

Microsoft Exchange vs. Google Gmail

Hosted services comparison

Organizations today have many choices regarding their messaging environments. As budgetary pressures continue to drive evaluations of new and existing technologies, hosted services can offer the ability to reduce on-premises infrastructure and administrative costs. While these services offer attractive savings at first glance, it is important to understand the effects on user productivity and support resources necessary beyond deployment. This comparison overview document evaluates the capabilities, limitations, and overall business impact for hosted solutions from both Microsoft® Business Productivity Online Suite (BPOS) and Google Apps Premier Edition (GAPE). The categories were selected based on common business needs for hosted messaging and include user experience, IT administration and support, end-user transition to the hosted environment, mobility, offline access, and pricing options.

Feature/Capability is:		Hosted Service Provider		Importance to Users		Issues and Comments
Present	Not Present	Microsoft	Google	Power Users	Information Workers	
Present Not Present Partially Available Equal				High Moderate		
Microsoft Office Outlook® Interoperability with Gmail vs. Microsoft Exchange Online						
Common User Features	Tasks and Reminders					To-do flags and reminders work and can be set locally in Outlook. However, voting buttons and tasks cannot be sent to other Gmail users.
	Folder Organization					Folders work for e-mail in Outlook, but multiple contact folders sync to the cloud as one set of contacts.
	Attachments and Rich Formatting					Rich formatting in e-mail results in layout problems. Attachments and rich formatting cannot be added to calendar items or contacts.
	Mail Stationery and Signatures					Both stationery and signatures can be set in Outlook locally and sent to others, independent of back-end server being Exchange or Gmail.
	Permissions and Delegation					The user cannot share mail or contact folders, or calendars, and cannot delegate permissions and access to others, such as administrative assistants.

Feature/
Capability is:



Present



Not Present



Partially
Available



Equal

Hosted Service
Provider

Importance
to Users

Importance
to users:



High



Moderate

Feature/Capability

Microsoft

Google

Power Users

Information
Workers

Issues and Comments

Messaging

E-mail Rules (includes Out of Office settings)



Client-side rules only. For example, no Out of Office/Vacation responder support.

Encrypted Mail (message vs transport)



Not supported as a feature in Outlook if using Gmail back end; prevents mail from being sent with an ambiguous "unexpected error."

Address Auto Complete



Auto complete works when using Gmail back end. Requires registry entry to enable the shared address list from Google Apps.

Mail Tracking and Receipts



Delivery receipts do not work with Gmail back end, but read receipts do.

Calendar

Calendar Free/Busy Information



Busy/Free requires deployment of GAL Generator and provides no support for Out of Office status. GAL Generator must be run everytime users are added/deleted or emails addresses edited.

Rich Calendar



Google strips attachments from appointments, so content might be missed when collaborating with anyone on other rich messaging platforms (use case example: Agendas).

Shared User Calendars



Outlook users cannot share their calendars if using a Google Apps back end, and cannot delegate permissions for others to manage their calendars, such as administrative assistants.

Synchronized Group Calendars



Google Apps does not provide as complete a collaboration solution, like SharePoint, for group calendaring that can be synchronized to Outlook for tracking project meetings, timelines, etc.

Directory/Contacts

Meeting Attendees and Responses



Attendees can be required only, not optional. Responses can be accept or decline only, not tentative. The user cannot delete attendees from exceptions to recurring events.

User Created (local) Contact List



Outlook local contacts are complete and can include user-created groups and distribution lists.

