

File created: 11-Jul-85 11:39:07 {DSK}<LISPFILS>TESTER>TEST-REMOTE-EVAL.;4

changes to: (VARS TEST-REMOTE-EVALCOMS)

previous date: 11-Jul-85 10:20:19 {DSK}<LISPFILS>TESTER>TEST-REMOTE-EVAL.;1

Read Table: OLD-INTERLISP-FILE

Package: INTERLISP

Format: XCCS

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(RPAQQ **TEST-REMOTE-EVALCOMS**

```
((FNS TEST.CALL-SOMEONE-FOR-HELP TEST.ESTIMATE-FILE-PRINTING-TIME TEST.ESTIMATE-FILE-READING-TIME
  TEST.EVAL-FORM-AT-HOST TEST.FLAG-CONTROLLED-REMOTE-EVAL TEST.LOAD-FORM-AND-EVAL
  TEST.NONE-BREAK-REMOTEVAL TEST.OPEN-INPUT-FILE-OR-WAIT TEST.PRINT-RESULT-ON-FILE
  TEST.READ-FORM-FILE TEST.REMOTE-EVAL-FORM TEST.REMOTE-EVAL-USING-FILE TEST.WAIT-ON-FLAG)
(VARS TEST.COMMUNICATION-FLAG TEST.GLOBAL-FORM-IN-HOST-MACHINE TEST.GLOBAL-RESULT-IN-HOST-MACHINE)
(GLOBALVARS (TEST.EVAL-SERVER-HOST (QUOTE 222#24#))
  (TEST.FORM-FILE-NAME (QUOTE {ERIS}<MARKOVITCH>TESTER>TESTFILES2>FORM-FILE))
  (TEST.MASTER-MACHINE (QUOTE 222#6#))
  (TEST.RESULT-FILE-NAME (QUOTE {ERIS}<MARKOVITCH>TESTER>TESTFILES2>RESULT-FILE)))
(CONSTANTS (GARY (QUOTE 222#24#))
  (TERRY (QUOTE 222#53#))
  (TEST.CHAR-PER-SECOND-PRINTING-SPEED 400)
  (TEST.CHAR-PER-SECOND-READING-SPEED 1000)
  (TEST.CHECK-FOR-RESPONSE-PERIOD.ms 100)
  (TEST.DEFAULT-MAX-WAITING-TIME-ON-FILE.ms 20000)
  (TEST.DEFAULT-MAX-WAITING-TIME-ON-FLAG.ms 30000)
  (TEST.GENERAL-DEFAULT-WAITING-TIME.ms 60000)
  (TEST.MAX-DATA-TRANSFER-TIME.ms 1000)
  (TEST.OPEN-AND-CLOSE-FILE-TIME.ms 20000)
  (TEST.PERIOD-BETWEEN-FILE-OPEN-TRIALS.ms 5000)
  (TEST.PERIOD-BETWEEN-FLAG-CHECK-TRIALS.ms 100)
  (TEST.WAIT-FOR-SERVICE-TIME.ms 30000))))
```

(DEFINEQ

(TEST.CALL-SOMEONE-FOR-HELP

```
[LAMBDA (MESS T-ITEM) (* sm "27-Jun-85 11:38")
  (RINGBELLS)
  (PROMPTPRINT MESS)
  (LAFITE.SENDMESSAGE (CONCAT "Subject: Tester program needs help
    To: Markovitch.pa
    Help -- " MESS))
  (MENU (create MENU
    ITEMS _ (LIST (LIST T-ITEM T)
      (QUOTE ("Skip test" NIL)))
    MENUFONT _ BIGFONT])
```

(TEST.ESTIMATE-FILE-PRINTING-TIME

```
[LAMBDA (NUMBER-OF-CHARACTERS) (* sm "27-Jun-85 12:14")
  (IPLUS TEST.OPEN-AND-CLOSE-FILE-TIME.ms (ITIMES 1000 (FIX (FQUOTIENT NUMBER-OF-CHARACTERS
    TEST.CHAR-PER-SECOND-PRINTING-SPEED]))
```

(TEST.ESTIMATE-FILE-READING-TIME

```
[LAMBDA (FORM) (* sm "27-Jun-85 11:48")
  (IPLUS TEST.OPEN-AND-CLOSE-FILE-TIME.ms (ITIMES 1000 (FIX (FQUOTIENT (NCHARS FORM T)
    TEST.CHAR-PER-SECOND-READING-SPEED]))
```

