

# Project Closeout Report

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## *Restoring Lost Email & Calendaring Functionality*

### Introduction

This document is intended to serve multiple purposes:

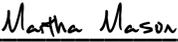
- 1) It is the formal acceptance document signifying the Steering Committee’s approval of the project deliverables;
- 2) It is the formal hand off document signifying the appropriate operational team(s)’ acknowledgement of the ongoing care and maintenance of the project deliverables;
- 3) It can serve as an informal retrospective document to record any lessons learned (positive *or* negative) or suggestions for future process improvement (in the execution of the project *or* in the project deliverables).
- 4) This document will outline any remaining next steps that were out of scope.

### Signature Block

By signing below, I concur that ***Restoring Lost Email & Calendaring Functionality*** is closed and no additional work needs to be performed.

DocuSigned by:  
  
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**Adam Paulick (UAA CIO)**

June 6, 2018  
**Date**

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## Release and Deployment Plan

### Transfer to Production

**Enabling the Global Address List (GAL)-** The GAL was enabled in Google on 3/19/17. Updating the Service Catalog was unnecessary.

**UAA Migrations of Historical Email & Calendaring Content from Exchange to Google-** Account migrations were closed on 9/19/17. Of the 456 accounts requesting migration of historical content, 131 accounts remained unfinished. However, out of those 131 accounts, 85 never responded to the request to migrate their content. The assumption in closing this work effort out in September of 2017 was that the 85 account owners who never responded no longer require this service to be performed. Remaining requests were handled, as needed.

**Departmental Account Architecture and Distribution Lists-** A change in account architecture was decided on by the Chief Information Officer (CIO) Management Team (CMT) on 11/29/17 to set Office 365 for secondary mail routing. The work to complete this decision was out of scope for this project. This decision was made so that UAA could restore the functionality for five of their ten departmental distribution list use cases. The following use case functionality will be resolved after the change in architecture is made:

- Single point of contact for a group of users i.e. UAA ITS communicating with all members of their department (could have been a candidate for the transition to Google Groups however, this change would have impacted other workflow / business processes).
- Restricted group messages sending internal only messages, or messages accepted by specific moderators i.e. manager sending to group of employees (could have been a candidate for the transition to Google Groups however, this change would have impacted other workflow / business processes).
- One to many responses i.e. a message sent on behalf of groups where the reply goes to all group members (could have been a candidate for the transition to Google Groups however, this change would have impacted other workflow / business processes).
- Dynamic Groups Based on AD Attributes or LDAP Filters.
- Ability to Show/Hide in an Address Book.

**Managing Voicemail Via Email-** The ability to manage voicemail via email was restored at UAS & UAA, however, it is limited compared to what they had previously with Microsoft Exchange.

- At UAS and UAA, users automatically receive an email message every time they receive a voicemail. The email message includes a copy of the voicemail as an attachment, but it is no longer synchronized with the phone system. Users also receive a link to their Cisco web inbox and have the ability to listen to their voicemail message by either logging into the Cisco web inbox, playing the voicemail attachment, or using their desktop phone. Users have the ability to delete voicemail from the phone system by either logging into the Cisco web inbox or using their

desktop phone. Deleting the email with attached voicemail message has no effect on voicemail stored on the phone system.

Deployment of the Cisco provided service called HTML notifications occurred on 10/20/17 for UAS and 3/19/18 for UAA. Campus wide communication occurred leading up to this change at each campus. UAA adopted a new voicemail policy as part of this effort on 3/30/18, around two weeks after the new service went live. UAS also adopted a new voicemail policy two weeks after their implementation (11/3/17).

## Production Operation

**Production Operation of the GAL-** OIT-System Engineering provides support for the production operation of the GAL Flag (the sync between Gsuite and Active Directory). The GAL flag is synced from Active Directory (AD) every hour and the code base is available at [github.alaska.edu](https://github.alaska.edu). Each campus contributes towards the production operation of AD, which allows them to make changes that are then synced with the GAL. Therefore, each campus participates in the production operation of the GAL.