Feature/Capability	Hosted Service Provider		Importance to Users		Issues and Comments
	Microsoft	Google	Power Users	Information Workers	
Company Directory					Global Address List (GAL) is missing phone number, company name, business unit, work office location, manager, and other key metadata fields to help identify unique users In addition IT must deploy the GALSYNC tool for the limited functionality.
Distribution Lists and Groups					No support for syncing of groups and distribution lists with Google Gmail. No support for multiple contact lists, etc
E-Mail Feature Gaps—Exchange 2010 vs. Gmail					
File-Level Manipulation of Messages (attach mail threads to new mail for reference)					Outlook messages (.msg files) can be attached to other e-mails, put in folders, copied to desktop, cut and pasted, etc. Gmail items are not files, so there is no item-level control for cut-and-paste or archiving.
Unified and Multiple Views					Gmail has only a conversation view for mail. Outlook has multiple views including AutoPreview. Outlook also provides one unified view of all user data (e-mail, calendar, etc.).
Right Click and Multiple Select					In Gmail, simple actions, like "mark as unread," require extra clicks and user actions because of the use of check boxes and buttons, decreasing user productivity. Much more difficult with a large number of items.
E-mail Rights Management					Secure and controlled distribution of e-mail (such as limiting forwarding, preventing saving, and requiring expiration) is not supported in Gmail.
MailTips					Outlook 2010 offers automated guidance to avoid e-mail mistakes and be more effective, such as notifying the user when the recipient is out of office (before the message is sent), or warning the user that he or she is sending to a large distribution list.
Cleanup					Outlook 2010 offers advanced and automated capabilities to cleanup the user's e-mail account, such as AutoArchive, and Mail Cleanup.

Feature/Capability	Hosted Service Provider					Importance to Users	
	Microsoft	Google	Power Users	Information Workers	Issues and Comments		
Social Connector					Outlook 2010 shows communication history, status updates, and social networking service updates from LinkedIn and Microsoft Windows Live™, in people-centric views.		
QuickSteps					Save time by automating common information worker e-mail needs; reply to all meeting attendees, reply to manager, reply and delete, and more.		
Unified Communication (voice mail, SMS/text, instant messaging, RSS feeds, etc.)					Google offers no inbox management of communication other than e-mail.		
Instant Messaging/Presence Integration					Gmail does not provide integrated presence capabilities within mail messages. Users must use the application sidebar or open the secondary application to search for a user.		

Business impact details:

Consistent features across communication tools can empower users to complete tasks and collaborate more efficiently and reduce support costs for IT. E-mail is perhaps the most widely used of these tools, so it is important to consider the impact that moving from a Microsoft to Google environment will have on day-to-day operations.

Lack of instant messaging (IM)/presence interoperability with Google could impact end users ability to work on a real time basis.

Google Apps has no delegation ability with Outlook interoperability or ability to 'send as'. Executive or department assistants would be prevented from monitoring separate inboxes or managing calendars.

Feature/Capability	Hosted Service Provider		Importance to Users		Issues and Comments
	Microsoft	Google	Power Users	Information Workers	
IT Administration and Support (Service Level Agreements)					
Maximum Storage Limits	☰	☰	●	●	Both BPOS Standard Suite and GAPE offer 25 GB.
Configurable Storage and Quotas	✓	✗	●	●	GAPE gives all users 25 GB; quotas cannot be set. Only the Microsoft offering allows smaller mailboxes for deskless, non-information-worker employees which helps manage compliance and data retention needs.
Archiving and Retention	☰	☰	●	●	Exchange Hosted Services offer compliance and legal archiving capabilities. Google offers Postini for retention, archiving, and discovery.
Directory Integration	✓	⚠	●	●	Active Directory support with Google Apps is a separate download/utility. Limited GAL support in Gmail, with groups and distribution lists not supported.
Software Add-ons and Client Installs	✓	✗	●	●	Google requires add-ons and plug-ins not covered by the Google Apps SLA. This is especially true for offline access requiring Google Gears and Google Apps Sync, which need to be installed on each client machine that requires support for Outlook.
IT Architecture Flexibility	✓	✗	●	◐	Exchange can be configured for on-premises, off-premises, or hybrid configurations to coexist with the cloud. Google Apps supports only hosted model for all users.
Hosted BlackBerry Support (BES)	✓	✗	●	◐	Exchange Online provides hosting for BlackBerry Enterprise Server (BES) to support BlackBerry users. Google, requires customers to run their own BES on-premises to support their BlackBerry users, which mean IT overhead and lessens customer benefit of going to the cloud.
Data Center Locations	✓	✗	●	◐	Exchange Online provides services based out of known locations, with options for dedicated servers. Google stores data in multiple locations and will not track where the data resides.
Service Levels and Uptime	✓	⚠	●	●	Exchange has a 99.9 percent financially backed uptime guarantee. Google does not cover outages of less than 10 minutes, even if consecutive, and offers only service extension as compensation.