(TEST.EVAL-FORM-AT-HOST

```
[LAMBDA NIL (* sm "27-Jun-85 14:53")
  (PROG (RESULT NUM-OF-CHARS-IN-RESULT FORM)
    (SETQ FORM TEST.GLOBAL-FORM-IN-HOST-MACHINE)
    (SETQ RESULT (TEST.LOCAL-EVAL-FORM FORM))
    (SETQ NUM-OF-CHARS-IN-RESULT (NCHARS RESULT T))
    (SETQ TEST.GLOBAL-RESULT-IN-HOST-MACHINE RESULT)
    (REMOTEVAL (LIST (QUOTE SETQ)
      (QUOTE TEST.COMMUNICATION-FLAG)
      NUM-OF-CHARS-IN-RESULT)
      TEST.MASTER-MACHINE 0 TEST.WAIT-FOR-SERVICE-TIME.ms))
```

(TEST.FLAG-CONTROLLED-REMOTE-EVAL

```
[LAMBDA (FORM HOST MAX-WAITING-TIME.ms) (* sm "27-Jun-85 16:50")
  (PROG (TRANSACTION-ID ABORT-TRIAL)
    (if (NULL MAX-WAITING-TIME.ms)
      then (SETQ MAX-WAITING-TIME.ms TEST.GENERAL-DEFAULT-WAITING-TIME.ms))
    (SETQ TEST.COMMUNICATION-FLAG NIL)
    START-AGAIN
    (SETQ TRANSACTION-ID (TEST.NONE-BREAK-REMOTEVAL FORM HOST 0 TEST.WAIT-FOR-SERVICE-TIME.ms))
```

```

(if (EQ TRANSACTION-ID (QUOTE TIME-EXPIRED))
  then [if (TEST.CALL-SOMEONE-FOR-HELP "Can't establish communication with eval host. " "Retry
      communicating")
    then (GO START-AGAIN)
    else (RETURN (QUOTE (ERROR! "REMOTE SERVICE DOES NOT RESPONSE"]
  else (TEST.WAIT-ON-FLAG (QUOTE TEST.COMMUNICATION-FLAG)
    (IPLUS MAX-WAITING-TIME.ms TEST.MAX-DATA-TRANSFER-TIME.ms))
    (if (NOT TEST.COMMUNICATION-FLAG)
      then (SETQ ABORT-TRIAL (TEST.NONE-BREAK-REMOTEVAL (LIST (QUOTE EVALSERVER.ABORT)
        TRANSACTION-ID)
        TEST.EVAL-SERVER-HOST 1 TEST.WAIT-FOR-SERVICE-TIME.ms))
      [if (EQ ABORT-TRIAL (QUOTE TIME-EXPIRED))
        then [if (TEST.CALL-SOMEONE-FOR-HELP "Eval server host did not complete his
            computation in the designated time, and does not response to
            interrupt trials." "Retry test")
          then (RETURN (QUOTE (ERROR! RETRY)))
          else (RETURN (QUOTE (ERROR! "TIME EXPIRED, ABORT FAILED. "])
        else (RETURN (QUOTE (ERROR! "TIME EXPIRED, REMOTE ABORTED."])
      else (RETURN TEST.COMMUNICATION-FLAG)])

```

(TEST.LOAD-FORM-AND-EVAL

```

[LAMBDA NIL (* sm "27-Jun-85 13:21")
  (PROG (FORM-FILE RESULT-FILE RESULT FORM NUM-OF-CHARS-IN-RESULT)
    (SETQ FORM-FILE (TEST.OPEN-INPUT-FILE-OR-WAIT TEST.FORM-FILE-NAME))
    (IF (TEST.ERRORP FORM-FILE)
      THEN (SETQ RESULT RESULT-FILE)
      ELSE (SETQ FORM (READ FORM-FILE))
        (CLOSEF FORM-FILE)
        (SETQ RESULT (TEST.LOCAL-EVAL-FORM FORM)))
    (SETQ NUM-OF-CHARS-IN-RESULT (NCHARS RESULT T))
    (SETQ TEST.GLOBAL-RESULT-IN-HOST-MACHINE RESULT)
    (REMOTEVAL (LIST (QUOTE SETQ)
      (QUOTE TEST.COMMUNICATION-FLAG)
      NUM-OF-CHARS-IN-RESULT)
      TEST.MASTER-MACHINE 0 TEST.WAIT-FOR-SERVICE-TIME.ms))

