

## File transfers

BulkRate 2.1 now supports file transfers. File transfers are disabled in the evaluation version of BulkRate. If you register BulkRate, file transfers will become available.

### Downloads

There are two ways to have BulkRate download files that are attached to messages. The first is to specify which conferences you would like BulkRate to automatically download files under a certain size. You can do this by choosing "Service setup..." under the Service menu, then clicking on the File Transfers icon.

In this dialog, you can enter the names of conferences in which BulkRate should automatically download file attachments, and the size limit on these automatic downloads. The default setting is to automatically download any files under 100K attached to messages in your MailBox. Any files downloaded will appear in a folder named "BulkRate downloads" in the same folder as the BulkRate application.

The second way to download files with BulkRate is a two-step process: step one is a normal mail exchange, in which BulkRate only retrieves the text of messages and ignores file attachments. If while reading through the

incoming mail you notice a file you want, you can then Choose "Request file" under the Mail menu, or click the RQST button on the Palette. This will cause BulkRate to create what looks like a threaded reply, but in actuality is a File Request - a command and the information needed to retrieve the desired file or files during the next exchange.

ote: there is nothing preventing you from editing a File Request message, but if you want the Request to actually work, do not edit it with the exception of removing a file or files from the list of those to retrieve. (This may happen if a given message has multiple files attached to it.) Click POST on the Palette or choose "Queue to send" from the Mail menu, and the request will be saved to your outgoing mailbox.

During the next mail exchange, while sending mail, BulkRate will also retrieve any files requested by you. Note that the file retrieval is not a separate process, but rather is interleaved with the sending of mail. You could easily have a new message, a file retrieval request, another new message, another file request, and a reply to a message in that order in your outgoing mail. BulkRate will process the items in your outgoing mail in the order they are saved to the outgoing mail file. Again, any files downloaded will appear in a folder named "BulkRate downloads" in the same folder as the BulkRate application. A message will appear in your incoming mailbox to inform you of the success or failure of the retrieval request.

## Uploads

You may attach files to outgoing messages with the "Attach file" item under the Mail menu and the "ATTCH" button on the Palette. The paths to these files will appear in the "Attached files" field on the Outgoing mail window. The files themselves are not saved or copied in any way. When the mail exchange occurs, BulkRate will expect to find the file(s) in the same place as when you attached the file to the message. If you move the file, rename it, or rename any folder in the path to the file, BulkRate will not be able to locate the file.

You can delete an attached file from a message by clicking on its path and pressing the delete key on your keyboard.

## File transfer protocols

BulkRate uses the XModem-1K CRC file transfer protocol for all file transfers. This protocol was chosen for the following reasons:

- 1) It is much easier to program than the ZModem protocol.
- 2) ZModem in the FirstClass® CLUI seems to fail on occasion, causing a crash of the CLUI session, much the same way an overly large message can crash the CLUI message editor.