		Feature/Capability is:		Hosted Service Provider		Importance to Users		Importance to users:					
			Present		Not Present		Partially Available		Equal		High		Moderate
		Feature/Capability		Microsoft	Google	Power Users	Information Workers	Issues and Comments					
From IBM Lotus Notes	Group Policy							Not supported with Google Apps.					
	User Data Migration (automated tools)							Much of the users' existing data (including archived mail, contacts, tasks, recurring calendar items, etc.) will not migrate over to Google Apps or will require unsupported manual tools or costly third-party applications to complete the migration. In order to migrate users' locally archived messages to Google, tools must be run on each user's machine.					
	Mail and Calendaring Coexistence During Transition							BPOS provides gateways that correctly translate complex message types and calendar invitations so they are delivered intact to the migrated users now running Outlook/Exchange. Google, however, does not provide these gateways, so links, rich text formatting, and attachments are stripped from mail and calendar items being sent by Lotus Notes users.					
From Exchange	Directory Coexistence During Transition							BPOS provides full directory synchronization during the transition for Lotus Notes users, so mail and calendar requests can be used without interruption. Google does not provide this service, thereby forcing users to manually type the e-mail addresses of colleagues in order to send messages and calendar items.					
	Mail-Enabled Workflow Application Support							Google does not support the translation of workflow messages, including doc links, for Lotus Notes applications. These applications will need to be rewritten to utilize different notification methods, which can be extremely costly for IT support groups. BPOS provides a utility that does perform the message translation, so workflow items can be acted on by users who have migrated to the hosted environment without issues.					
	User Data Migration (automated tools)							Both BPOS and Google provide automated tools to transition users' data from Exchange to their hosted environments. However, Google does not migrate tasks, notes, distribution lists and some rich calendar content. With Outlook front end to Google Apps, IT department must deploy, configure, and maintain Google Apps Sync for every PC with Outlook.					

Feature/Capability is:		Hosted Service Provider		Importance to Users		Importance to users:
		Present	Not Present	Partially Available	Equal	
Feature/Capability		Microsoft	Google	Power Users	Information Workers	Issues and Comments
Mail and Calendaring Coexistence During Transition		✓	✗	●	●	Exchange Online offers full compatibility for e-mail and calendar requests during the transition. Google will not transfer items, such as rich text formatting and attachments for calendar invitations (meeting agendas, etc.), Google Apps GAL with Outlook as a front end requires the Outlook Sync Tool.
Directory Coexistence During Transition		✓	✗	●	●	Both Exchange Online and Google provide directory synchronization during the transition; however, Google restricts synchronization to basic fields (first name, last name, e-mail address), Exchange Online synchronizes additional fields to provide valuable identity information (phone number, office location, manager, business unit, etc.).
End-User Training		⚖	⚖	●	●	Both Google and Microsoft services offer extensive end-user training materials and resources.
End-User Support and Impact		✓	✗	●	●	Prior to the migration, extensive end-user communication is needed to explain the data transfer and conversion implications, as well as the features' differences. The BPOS team has standardized communication and change-management plans built into its migration project model. Plus, it provides access to customized "How To" and "FAQ" documents for all transitioned users. Google, on the other hand, sends out only a single e-mail notification before the migration and pushes all first-line support, communications, change management, and training to the customer.

Common Capabilities

Business impact details:

One proposed advantage of a cloud solution is the ability to move system administration off-premises, reducing drain on IT resources. This is true to an extent, but the Google solution requires some additional resources to facilitate the migration and continue optimal service delivery.