```

(TEST.NONE-BREAK-REMOTEVAL

```

[LAMBDA (FORM HOST MULT TIMEOUT) (* sm "26-Jun-85 11:18")
  (PROG (RESULT OLD-HELPFLAG)
    (SETQ OLD-HELPFLAG (GETTOPVAL (QUOTE HELPFLAG)))
    (SETTOPVAL (QUOTE HELPFLAG)
      NIL)
    (SETQ RESULT (ERRORSET (QUOTE (REMOTEVAL FORM HOST MULT TIMEOUT))
      (QUOTE NOBREAK)))
    [if (NULL RESULT)
      then (SETQ RESULT (LIST (ERRORN)))
        (if (EQP (CAAR RESULT)
          17)
          then (SETQ RESULT (QUOTE (TIME-EXPIRED])
        (SETTOPVAL (QUOTE HELPFLAG)
          OLD-HELPFLAG)
        (RETURN (CAR RESULT)])

```

(TEST.OPEN-INPUT-FILE-OR-WAIT

```

[LAMBDA (FILE-NAME MAX-WAITING-TIME.ms) (* sm "27-Jun-85 14:12")
  (PROG (F)
    (if (NULL MAX-WAITING-TIME.ms)
      then (SETQ MAX-WAITING-TIME.ms TEST.DEFAULT-MAX-WAITING-TIME-ON-FILE.ms))
    (for II from 0 to MAX-WAITING-TIME.ms by TEST.PERIOD-BETWEEN-FILE-OPEN-TRIALS.ms
      while [TEST.ERRORP (SETQ F (TEST.LOCAL-EVAL-FORM (LIST (QUOTE OPENFILE)
        (KWOTE FILE-NAME)
        (QUOTE (QUOTE INPUT))
        (QUOTE (QUOTE OLD])
      do (DISMISS TEST.PERIOD-BETWEEN-FILE-OPEN-TRIALS.ms))
    (RETURN F)])

```

(TEST.PRINT-RESULT-ON-FILE

```

[LAMBDA NIL (* sm "27-Jun-85 12:47")
  (PROG (RESULT-FILE)
    (SETQ RESULT-FILE (OPENFILE TEST.RESULT-FILE-NAME (QUOTE OUTPUT)
      (QUOTE NEW)))
    (PRIN4 TEST.GLOBAL-RESULT-IN-HOST-MACHINE RESULT-FILE)
    (CLOSEF RESULT-FILE)
    (REMOTEVAL (QUOTE (SETQ TEST.COMMUNICATION-FLAG T))
      TEST.MASTER-MACHINE 0 TEST.WAIT-FOR-SERVICE-TIME.ms))

```

(TEST.READ-FORM-FILE

```

[LAMBDA NIL (* sm "27-Jun-85 16:39")
  (PROG (FORM-FILE RESULT)
    (SETQ FORM-FILE (TEST.OPEN-INPUT-FILE-OR-WAIT TEST.FORM-FILE-NAME))
    (IF (NOT (TEST.ERRORP FORM-FILE))
      THEN (SETQ TEST.GLOBAL-FORM-IN-HOST-MACHINE (READ FORM-FILE))

```

```

(CLOSEF FORM-FILE))
(REMOTEVAL (LIST (QUOTE SETQ)
                 (QUOTE TEST.COMMUNICATION-FLAG)
                 (KWOTE FORM-FILE)))
TEST.MASTER-MACHINE 0 TEST.WAIT-FOR-SERVICE-TIME.ms])

```

(TEST.REMOTE-EVAL-FORM

```

[LAMBDA (FORM TIMEOUT.ms)                                     (* sm "9-Jul-85 17:23")
  (TEST.REMOTE-EVAL-USING-FILE FORM TIMEOUT.ms)]

