

Environment Management – Admin Access, Configuration, Services, SPAM/Virus Control, Auditing

- Google Apps administrators have access to a web-based control panel which allows for the configuration and management of all Google Apps users, services, settings, and connectors. In addition, Postini services allow for the set up of email policies and filters, providing additional security features and controls for Google Apps email, including enhanced SPAM/Virus protection. The Google Apps Audit API lets administrators audit user accounts for legal compliance. Administrators can audit user's email, email drafts and archived chats.

Account Management – Creation/Migration, Modification, Deletion, Recovery, Password Resets

- Google provides many different APIs for integrating with Google Apps services including a Provisioning API, which allows for the programmatic management of user accounts, and email migration APIs for moving accounts to Google Apps. Once an administrator or end-user has deleted any data in Google Apps, Google deletes it according to their published privacy policy. In order to recover deleted email, Google Message Discovery (powered by Postini) service must be activated prior to the data recovery process. Data is irretrievable once an administrator deletes a user account. Password Resets are handled through the authoritative authentication system. In an ideal implementation, that would be Middlebury's identity management system.

Data Management - Directory Attributes, Organizational Structures, Quotas, Backups

- Google Apps supports organizational structures and a basic set of directory attributes. There are some perceived shortcomings, as individuals can only belong to one organizational node and directory attributes are limited to first name, last name, and email address, however Google Apps is constantly being refined and improved to meet changing needs. An example of this is the ever-increasing quota per Google Apps email account, currently around 7GB. Data can be backed up by administrators and users through provided APIs and also through the setup of secondary email archival servers. In addition, Google keeps multiple backup copies of users' content so that data and accounts can be recovered and restored in case of errors or system failure.

Email Management – SMTP, Forwarding, Filtering/Rules, Delegation

- Google Apps provides a variety of email routing options, from completely cloud-based scenarios to locally hosted inbound and outbound gateways. Email can easily be forwarded by administrators and/or users using built-in filtering options and message rules. Delegation is supported in Google Apps for email and calendaring, and allows specified users to read messages in that account, and to send messages (and manage calendar information) on behalf of that account. Delegation can be initiated by the account owner/user.