Data migration: While migration is facilitated with an online wizard and support, many items do not move or may require unsupported third-party applications. Tasks, distribution lists, or recurring calendar items (and possibly archived e-mail) will not move in a standard migration, and directory synchronization may not be available or complete. The absence of these items and services may increase help desk call volume and IT staff time necessary to support the deployment. As users turn to

third-party devices to help move the remaining data, more issues need attention.

Software add-ins and client installs: The core service is delivered via the cloud, but many e-mail tools you are familiar with require plug-ins and connectors, some to be installed locally (e.g., conferencing add-in, Gears, free busy tool, GAL tool, archiving, and migration). Once these are installed, they will need to be maintained or reinstalled as you upgrade operating systems or change PC images, or if the end user downloads software that interacts with the process the connectors support.

Feature/Capability is:	Feature/Capability is:		Hosted Service Provider		Importance to Users		Issues and Comments
	Present	Not Present	Microsoft	Google	Power Users	Information Workers	
Remote Push							Remote push is supported by Google on Windows Mobile®, Android, Symbian, BlackBerry, Palm, and iPhone, using a combination of clients and sync applications. For Exchange, any WM 6.0 device and all of the above devices/platforms are supported.
Server Search							Exchange supports server side search, allowing mobile users access to all of their email, whereas Gmail only allows access to recent email that has been synchronized
Mobile Directories							Exchange has mobile GAL support for all Windows Mobile 6.0 devices. There is no mobile directory support for Gmail, except on BlackBerry, with the Google Apps Connector for BlackBerry Server installed.
Synchronization							E-mail is synchronized similarly across both on all devices. Contact sync on most devices other than Windows Mobile requires Google Sync App install. Exchange ActiveSync supports full over-the-air sync of contacts, calendars, and e-mail.
BlackBerry Support							Google requires customers to support an on-premises BES for every 500 users, whereas the Exchange offering can support up to 2,000 users per server and can be hosted and managed for customers with Exchange online.



Feature/Capability	Hosted Service Provider		Importance to Users		Issues and Comments
	Microsoft	Google	Power Users	Information Workers	
iPhone Support	✓		●	●	Google sync support for iPhone is a Beta environment. Limitations include sync issues with recurring events. In addition, actions in Gmail may have different results, e.g., archiving messages moved to the trash and attendee status for messages not clearly defined (yes/no/maybe not available; only check mark as a hint will appear). No way to reply to calendar event with a message via the iPhone.

Feature/Capability	Hosted Service Provider		Importance to Users		Issues and Comments
	Microsoft	Google	Power Users	Information Workers	
Offline Access					
Software Add-ons and Client Installs	✓	✗	●	●	Offline access with Google requires the download and installation of Google Gears (unsupported by Service Level Agreement). Exchange requires no such installation, as all offline features are supported by the Outlook client.
Corporate Directory Access	✓	✗	●	●	Exchange has offline GAL support. There is no offline directory support for Gmail.
Edit/Create Personal Contacts	✓	✗	●	●	Users cannot create or edit existing personal contacts when offline.
Search	⚖	⚖	●	●	Google users must manually configure the items they want to be able to search offline. Microsoft provides full search capabilities for offline users via Outlook.

Feature/Capability	Hosted Service Provider		Importance to Users		Issues and Comments
	Microsoft	Google	Power Users	Information Workers	
Offline Attachments					If a Google Apps user receives a Microsoft Office document while offline, the user must convert it to HTML, with most formatting lost, in order to view it.
Overall Disconnected Experience					While offline, Google users cannot spell check, edit, or create contacts, nor edit or create meetings in the calendar, etc. No Google Labs features are available offline.

Business impact details:

Mobile directories: When you are away from your desk, a corporate directory allows you to locate your colleagues and send them an e-mail via a mobile device. Google does not support corporate mobile directories with Gmail, except via the Google Apps Connector for BlackBerry.

