Sending Mail from host to Lan.

Below is an example of JCL used to send E-Mail from the production Host to the Mail system on the LAN. The step name (MAIL in the example), can be changed to any valid step name. The input control cards, pointed to by the SYSTSIN DD card, can be DD * as in the example or any data set with fixed block format and record length of 80 bytes. Format of the SMTPNOTE command is:

SMTPNOTE [**BATCH**] [**NOCC** | **CC(**address**)**] **TO(**address**)** [**FROM(**address**)**]

[**REPLYTO(**address**)**] **SUBJECT(**text**)** [**DATASET('**data-set-name**')**]

Where :
- BATCH is required when running in batch with JCL.
- CC(address) can be repeated as many times as necessary to send mail. If there is no CC(address) present, then the NOCC parameter must be used.
- TO(address) is used to send the mail to an address. As with CC(address) it may be repeated as many times as necessary. At least one TO(address) must be present. Use of TO(address) vs. CC(address) has only to do with where the address appears in the Mail.
- FROM(address) is optional and is used to change the address where undeliverable mail will be sent. It defaults to the sender of the mail. In the case of Host mail, this is the ACF2 userid of the job running the SMTPNOTE command.
- REPLYTO(address) is optional and is the address where a reply will be sent. If it is not present, then the FROM(address), or its default, is used for the reply.
- SUBJECT(text) is the subject of the mail and must be present.
- DATASET(data-set-name) is the full data set name of the information that is to be the text of the message. Note that the data set name is in quotes. Any type of disk data set can be mailed, maximum LRECL is 255 bytes. This parameter is required if the BATCH parameter is present.

Notes:
- address is a valid SMTP E-Mail address on the LAN and is in the format first.m.last@pmusa.com for most people's address
- text is any characters for the subject of the message.
- The FROM parameter should be used and have the address of the responsible person for the JOB. They can then correct undeliverable mail address.
- If the SMTPNOTE command is on more than one line in the input data set, then each line except the last one must end with the sequence $\varnothing+\varnothing\varnothing$ Where $\varnothing$ stands for a blank and $\varnothing\varnothing$ stands for one or more blanks.

The SMTPNOTE command can also be used from TSO/ISPF. The BATCH parameter would not be used and the DATASET(data-set-name) parameter is optional. If present, the data pointed to is copied to a work data set and the user is placed in edit on the working copy. If the parameter is missing, the user is placed in edit on an empty data set. In TSO/ISPF, the user will not be prompted for the FROM(address) or REPLYTO(address) parameters.

Sending Mail from host to Lan.

The bells and whistles

In order to do just more than transfer text from the Host to the LAN email system several features have been added to the basic email process: Set the level of importance of the message, Add color, Change the font, Attach files to the message and Send blind copies. Most of these features are controlled by one of two standards sets of control "words" added to your message data set. The two systems are: Enriched Text and HTML. Both systems allow you to perform these functions:

- Add Colors
- Bold text
- Italic text
- Underlining text
- Change fonts type
- Change font size

Both systems by default move text up. That is, the end of the input records are ignore and two or more spaces are treated as one. This is done in part because the control words take up space in the input file but are not printed. If you are only interested in say, changing the font to a fixed size character set and retaining the format and spacing in the file, you can add control words to the start and end of the file to retain the spacing.

The additions to the SMTPNOTE syntax are:

        SMTPNOTE .. [[ENRICH] [NOFILL] [FIXED]] | [HTML] |
                            [IMPORTANCE(LOW | NORMAL | HIGH)] |
                            [FILE(data-set-name**,EXT**=typ**]] |**
                            [BCC(address**)]**

Where
- ENRICH   Request that the Enriched control words be accepted in the input file.
- NOFILL   To request that a NOFILL command be inserted before the first line of the users data, as seen be the email system. The original file is not changed. Implies ENRICH.
- FIXED   To request a fixed pitched font. Adds the FIXED command before the first line of the users data, as seen be the email system. The original file is not changed. Implies ENRICH and NOFILL.
- HTML   Request that the HTML control words be accepted in the input file.
- IMPORTANCE   To set the level of importance to High, Normal, or Low. The default is to normal. The command can be shorten to IMP.
- FILE   Request that the "data-set-name" be sent as an attached file.
  Data-set-name is the full data set name of the information that is to be attached to the message. Note that the data set name is in quotes. Any type of disk data set can be mailed.
  typ is the three (3) character extension to be used for the data set name on the receiving mail system, default is TXT if the parameter is omitted
  FILE can be repeated as many times as necessary.
- BCC   address is the SMTP address of the person that is to receive the blind mail. BCC can be repeated as many times as necessary.