**Production Operation of HTML Notifications at UAA-** UAA Network Engineering and Telephone Services configured the Unity system. Web Applications and Messaging produced the HTML notification.

**Production Operation of HTML Notifications at UAS-** UAS ITS jointly developed the HTML notification template. UAS Network and Desktop Support (NDS) configured Cisco Unity.

## Support and Maintenance

**GAL-** A Service Level Agreement (SLA) does exist between UA and Google. A link to the public Software as a Service (SaaS) SLA can be found here: <https://gsuite.google.com/intl/en/terms/sla.html>

- The automated maintenance process for the GAL flag was solidified on 4/11/17 and this process is maintained by OIT System Engineering.

### HTML Notifications-

- The maintenance process for HTML notifications was solidified at UAA on 3/30/18 when the new voicemail policy went into effect. Should changes to the policy become necessary, UAA Network Engineering and Telephone Services will need to make adjustments. Web Applications and Messaging are responsible for making changes to the template and Network Engineering and Telephone Services are responsible for configuring changes in the Unity system to apply the new template.
- The maintenance process for HTML notifications was solidified at UAS on 10/4/17. Changes to the template will be made by UAS ITS personnel, changes to Cisco Unity will be made by UAS NDS.

## Deliverables

As each of the four technical tasks reached completion, consensus by team members occurred and notification that each phase was closed out was placed on the project website. Examples include:

- Once the GAL was enabled and the maintenance process configured, the project website was updated to show this effort was closed and the team was released.
- To close out UAA migrations of historical email / calendar content, data describing the status of this effort was reviewed by UAA and it was determined that the effort was able to be closed out. This was posted on the project website.
- After the CMT approved setting Office 365 as secondary mail routing for UA, the project website was updated to reflect the decision made and that implementation of this change was deemed out of scope. The team was made aware that this effort was being closed out and the project website was updated to reflect this.
- After HTML notifications went live at UAS and UAA, resources at each campus were made aware that the effort was closed, team members released and the project website was updated to reflect that no further work was required.

## Schedule

**GAL-** The Gal was scheduled to end the middle of April; this effort finished on schedule.

**Migrations-** UAA migrations were scheduled to end in June 2017, however this effort was officially closed out in September of 2017. This decision was made to allow faculty and staff time to return after the summer break and take advantage of the migration service. This effort closed out three months late.

**Distribution Lists-** This effort was originally identified as closing out in June of 2017. However, as the team discussed a resolution that was acceptable to UAA, the team decided to recommend a larger enterprise wide infrastructure change that would ultimately take longer to route through executive leadership. The CMT didn't receive the proposal until the end of September. This effort officially closed out the end of November 2017, five month late.

**HTML Notifications-** Restoring the ability to manage voicemail via email was scheduled to close out the end of July, 2017. The project team was working on other efforts leading up to this time so work on this effort didn't begin until August, 2017. UAS required two months beyond the start to deploy HTML notifications in their environment. Due to the complexities of UAA's environment, they needed another six months to successfully deploy HTML notifications.

## Cost (Resources)

### Labor

#### Creation of a GAL (160 Hours Total)-

- OIT-SE contributed 160 hours to the creation of a GAL for the UA system.
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### **Distribution Lists (690 Hours Total)-**

- OIT-SE contributed 160 hours towards the analysis and development of a proposal to set O365 for secondary mail routing.
- UAA Messaging department contributed 480 hours towards the analysis and development of a proposal to set O365 for secondary mail routing.
- UAS Information Systems contributed 50 hours towards the analysis and development of the proposal to set O365 for secondary mail routing.

### **Migrations (1150 Hours Total)-**

- UAA Call Center & Messaging teams contributed 1150 hours towards migrating historical email & calendaring content from Exchange to Google for UAA members requesting this service.