```

(TEST.REMOTE-EVAL-USING-FILE

```

[LAMBDA (FORM TIMEOUT.ms)                                     (* sm "27-Jun-85 16:26")
  (PROG (FORM-FILE RESULT-FILE NUMBER-OF-CHARACTERS-IN-RESULT RESULT READ-REPORT)
    START-AGAIN
    (SETQ FORM-FILE (OPENFILE TEST.FORM-FILE-NAME (QUOTE OUTPUT)
                                     (QUOTE NEW)))
    (PRIN4 FORM FORM-FILE)
    (CLOSEF FORM-FILE)
    (SETQ READ-REPORT (TEST.FLAG-CONTROLED-REMOTE-EVAL (QUOTE (TEST.READ-FORM-FILE))
                                                         TEST.EVAL-SERVER-HOST
                                                         (TEST.ESTIMATE-FILE-READING-TIME FORM)))
    (if (TEST.ERRORP READ-REPORT)
        then (if (EQ (CADR READ-REPORT)
                      (QUOTE RETRY))
                  then (GO START-AGAIN)
                  else (RETURN READ-REPORT))
        else (SETQ NUMBER-OF-CHARACTERS-IN-RESULT (TEST.FLAG-CONTROLED-REMOTE-EVAL (QUOTE (
                                                                                          TEST.EVAL-FORM-AT-HOST
                                                                                          ))
                                                                                          TEST.EVAL-SERVER-HOST
                                                                                          TIMEOUT.ms)))
    (* If Computation Completed Succesfully Then The Communication Flag Was Set To The Number Of Characters In The
    Prin4 Form Of The Result So That We Will Be Able To Estimate How Long Should We Wait For Printing The Result File.
    Otherwise, We Had Some Error, And <Number-of-characters-in-result> Will Be Of The Form
    (Error! ...))
    (if (TEST.ERRORP NUMBER-OF-CHARACTERS-IN-RESULT)
        then (if (EQ (CADR NUMBER-OF-CHARACTERS-IN-RESULT)
                      (QUOTE RETRY))
                  then (GO START-AGAIN)
                  else (RETURN NUMBER-OF-CHARACTERS-IN-RESULT))
        else (SETQ RESULT (TEST.FLAG-CONTROLED-REMOTE-EVAL (QUOTE (TEST.PRINT-RESULT-ON-FILE))
                                                             TEST.EVAL-SERVER-HOST
                                                             (TEST.ESTIMATE-FILE-PRINTING-TIME NUMBER-OF-CHARACTERS-IN-RESULT)))
    (if (TEST.ERRORP RESULT)
        then (if (EQ (CADR RESULT)
                      (QUOTE RETRY))
                  then (GO START-AGAIN)
                  else (RETURN RESULT))
        else (SETQ RESULT-FILE (TEST.OPEN-INPUT-FILE-OR-WAIT TEST.RESULT-FILE-NAME))
    (if (TEST.ERRORP RESULT-FILE)
        then (RETURN RESULT-FILE)
        else (SETQ RESULT (READ RESULT-FILE))
    (CLOSEF RESULT-FILE)
    (RETURN RESULT])

```

(TEST.WAIT-ON-FLAG

```

[LAMBDA (FLAG-NAME MAX-WAITING-TIME.ms)                       (* sm "27-Jun-85 13:23")
  (if (NULL MAX-WAITING-TIME.ms)
      then (SETQ MAX-WAITING-TIME.ms TEST.DEFAULT-MAX-WAITING-TIME-ON-FLAG.ms))
  (for i from 0 to MAX-WAITING-TIME.ms by TEST.PERIOD-BETWEEN-FLAG-CHECK-TRIALS.ms
    while (NOT (EVAL FLAG-NAME)) do (DISMISS TEST.PERIOD-BETWEEN-FLAG-CHECK-TRIALS.ms])
)

```

```

(RPAQQ TEST.COMMUNICATION-FLAG 3)

```

```

(RPAQQ TEST.GLOBAL-FORM-IN-HOST-MACHINE NIL)

```

```

(RPAQQ TEST.GLOBAL-RESULT-IN-HOST-MACHINE NIL)

```

```

(DECLARE: DOEVAL@COMPILE DONTCOPY

```

```

(GLOBALVARS (TEST.EVAL-SERVER-HOST (QUOTE 222#24#))
             (TEST.FORM-FILE-NAME (QUOTE {ERIS}<MARKOVITCH>TESTER>TESTFILES2>FORM-FILE))
             (TEST.MASTER-MACHINE (QUOTE 222#6#))
             (TEST.RESULT-FILE-NAME (QUOTE {ERIS}<MARKOVITCH>TESTER>TESTFILES2>RESULT-FILE)))
)

```

```

(DECLARE: EVAL@COMPILE

```

```

(RPAQQ GARY 222#24#)

```

```

(RPAQQ TERRY 222#53#)