The bells and whistles

The syntax of the command words in either standard is <command>
the < and > are necessary to define the command . Each command is terminated with a </command>

Enrich text example: This line has the word <bold>bold </bold> in bold.
HTML text example: This line has the word bold in bold.

While I do not want you to consider the following text, a complete syntax of the two standards, it should be enough to get you started.

The commands can be placed one within another. By commands I mean the <command> </command> pair. Therefore in the Enrich standard syntax:

<bold><color><param>red</param>text-1</color>text-2</bold>
causes text-1 to be both red and bold, while text-2 is only bold

Note that this sequence is invalid.

<bold><color><param>red</param>text-1</bold>text-2</color>

The color must be ended before the bold.

Enrich Syntax

Colors:

        <color><param>a-color</param> text </color>

        where

                a-color   is one of the following red, blue, green, yellow, cyan, magenta, black, white.

                text   is the text to be in that color.

Bold:

        <bold>text</bold>

        where

                text is the text to be bold.

Italic

        <italic>text</italic>

        where

                text is the text to be in italic.

Underlining

        <underline>text</underline>

        where

                text is the text to be underlined.

Font

        <fontfamily><param>font-name</param>text</fontfamily>

        where

                font-name   is a name of a font to be used. Case is important in the name .

                text   is the text to be changed to that font.

Fixed

        <fixed>text</fixed>

        where

                text is the text to be displayed in a fixed pitch font.

Larger font

        <bigger>text</bigger>

        where

                text is the text to be displayed larger.

Smaller font

        <smaller>text</smaller>

        where

                text is the text to be displayed smaller.

Enrich Syntax

Nofill

        <nofill> text </nofill>

        where

                text is the text to be diplayed with all end-of-lines honored.

Without nofill text after a blank line starts a new line and text after 2 blanks line has one blank line before it and starts on a new line. In general n blank line become n-1 blank lines.

If the parameter NOFILL is added to the SMTPNOTE command a <nofill> command is inserted before any text is added by the user. You can then insert the </nofill> command to allowing filling to occur. IF the NOFILL paramter is added without the ENRICH parameter on the SMPTNOTE command, the ENRICH parameter is assumes to be present.

HTML Syntax

Colors: see Font control word later

Bold:

    text

    where

        text is the text to be bold.

Italic

    <i>text</i>

    where

        text is the text to be in italic.

Underlining

    <u>text</u>

    where

        text is the text to be underlined.

Font

    text

    where

        a-color   is one of the following red, blue, green, yellow, cyan, magenta, black, white.

        font-name   is a name of a font to be used. Must have the quotes around it.

        n   is the number 1 through 7 with 3 being the default, 7 is the largest.

        text   is the text to be changed to that font.

    Not all parameters need to be present.

Larger font: see Font control word above.

Smaller font: see Font control word above.

Nofill

    <pre> text </pre>

    where

        text   is the text to be displayed with all end-of-lines honored and in a fixed font (as is or PREformatted).

New Paragraph

    <p> text

    where

        text   is the text to start a the beginning of a new line after one blank line.

    Note that this command does not have the ending </p>.

