Pascal 180 Project Plan (Release 1.1.4)


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DISCLAIMER:

This document is an internal working paper and does not  represent
any intent on the part of Control Data Corporation.

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1.0 INTRODUCTION

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### 1.1 BACKGROUND

Pascal 180 was first released for 1.1.3 and implements the ISO and ANSI standards with several extensions (see references 1, 4 and 5).

### 1.2 GOALS

The goals for Release 1.1.4 for Pascal are to improve the product via such further extensions as are possible and to correct problems discovered with the initial release. The identified items for 1.1.4 are:

1. Structured Constants (see reference 3).

2. Improvement of Syntax Error Texts

3. Improvement of Run Time Errors (i.e., reduce list of errors not detected)

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2.0 IMPLEMENTATION STRATEGY

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For the structured constants extension, the TWS  grammar  will  be
modified  to accomodate the syntax required.  The constrainer will
be modified to perform the required semantic checks and to perform
the required code selection.

For the improvement of syntax error texts, modifications to TWS to
allow user error processing will  be  investigated.   Should  that
tack  prove  unprofitable, an interface to cleanse the diagnostics
will be provided by Pascal.  This should allow production of  more
readable and informative diagnostics.

Time  permitting,  the existing RSEs relating to Pascal Errors Not
Detected will be addressed and  where  appropriate,  modifications
will  be  made to the code selection process to allow diagnosis of
those errors.

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3.0 ASSUMPTIONS AND DEPENDENCIES

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### 3.0 ASSUMPTIONS_AND_DEPENDENCIES

### 3.1 ASSUMPTIONS

1.  TWS will continue to be used for the scan/screen/parse
    function.

2.  No new support code will be required of other projects.

### 3.2 DEPENDENCIES

Release 1.1.4 introduces no new dependencies.

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4.0 RISKS

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## 4.0 RISKS

The only known risk is that TWS may be deemed  unacceptable  as  a
software  tool because of the quality of diagnostics.  Should this
occur, the recourse would be to write  a  scanner  and  parser  by
hand.   This  would  make  inclusion  of  new  features  for 1.1.4
unlikely, but would probably enhance the syntax diagnostic  texts.

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5.0 COMPONENTS, SCHEDULE, RESOURCES, BUDGETS AND COSTS

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## 5.0 COMPONENTS, SCHEDULE, RESOURCES, BUDGETS AND COSTS

### 5.1 COMPONENTS

The deliverables for 1.1.4 shall be:

1. Updated Pascal processor

2. Updated ERS

3. Updated Usage Manual

### 5.2 SCHEDULE OF PHASES AND DELIVERABLES

|  | Start | Complete |
|---|---|---|
| Analysis and Design Phase | | |
| Feature Design | 31May85 | 31Jul85 |
| ERS Update to DCS | | 31Jul85 |
| | | |
| Implementation Phase | | |
| Feature Code | 1Aug85 | 30Sep85 |
| Usage Manual Update | 1Aug85 | 30Sep85 |

### 5.3 RESOURCES AND BUDGET

See 1985 TRACs and PMS for project number 43NW8602.

### 5.4 COMPUTER RESOURCES

Maintenance of current level of computer resource availability is sufficient.

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6.0 REFERENCES

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1.   Pascal 180 ERS: S4509, 30 April 1985

2.   Pascal 180 DR:  S4647, 15 January 1985

3.   ANSI X3J9/JPC/85-036, Structured Constants:  19 March 1985

4.   Specification for Computer Programming Language Pascal,
     ISO dp7185, 1983.

5.   American National Standard Pascal Computer Programming Language
     ANSI/IEEE770x3.97-1983.

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