```

```
(RPAQQ TEST.CHAR-PER-SECOND-PRINTING-SPEED 400)
(RPAQQ TEST.CHAR-PER-SECOND-READING-SPEED 1000)
(RPAQQ TEST.CHECK-FOR-RESPONSE-PERIOD.ms 100)
(RPAQQ TEST.DEFAULT-MAX-WAITING-TIME-ON-FILE.ms 20000)
(RPAQQ TEST.DEFAULT-MAX-WAITING-TIME-ON-FLAG.ms 30000)
(RPAQQ TEST.GENERAL-DEFAULT-WAITING-TIME.ms 60000)
(RPAQQ TEST.MAX-DATA-TRANSFER-TIME.ms 1000)
(RPAQQ TEST.OPEN-AND-CLOSE-FILE-TIME.ms 20000)
(RPAQQ TEST.PERIOD-BETWEEN-FILE-OPEN-TRIALS.ms 5000)
(RPAQQ TEST.PERIOD-BETWEEN-FLAG-CHECK-TRIALS.ms 100)
(RPAQQ TEST.WAIT-FOR-SERVICE-TIME.ms 30000)

(CONSTANTS (GARY (QUOTE 222#24#))
  (TERRY (QUOTE 222#53#))
  (TEST.CHAR-PER-SECOND-PRINTING-SPEED 400)
  (TEST.CHAR-PER-SECOND-READING-SPEED 1000)
  (TEST.CHECK-FOR-RESPONSE-PERIOD.ms 100)
  (TEST.DEFAULT-MAX-WAITING-TIME-ON-FILE.ms 20000)
  (TEST.DEFAULT-MAX-WAITING-TIME-ON-FLAG.ms 30000)
  (TEST.GENERAL-DEFAULT-WAITING-TIME.ms 60000)
  (TEST.MAX-DATA-TRANSFER-TIME.ms 1000)
  (TEST.OPEN-AND-CLOSE-FILE-TIME.ms 20000)
  (TEST.PERIOD-BETWEEN-FILE-OPEN-TRIALS.ms 5000)
  (TEST.PERIOD-BETWEEN-FLAG-CHECK-TRIALS.ms 100)
  (TEST.WAIT-FOR-SERVICE-TIME.ms 30000))
)

(PUTPROPS TEST-REMOTE-EVAL COPYRIGHT ("Xerox Corporation" 1985))
```

FUNCTION INDEX

TEST.CALL-SOMEONE-FOR-HELP	1	TEST.LOAD-FORM-AND-EVAL	2	TEST.REMOTE-EVAL-FORM	3
TEST.ESTIMATE-FILE-PRINTING-TIME .	1	TEST.NONE-BREAK-REMOTEVAL	2	TEST.REMOTE-EVAL-USING-FILE	3
TEST.ESTIMATE-FILE-READING-TIME .	1	TEST.OPEN-INPUT-FILE-OR-WAIT	2	TEST.WAIT-ON-FLAG	3
TEST.EVAL-FORM-AT-HOST	1	TEST.PRINT-RESULT-ON-FILE	2		
TEST.FLAG-CONTROLLED-REMOTE-EVAL .	1	TEST.READ-FORM-FILE	2		

CONSTANT INDEX

GARY	4	TEST.GENERAL-DEFAULT-WAITING-TIME.ms	4
TERRY	4	TEST.MAX-DATA-TRANSFER-TIME.ms	4
TEST.CHAR-PER-SECOND-PRINTING-SPEED	4	TEST.OPEN-AND-CLOSE-FILE-TIME.ms	4
TEST.CHAR-PER-SECOND-READING-SPEED	4	TEST.PERIOD-BETWEEN-FILE-OPEN-TRIALS.ms	4
TEST.CHECK-FOR-RESPONSE-PERIOD.ms	4	TEST.PERIOD-BETWEEN-FLAG-CHECK-TRIALS.ms	4
TEST.DEFAULT-MAX-WAITING-TIME-ON-FILE.ms	4	TEST.WAIT-FOR-SERVICE-TIME.ms	4
TEST.DEFAULT-MAX-WAITING-TIME-ON-FLAG.ms	4		

VARIABLE INDEX

TEST.COMMUNICATION-FLAG	3	TEST.GLOBAL-RESULT-IN-HOST-MACHINE	3
TEST.GLOBAL-FORM-IN-HOST-MACHINE	3		
