

Identification Division.  
Program-ID. J7200524.

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\*  
\* \* This program wraps up the LE callable services necessary to  
\* \* obtain the current date and time (GMT or local) and format  
\* \* that date and/or time according to a format string. This  
\* \* is conceptually similar to the C function strftime().  
\*  
\* \* Valid values for the format string can be found by looking  
\* \* up the CEEDATM callable service in the Language Environment  
\* \* Programming Reference.  
\*  
\* \* If errors are encountered in any of the LE callable services,  
\* \* the service will display a message. It appears that CEEMSG  
\* \* is used for this purpose.  
\*  
\* \* Under systems other than CICS, Language Environment writes  
\* \* the message to the ddname of the file specified in the MSGFILE  
\* \* run-time option. Under CICS, the message is written to a  
\* \* transient data queue named CESE.  
\*  
\* \* Currently, this means that in batch the message is likely to

\* be found in SYSOUT and in CICS it's likely to be found in  
\* CEEMSG.

\*

\*Working-Storage Section.

\*01 CONSTANTS.

\* 05 MYNAME PIC X(008) VALUE 'J8675309'.

\* 05 FMT-DT-TM-PGM PIC X(008) VALUE 'J7200524'.

\*

\*01 LCL-TM-SW PIC X(001).

\* 88 LCL-TM VALUE 'Y'.

\* 88 GMT-TM VALUE 'N'.

\*

\*01 DT-PIC-STRN.

\* 05 DT-PIC-STRN-LEN PIC S9(004) COMP-5 VALUE +80.

\* 05 DT-PIC-STRN-VAL PIC X(080)

\* VALUE 'Www, DD Mmm YYYY HH:MI:SS GMT'.

\*

\*01 FMT-DT-TM PIC X(080) VALUE SPACES.

\*

\*Procedure Division.

\* SET GMT-TM TO TRUE

\* CALL J7200524-PGM USING

\* LCL-TM-SW

\* DT-PIC-STRN

\* FMT-DT-TM

\* END-CALL

\*

Environment Division.

Data Division.

Working-Storage Section.

01 CONSTANTS.

05 MYNAME PIC X(008) VALUE 'J7200524'.

01 WORK-AREAS.

05 GMT-LILIAN PIC 9(008) COMP-5 VALUE 0.

05 OSET-HRS PIC S9(008) COMP-5 VALUE +0.

05 OSET-MIN PIC S9(008) COMP-5 VALUE +0.

05 GMT-FLOT COMP-2 VALUE 0.0.

05 OSET-SEC COMP-2 VALUE 0.0.

Linkage Section.

\* Input - Switch indicating whether to pass back local time

\* or GMT. A value of 'Y' in this field indicates

\* local time should be used. Any value other than 'Y'

\* indicates GMT should be used.

```
01 LCL-TM-SW          PIC X(001).
   88 LCL-TM          VALUE 'Y'.
```

\* Input - Date picture string prefixed by its length. Valid  
\* picture string formatting is documented in the  
\* Language Environment Programming Reference.

```
01 DT-PIC-STRN.  
   05 DT-PIC-STRN-LEN  PIC S9(004) COMP-5.  
   05 DT-PIC-STRN-VAL  
      OCCURS 1 TO 80  
      DEPENDING DT-PIC-STRN-LEN  
      PIC X(001).
```

\* Output - GMT date/time formatted according to the content  
\* of DT-PIC-STRN-VAL.

```
01 FMT-DT-TM          PIC X(080).
```

Procedure Division Using

```
LCL-TM-SW  
DT-PIC-STRN  
FMT-DT-TM  
.
```

```
MOVE SPACES TO FMT-DT-TM
```

\* Obtain GMT time.  
CALL 'CEEGMT' USING  
 GMT-LILIAN  
 GMT-FLOT  
 OMITTED  
END-CALL

```
IF LCL-TM
```

\* If local time requested, obtain its offset from GMT  
\* and compute local time.

```
CALL 'CEEGMT0' USING  
    OSET-HRS  
    OSET-MIN  
    OSET-SEC  
    OMITTED  
END-CALL  
ADD OSET-SEC TO GMT-FLOT  
END-IF
```

\* Format the date according to the passed picture string.  
CALL 'CEEDATM' USING

GMT-FLOT  
DT-PIC-STRN  
FMT-DT-TM  
OMITTED  
END-CALL

MOVE 0 TO RETURN-CODE  
GOBACK.