            Suggested Additional MIME Types for Associating Documents

Status of this Memo

1)   New MIME Types: Staple and "Paper" Clip

        1) indicates the degree of binding of multipart documents:
           stapled documents should stay together on the desktop,
           while paper clipped ones should be easily spreadable

        2) big paper clips vs small ones; heirarchical assembly

        3) big vs small for large documents vs. small ones?

        4) warning! the presence of electronic staples or paper clips
           may break some programs, particularly those designed to do
           high-speed copying!

2)   patents on the electronic staple and paper clip

        1) use First Virtual to record a charge each time new staples
           or paper clips are made.

        2) to reduce transmission charges, electronic staples should be
           bought in boxes of 5000. Reference: Apple's "bento"
           technology?

        3) electonic staples should have a standard "size and shape"
           so a supply of staples could be used be used by several
           programs.

3)   recycling electronic staples and paper clips

        1) to assure proper accounting, and to detect patent violations
           (people making their own electronic staples), it may be
           necessary to attach a certificate to each staple or paper
           clip.

        2) When a file or folder is deleted, a "recycler" program could
           look inside for staples or paper clips that could be reused
           or recycled.

                1) staples could be reycled for a small credit

                2) paper clips could be reused.

4)   custom-look electronic staples and paper clips

        1) when stabled or clipped documents are displayed on the
           desktop, there should be some icon or visual indicator to
           show the presence of the (possibly removable) staple
           or paper clip

        2) "color=" and "shape=" attributes in the MIME line should
           allow senders to customize the appearance of individual
           staples or paper clips.

                1) this could have some significance for office filing
                   systems, for instance: a silver paper clip could
                   trigger one workflow component, while
                   a gold paper clip could trigger another.

        3) "src=" would allow the specification of a URL of the image to
           be shown, for even greater control of appearance.

        4) it should be possible to specify 3D modelling of your custom
           paper clip, for electronic desktops being viewed through
           virtual reality headsets

5)   electronic paper clip sculpture

        1) instead of discarding or reusing paper clips, it should be
           possible to "bend" them and display the resulting sculpture
           on the desktop

                1) a morphing interface would be suitable

        2) linked chains of paper clips

        3) each paper clip should keep track of how many times it has
           been bent. Above a certain limit, the clip should fail.

6)   electronic paper clips as page flags

   1) in addition to using electronic paper clips to group related
      documents, it should be possible to attach an electronic
      paper clip to a single page of a multipage document or
      collection of documents. This highlights or draws
      attention to the page.

   2) it should be possible to include positioning information
      with the electronic paper clip, to mark specific paragraphs
      or sentences

   3) combinations of color, shape, size, position, orientation,
      etc. could have special meaning

7)   additional safety hazards of electronic paper clips

   1) they should not be used on data flines which might end up in
      the hands of very small children

          1) thus, one should consider keeping them in a locked
             drawer of the electonic desk on home PCs

   2) they should not be attached to documents on floppy disks, as
      they may erase portions of the floppy

Security Considerations

   Security issues are not discussed in this memo.

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