BlackBerry support: Google's Gmail solution supports BlackBerry but requires an on-premises BES to deliver limited integration. This necessitates hardware costs and on-premises expertise to support a hosted environment. Microsoft also requires a BES but will host the server as part of its service.

Offline access: Google provides a limited offline experience with support from a Beta product. Without the ability to reply to or create new messages, users lose valuable

Feature/Capability	Hosted Service Provider		Importance to Users		Issues and Comments
	Microsoft	Google	Power Users	Information Workers	
Security					

Feature/Capability	Hosted Service Provider					Importance to Users	
	Microsoft	Google	Power Users	Information Workers	Issues and Comments		
SSL					Microsoft provides SSL, a "by default approach" to help ensure security. .Google SSL support varies by service and is available for e-mail, chat, calendar, docs, and sites. SSL access is not available for the Google Apps Start Page, Google Video for Business, and the Google Talk desktop client. Forcing HTTPS can make Gmail a little slower, and if you enable SSL, you will not be able to see your mail in the Gmail gadget on the Google Apps Start Page, since it is not served over SSL.		
Information Rights Management					Information Rights Management (IRM) allows individuals and administrators to specify access permissions to documents, workbooks, and presentations. This helps prevent sensitive information from being printed, forwarded, or copied by unauthorized people. Google does not support IRM.		
Encrypted Mail Support					Encrypted mail is extra fee for Postini with Gmail.		
Offline Security					Cross-site scripting has been shown to be able to compromise the security of Google Gears, which uses client-side JavaScript to manipulate local data. Local data are stored in an unencrypted state and based on the physical and access security of the user's machine.		

Business impact details: Information security is the number one IT issue for most organizations. This includes the ability to restrict access when information is off the corporate network or in the hands of unauthorized users.

IRM is a powerful tool in securing data transmitted via e-mail. If an unauthorized person is added or left on a message without IRM, confidential information could be shared, exposing an organization to possible punitive damages. Google has no IRM support for its corporate e-mail offering.

Feature/Capability	Hosted Service Provider		Importance to Users		Issues and Comments
	Microsoft	Google	Power Users	Information Workers	
Mail-Only Offering					Both Microsoft and Google offer standard hosted e-mail services. Google's standard service supports corporate domains and is free, but it is an unmanaged solution and ad-funded. Microsoft's Exchange Deskless offer costs \$2 per month but is a managed service offering technical assistance and support for corporate domains.
Enhanced E-mail Services					Both Microsoft and Google offer enhanced hosted e-mail services. GAPE offers support for corporate domains, an uptime SLA, and anti-virus and anti-spam. It costs \$50 per year, per user. Microsoft offers the same services with a monthly payment option of \$5 per month or \$60 per year. You also have the ability to localize your data into one hosted server. This guarantees that you know the location of your data. Google cannot offer this service. (Microsoft puts dedicated servers in place to BPOS versus the consumer offering of Hotmail.) Google has consumer and business GAPE users on the same infrastructure.
Hybrid Services (interoperated on-premises and off-premises offerings)					Microsoft offers the ability to have on-premises users supported by a physical infrastructure, hosted users supported by Microsoft data centers, or any combination of the two. The two environments can be integrated to allow for shared directories, IM/presence, etc. Google has only a hosted option.

Business impact details:

Pricing and options: Hosted e-mail allows for cost reduction and delivery of services to users whose messaging needs normally would not have warranted investment in the service. While Google offers two options, only one may be a viable business solution. Its standard service is unmanaged and may pose a risk of data loss or theft. The business option provides some of the standard protections you would expect in a corporate environment, but it is a one-size-fits-all solution with little flexibility.

With Microsoft you have a choice of supported e-mail solutions, allowing for greater cost savings where the standard service can be deployed. In addition, you can keep some users on the on-premises system and deploy other users in the cloud. This flexibility allows you to continue to depreciate existing investments while piloting new technologies. You can also take your time in evaluating the impact of the new solution, knowing that all of your workforce can work together efficiently.

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