### **HTML Notifications (310 Hours Total)-**

- UAA Network Engineering, Telephone Services, Web Applications and Messaging contributed 230 hours to restore the ability to manage voicemail via email at UAA.
- SW Network Engineering put 20 hours towards planning & development and another 10 towards implementation & training totaling 30 hours.
- UAS ITS contributed approximately 20 hours towards HTML notifications, and had already been working on it prior to project initiations.

## **Non-labor**

**GAL-** There were no additional costs associated with development of the GAL other than labor. The process that maintains the GAL runs on a server that also processes other integrations.

**Migrations-** There were no additional costs associated with UAA's migrations other than labor.

**Distribution Lists-** There were no additional costs associated with the decision to set O365 for secondary mail routing other than labor.

**HTML Notifications-** There were no additional costs associated with the change to deploy HTML notifications other than labor.

## **Quality**

### **Outstanding Issues**

**GAL-** All issues were resolved. Future improvements are able to be made by those involved in the support and maintenance of the G Suite.

**Migrations-** All issues were resolved. The UAA Call Center is able to perform migrations should a user request this service in the future.

**Distribution Lists-** Functionality for five out of UAA's 10 use cases will be restored by the change to set O365 for secondary mail routing, however, implementation is still pending. The other five use cases

were considered out of scope as addressing them will take more time than the project team originally allocated towards this project.

#### **HTML Notifications-**

- UAA tried to use the bulk administration tool to apply the customized HTML template to all user accounts, however, it didn't affect all user accounts at once. Due to preexisting conditions in UAA's environment, around 2700 user accounts had to be manually updated. This is resolved now and the bulk administration tool is able to be used for future changes. There are no issues remaining at this point.
- Both UAS and UAA are providing limited functionality to manage voicemail via email with HTML Notifications compared to what they had with Microsoft Exchange. The email message includes a copy of the voicemail as an attachment, which is no longer synchronized to the phone system. In addition, only some cell phone types are supported and able to access the Cisco inbox via the link provided in the email.

#### **Lessons Learned**

- Before major system changes are decided upon, the UA system should conduct a business case analysis and select solutions based upon the analysis that meet the requirements of the UA system.
- Close out activities could have occurred in a phased approach because each phase was independent of one another. In addition it made it difficult for project team members to recall activities that occurred during the start of the project. Moving forward, when project phases are completely independent of one another, close-out activities should be completed as each phase comes to an end. Additionally, a request was made to begin close-out activities after UAS went live with HTML notifications however this request was denied by executive leadership. The project was to be closed out after every phase was complete.
- Each campus experienced different challenges throughout the course of this project to bring the Unity system up to current versions. UAA experienced the biggest challenges because they had to upgrade CUCM (Cisco Unified Call Manager) and manually update user accounts to be able to use the bulk administration tool. In the future, campus technology systems should be maintained at similar levels so that a decision to unify systems doesn't overly burden one campus to get in line with the others.
- It would have been preferred to have one person with decision making authority about the direction of the project to minimize effort and time spent researching various options.
- Enabling the vacation responder on a user's Gmail account can cause auto reply messages to be sent to Cisco Unity, which may cause the user to receive a failed delivery status notification. Configuring the "Content Compliance" feature Via Gmail administration to not reply to the Unity email account mitigates this issue (but not for users who forward their email to another provider).

## Unanticipated Benefits

1. Setting Office 365 as secondary mail routing for UA also retired antiquated mail routing servers and simplified the mail routing process. This was not originally cited as a deliverable in this project.
2. General clean up of UA's Google such as the 30million number alias.
3. A push to make Cisco IP phone system more similar across each campus for voicemail.
4. More collaboration between IT personnel resulting in better departmental relationships.
5. UA is now on the same technical solution for voicemail management via email.
6. UAA developed and implemented a new voicemail policy.
7. UAA cleaned up user Unity accounts, deleting accounts for those members who are no longer with the university. A maintenance process was also identified for voicemail accounts that are active at UAA.
8. The Unity system integrated with LDAP as part of this project. As a result of this integration, users are able to use their UA credentials to manage their voicemail in the Unity system.