

# The Need for a Better Way to Send Files and Attachments



an Osterman Research white paper  
sponsored by

Accellion ™

## Introduction

---

*Email was originally designed to send short, text-based messages. While that is still its basic purpose, email has also assumed the role of being the primary data and file transport system for most enterprises.*

Over the past ten years, email has become the most important communications tool used in business. It is the primary communications medium for both external and internal communications – significantly more important than the telephone – and the one that users can least afford to be without.

However, the popularity and pervasiveness of email has created a very serious problem for organizations of all sizes: email was originally designed to send short, text-based messages. While that is still its basic purpose, email has also assumed the role of being the primary data and file transport system for most enterprises. As the sophistication and size of the attachments carried in email have grown, the number of problems for IT administrators and users alike have also grown. For example, large attachments sent through email can dramatically reduce the performance of messaging servers and can cause them to crash in some cases. Large attachments drive up storage costs and can require expensive upgrades to network bandwidth. The response from most IT departments has been to implement quotas on the size of mailboxes and/or limitations on the size of the attachments that can be sent through email. However, with increasing attachment sizes and size limits comes the burden on users to spend more time managing their mailbox to stay within the limitations imposed by IT. In fact, some users try to circumvent IT-imposed limits through the use of personal Webmail accounts and other means.

The better solution to this escalating problem is a paradigm shift with regard to email. Instead of treating ad hoc file transfer as just another function of the email system, it should instead be regarded as a core business process. Using solutions already available in the market, file transfer can be a parallel capability to email so that business users can send files more efficiently and so that IT does not have to worry about overburdening the email infrastructure.

## The Problem with Email for File Delivery

---

The ease with which email can be used to send attachments makes it the most convenient file transfer mechanism available to business users today. Whereas several years ago most email users sent basic spreadsheets and presentations via email, today they are sending bigger versions of these files, as well as applications, databases, closing documents, engineering drawings, graphics, creative content, faxes and other large files. While sending files through email is very convenient, email systems were never designed to handle these attachments efficiently, resulting in degraded email server performance, slower message delivery times and other problems. Because as much as 80% of email traffic can be generated through attachments, solving the attachment problem is becoming increasingly critical for IT administrators and users.

*While sending files through email is very convenient, email systems were never designed to handle these attachments efficiently, resulting in degraded email server performance, slower message delivery times and other problems.*

One solution that has become common practice in most email environments is to put a limit on the size of file attachments and a quota on mailbox size. For example, in such an environment if the design office of a manufacturing company wants to send a 50MB design update to the overseas production operation, the email system cannot be used to send the file. Similarly, for users who send smaller attachments via email, there is the periodic pain of having to sort through the mailbox and determine what can be safely deleted because of the IT-imposed mailbox quota.

### **FTP and Other Alternatives**

Business users do have a number of options for sending large files in the absence of their ability to do so through email, the most common of which is FTP. However, the fundamental problem with FTP as a business tool is that it is difficult to track file uploads and downloads. Plus, FTP is not as convenient for file transfer as email because it does not allow for ad hoc collaboration as email does. In short, users don't like FTP because it is difficult to use and IT doesn't like it because it is difficult to maintain.

Another option for sending large files that many users opt for is to send files via a personal Webmail account, such as Google Mail. However, the use of personal Webmail accounts generally bypasses corporate messaging security defenses and does not allow files to be tracked.

Alternatively, some users burn large files to compact disc and send them via overnight delivery, but this option is expensive, much slower than electronic delivery and susceptible to data loss.

### **A Historical Perspective on FTP**

FTP, or File Transfer Protocol, was one of the first protocols created on the Internet, introduced in 1973. FTP was developed so that individuals could share files between computers. Designed by programmers to share files with other programmers through a command line interface, it became a ubiquitous programmer's tool and the de facto standard for machine-to-machine large file transfer applications. However, due to the sparse programmer oriented user interface, its adoption as a business tool for ad hoc file transfer has been slow.

For users to send or receive large files using FTP, they must install an FTP client on their desktop or use their operating system's built-in FTP client. They also need a username and password provided to them by IT. Then, they must have IT create directories that house the files that are to be transferred.

*The key to efficiently sending large files...does not lie in coming up with new or smarter ways of using email to do so, or in coming up with better alternatives to bypass the email system.*

### **A New Way of Thinking About File Transfer**

The key to efficiently sending large files, therefore, does not lie in coming up with new or smarter ways of using email to do so, or in coming up with better alternatives to bypass the email system. Instead, it is important to recognize that secure, ad hoc file transfer is a core business process that is best served by a system deployed in parallel with the email infrastructure. In short, what IT administrators and email users need is a secure, ad hoc file transfer solution that integrates with existing email solutions while hiding the underlying technical complexity of sending large files. The key features of such a system would include:

- The ability to preserve the ease of sending large files through email by mimicking email functions but without being part of the messaging infrastructure. This would minimize end user training requirements, while at the same time offloading attachments into a parallel file transfer infrastructure, thereby relieving email of as much as 80% of the traffic it carries today.
- A low total cost of ownership by minimizing the amount of management and maintenance required for the system by the IT department.
- Auditability and tracking. Current business practices, as well as legal and regulatory requirements, demand that organizations implement auditable business processes, including those that allow for the tracking and auditing of ad hoc file transfers.

### ***The FTA as a Tool for Streamlining Attachment Delivery***

Because of resource constraints and competing priorities, one option for IT departments charged with solving the file transfer problem is an appliance-based file transfer system. Generally referred to as a File Transfer Appliance or FTA, the appliance design has particular appeal for IT in terms of its low maintenance and management footprint. As a plug-and-play system that compliments the existing email infrastructure, a secure, ad hoc and appropriately designed and configured FTA has the advantage of being highly scalable to meet user demands without extensive configuration every time there is a change in the messaging or network infrastructure.

*Because of resource constraints and competing priorities, one option for IT departments charged with solving the file transfer problem is an appliance-based file transfer system.*

### **Conclusion**

---

Because the number and size of attachments sent through email continue to increase, there is a growing need to find a more efficient, less expensive and easy-to-use alternative to send these files. One method that organizations of all sizes should seriously consider is a File Transfer Appliance that can offload as much as 80% of the traffic from email to satisfy IT requirements, while preserving the ease of use that users require in the normal course of doing their work.

© 2008 Osterman Research, Inc. All rights reserved.

No part of this document may be reproduced in any form by any means, nor may it be distributed without the permission of Osterman Research, Inc., nor may it be resold by any entity other than Osterman Research, Inc., without prior written authorization of Osterman Research, Inc.

THIS DOCUMENT IS PROVIDED "AS IS". ALL EXPRESS OR IMPLIED REPRESENTATIONS, CONDITIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OR FITNESS FOR A PARTICULAR PURPOSE, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE DETERMINED TO BE ILLEGAL.