

draft for approval
 Date: 4/06/66

DESCRIPTION

Use of the EPL Compiler in OLDS
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Pass 1 of EPL was written by R. Morley, and Pass 2 was written by M. B. Mc Ilroy. The present description and the "EPL runcom" are by A. Evans

USAGE

The command

R EPL NAME -(LIST)-

will cause the (ASCII) file NAME EPL to be compiled, producing the following three (ASCII) files:

NAME SOURCE A line-numbered listing of the source file, followed by a cross-referenced symbol table.

NAME PADROS Output of Pass 1 of the compiler and, therefore, input to Pass 2.

NAME EPLISA The output of Pass 2 of the compiler, ready to send to the 515 with (ADPFI) for assembly by EPLISA.

If the optional argument "(LIST)" is used, these three files will also be listed on the user's console as part of the run.

Files with the following names are produced as part of the EPL run, but they are deleted by the end of the run. Thus useful files with these names should not be in the user's directory.

NAME TSPFX
 NAME ISA
 NAME RFD

REMARKS

The program EPL SAVCO actually initiates a sort of programmed RUNCOM. An EPL compilation is a two-pass affair with both passes being non-interactive loads. Further, both passes produce as output the files NAME RFI and NAME RSI, the first file being a listing file and the second being the useful output. EPL compilation can be done with a RUNCOM such as the following:

```

CHN1 = NAME
RESUME IPL1 NAME IPL
DEFNAME NAME HCN NAME SOURCEP
RENAME NAME ASA NAME MESSAGES
RESUME IPL2 NAME MACROE
RENAME NAME ESA NAME EPUREA
RELATE NAME BDD
    
```

because of the inefficiencies involved in using SOURCEP in CHN1, the effect of the SOURCEP is simulated by programming IPL1 to load the contents of the command buffers in the file NAME IPL1A (in temporary mode), and it then loads the command buffers like this:

```

RESUME IPL1 NAME IPL
RESUME IPLX NAME (LISTON (LOON))
    
```

CHN1 will be "LISTON" if that option parameter appeared in the calling sequence of IPL1, and it will be "MIGRATE" otherwise. IPL1 is Pass 2 of the IPL compiler, and it will produce NAME BDD and NAME ESA. IPL1 will remove these two files to save SOURCEP and MESSAGES, respectively. Then, if the "MIGRATE" option was given, it will exit when it finds the argument "SOURCEP" is not present. IPL1 will terminate with an error, and if it is present, the following will be loaded into the command buffers:

```

RESUME IPL2 NAME MACROE
RESUME IPLY NAME (LISTON (LOON))
    
```

IPL2 is Pass 2 of the IPL compiler, and it also produces NAME BDD and NAME ESA. IPL2 renames NAME ESA to NAME EPUREA and deletes NAME BDD. If the "MIGRATE" option was used, it is in a NAME IPL1A. If the third parameter is "SOURCEP", it reloads the command buffers from NAME IPL1A and calls SOURCEP.

Error Abnormalities

Abnormalities occur in the user's J9000 program, are detected in either Pass 1 or Pass 2. They are indicated by error messages printed on the user's console. Pass 2 will be run even if errors are detected in Pass 1.

Symbolic Link Usage

The symbolic links between J9000 programs may be created by the user, or:

```

LINK J9000 IPL1 TO IPL2
LINK J9000 IPL2 TO IPL3
    
```

The SOURCEP will make the needed links and will use SOURCEP BDD.