

## The Bloomberg Messaging System

The Bloomberg Message System – which includes both email and instant messaging (IM) – is one of the most commonly used tools in the financial community. Unlike conventional email systems such as Microsoft Exchange or Lotus Notes, these services do not reside on a server on the User’s premises. Instead, each User’s workstation accesses a central server farm managed by Bloomberg. Emails and IM messages are stored on the Bloomberg servers and are viewed through Bloomberg’s proprietary terminals.

In order to comply with regulations and enable companies to archive, however, Bloomberg does allow its clients to access messages for archival purposes through daily FTP downloads. It is also possible to request a download of messages stored on the Bloomberg servers; by User, Customer or Firm. Both emails and IM messages are archived on Bloomberg’s servers in raw ASCII text format. To reduce the size of the archive message dump, it is possible to request messages for a specific date range.

```

Message Sent: 06/12/2008 18:22:00
From: Kevin@Bloomberg.net|DEPTABC|FIRM123| |
To: Bill@Bloomberg.net|DEPTXYZ|FIRM123| |
To: Susan@Bloomberg.net|DEPTABC|FIRM123| |
Attachment: Review_April.pdf
FileID: 406436405451416_Review_April.pdf
Attachment: Review_May.pdf
FileID: 406432445451416_Review_May.pdf
Subject: Monthly Review Meeting

Please see attached final figures for April and preliminaries for May.
Please read and be able to address
highlighted issues in Friday's meeting.

Susan will be presenting an overview of our new marketing strategy.

Make sure you arrive five minutes early so we can begin promptly at 8am.

Kevin
    
```

*Sample Bloomberg email message showing multiple Sender metadata fields and multiple Attachment Fields.*

## Handling Bloomberg Messages

The archive files made available through Bloomberg’s FTP site are simply text dumps and a single archive text file may comprise hundreds of thousands of individual messages. In order to search or review Bloomberg messages in any of the litigation industry standard review platforms, (e.g. Concordance, Summation, Ringtail, iConect), it is necessary to:

- Break up an archive file into individual records
- Identify a unique message number for an extracted record
- Extract the metadata (such as To, From, Subject) from the records
- Extract text from the records
- Generate a load file in one of the litigation industry standard formats

## MetaData Differences

One major difference between Bloomberg messages and messages produced by other systems (e.g. Microsoft Outlook) is that in Bloomberg messages there may be multiple occurrences of the same metadata field whereas in most systems, the additional metadata field values are simply concatenated into the same field.

For example: whereas the TO field in an Outlook msg file might contain several recipient names e.g. TO: [susan@acme.com](mailto:susan@acme.com); [bill@acme.com](mailto:bill@acme.com); [kevin@acme.com](mailto:kevin@acme.com) in a Bloomberg message, each recipient would be listed separately e.g. TO: [susan@acme.com](mailto:susan@acme.com)  
TO: [bill@acme.com](mailto:bill@acme.com)  
TO: [kevin@acme.com](mailto:kevin@acme.com)

## The LEX Solution

At LEX On Demand, we have created a Processing System to handle archived Bloomberg messages. Our Processing System can unitize and number the individual messages, parse out metadata fields with their values, extract the text and enable a load file to be produced from the resulting data. The LEX Bloomberg Message Processor can handle:

- Email sent between Bloomberg users,
- Email sent between Bloomberg users and senders/recipients with external email addresses
- Bloomberg Instant Messaging Archives

In addition, the LEX Bloomberg Processing System is able to identify any attachments, extract the metadata associated with these attachments (e.g. file name), and associate these with the parent email / IM Message (assuming the individual attachment files are available). It is able to do this whether there is one attachment in a message or many.

## Extracting Information

In keeping with LEX's Deep Extraction Philosophy, LEX can also provide customers with a range of value-added reports including:

- Senders and Recipients (by person & organization)
- Organizations (by Firm & Customer)
- Subject Analysis
- Subject Keywords
- Attachment Analysis

All metadata information (including the Body of the message) is held in a SQL database and can be searched and/or additional reports produced, as required.



Example Report on Bloomberg Data Set Showing Message Count by Recipient Firm