Samples "Code"

The text below is a sample HTML

```
     SMTPNOTE to(..) nocc Subject(..) html ..

 <pre> <font face="Arial" size=3>
 <b>This is all in bold<i> and italic too.</i></b>

 We can even have <u>underlinning too.</u>
 <font color=red>This is Red <b>and bold Red.</b></font>
 </font>
 </pre>
 <font face="Bookman Old Style">This
 is in the Bookman Old Style.<font size=4> And bigger
 font<font size=5> and even bigger.
 </font></font></font>

 <font face="Times New Roman">
 This is in the Times New Roman.
 </font>

 <font face="Bookman Old Style" size=5 color=green>
 This should be in green
 and 18 point Bookman Old Style,  </font>
 and the normal arial font 12 point.
```

The text below is a sample ENRICH

```
     SMTPNOTE to(..) nocc Subject(..) enrich nofill ..

<bold>This is all in bold<italic> and italic too.</italic></bold>

We can even have <underline>underlinning too.</underline>
<color><param>red</param>This is Red <bold>and bold
Red.</bold></color>
</nofill>
<fontfamily><param>Bookman Old Style</param>This
is in the Bookman Old Style.<bigger> And bigger
font<bigger> and even bigger.
</bigger></bigger></fontfamily>

<fontfamily><param>Times
New Roman</param>This is in the Times New Roman.
</fontfamily>

<fontfamily><param>Bookman Old Style</param><bigger><bigger>
<color><param>green</param>This should be in green
and 18 point Bookman Old Style,  </color>
</bigger></bigger></fontfamily>and the normal arial font 12 point.
```

Sample output

<u>HTML</u>

This is all in bold *and italic too.*

We can even have <u>underlinning too.</u>
This is Red **and bold Red.**

This is in the Bookman Old Style. And bigger font and even bigger. This is in the Times New Roman. This should be in green and 18 point Bookman Old Style, the normal arial font 12 point.

<u>ENRICH</u>

This is all in bold *and italic too.*

We can even have <u>underlinning too.</u>
This is Red **and bold Red.**

This is in the Bookman Old Style. And bigger font and even bigger.
This is in the Times New Roman.

This should be in green and 18 point Bookman Old Style, and the normal arial font 12 point.

Note the difference before the green text. In the HTML all white space is compressed to one space, while in ENRICH it is not. The enrich also adds one space before the Green text at the start of the line.

Either standard works, sometimes one "better" than the other. Which one you use depends on what you want to do and the ease of doing it.

EXAMPLES

1. Send message to three people and use a fixed font for the message.
```
SMTPNOTE  BATCH  NOCC  FIXED+
    TO(Tim.R.Benson@PMUSA.COM) +
    TO(Bob.I.Smith@PMUSA.COM) +
    TO(Kathy.C.Bell@PMUSA.COM) +
    SUBJECT(Job xyz completed) +
    DATASET('P.F1234.RESULTS')
```

2. Same as number one, but with second form of the TO parameter.
```
SMTPNOTE  BATCH  NOCC  FIXED+
TO(Tim.R.Benson@PMUSA.COM Bob.I.Smith@PMUSA.COM Kathy.C.Bell@PMUSA.COM) +
    SUBJECT(Job xyz completed) +
    DATASET('P.F1234.RESULTS')
```

3. Send Message and two attached files with HTML controls in the message.
```
SMTPNOTE  BATCH  NOCC  HTML      +
    FILE('P.F4567.RESULTS')  +
    FILE('P.F8901.RESULTS')  +
    TO(Tim.R.Benson@PMUSA.COM) +
    TO(Bob.I.Smith@PMUSA.COM) +
    TO(Kathy.C.Bell@PMUSA.COM) +
    SUBJECT(Job xyz completed) +
    DATASET('P.F1234.RESULTS')
```

4. Send Message and set its importance level to high.
```
SMTPNOTE  BATCH  NOCC  IMPORTANCE(HIGH)   +
    TO(Tim.R.Benson@PMUSA.COM) +
    TO(Bob.I.Smith@PMUSA.COM) +
    TO(Kathy.C.Bell@PMUSA.COM) +
    SUBJECT(Job xyz completed) +
    DATASET('P.F1234.RESULTS')
```

5. Send Message and use the blind copy.
```
SMTPNOTE  BATCH  NOCC  +
    TO(Tim.R.Benson@PMUSA.COM) +
    TO(Bob.I.Smith@PMUSA.COM) +
    BCC(Kathy.C.Bell@PMUSA.COM) +
    SUBJECT(Job xyz completed) +
    DATASET('P.F1234.RESULTS')
```