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AdaNET

Phase 0 Support for the AdaNET Dynamic Software Inventory (DSI) Management System Prototype

Catalog of Available Reusable Software Components

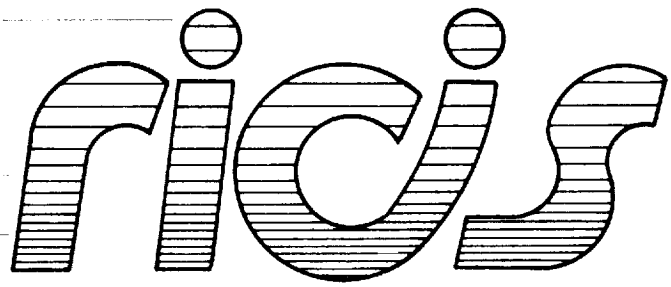
Lionel Hanley

GHG Corporation

May 1989

Cooperative Agreement NCC 9-16
Research Activity No. SE.24

NASA Headquarters
Technology Utilization Program
Information & Network Operations



Research Institute for Computing and Information Systems
University of Houston - Clear Lake

T·E·C·H·N·I·C·A·L R·E·P·O·R·T

The RICIS Concept

The University of Houston-Clear Lake established the Research Institute for Computing and Information systems in 1986 to encourage NASA Johnson Space Center and local industry to actively support research in the computing and information sciences. As part of this endeavor, UH-Clear Lake proposed a partnership with JSC to jointly define and manage an integrated program of research in advanced data processing technology needed for JSC's main missions, including administrative, engineering and science responsibilities. JSC agreed and entered into a three-year cooperative agreement with UH-Clear Lake beginning in May, 1986, to jointly plan and execute such research through RICIS. Additionally, under Cooperative Agreement NCC 9-16, computing and educational facilities are shared by the two institutions to conduct the research.

The mission of RICIS is to conduct, coordinate and disseminate research on computing and information systems among researchers, sponsors and users from UH-Clear Lake, NASA/JSC, and other research organizations. Within UH-Clear Lake, the mission is being implemented through interdisciplinary involvement of faculty and students from each of the four schools: Business, Education, Human Sciences and Humanities, and Natural and Applied Sciences.

Other research organizations are involved via the "gateway" concept. UH-Clear Lake establishes relationships with other universities and research organizations, having common research interests, to provide additional sources of expertise to conduct needed research.

A major role of RICIS is to find the best match of sponsors, researchers and research objectives to advance knowledge in the computing and information sciences. Working jointly with NASA/JSC, RICIS advises on research needs, recommends principals for conducting the research, provides technical and administrative support to coordinate the research, and integrates technical results into the cooperative goals of UH-Clear Lake and NASA/JSC.

ADANET
PHASE O SUPPORT FOR THE ADANET DYNAMIC SOFTWARE INVENTORY (DSI) MANAGEMENT SYSTEM PROTOTYPE
Catalog of Available Reusable Software Components

Preface

This research was conducted under the auspices of the Research Institute for Computing and Information Systems by Lionel Hanley of GHG Corporation. Dr. Charles McKay, Director of SERC, at the University of Houston-Clear Lake served as RICIS technical representative.

Funding has been provided by NASA Technology Utilization Program, NASA Headquarters through Cooperative Agreement NCC 9-16 between NASA Johnson Space Center and the University of Houston-Clear Lake. The NASA technical monitor for this activity was Roy Bivins, Manager, Information and Network Operations, Technologyy Utilization Division, NASA Headquarters.

AdaNet

PHASE 0 SUPPORT FOR THE ADANET DYNAMIC SOFTWARE INVENTORY (DSI) MANAGEMENT SYSTEM PROTOTYPE

Project No. RICIS SE. 24

Catalog of Available Reusable Software Components

Research Institute for Computing and Information Systems (RICIS)
Cooperative Agreement NCC-9-16

Revision #01
May 1989

University of Houston Clear Lake
2700 Bay Area Blvd
Houston, Texas 77058-1068

GHG SE 24-3

ADANET
Catalog of Reusable Software Components

Prepared by
GHG Corporation
Houston, Texas

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University of Houston Clear Lake
Houston, Texas

MAY 1989

APPROVED BY GHG:

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GHG Ada Technology Group

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GHG Ada Technology Group

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PREFACE

STATEMENT OF OPERATION - ADA SOFTWARE REPOSITORY

(OPERATE.DOC, Version 1.0)

The Ada Software Repository is a public-domain collection of Ada software and information. The Ada Software Repository is one of several repositories located on the SIMTEL20 Defense Data Network host computer at White Sands Missile Range in New Mexico. SIMTEL20 is owned and operated by the Operations and Systems Integration Division of the Information Systems Command of the US Army.

The Ada Software Repository is sponsored by the Operations and Systems Integration Division at White Sands Missile Range with additional funding provided by the STARS (Software Technology for Adaptable, Reliable Systems) Joint Program Office at the Pentagon.

Disclaimer

All software, documentation and other items of information in the Ada Software Repository are in the public domain. These software, documentation and information files are provided "AS IS" and without any expressed or implied warranties whatsoever. No warranties as to performance, merchantability or fitness for a particular purpose exist.

Because of the diversity of conditions and hardware under which this software may be used, no warranty of fitness for a particular purpose is offered. The user is advised to test the software thoroughly before relying on it. The user must assume the entire risk and liability of using this software.

In no event shall any person or organization of people be held responsible for any direct, indirect, consequential or inconsequential damages or lost profits.

THE ADA SOFTWARE REPOSITORY (ASR) ON SIMTEL20

(ADAREPOS.DOC, Version 1.0)

A repository of Ada programs, software components and educational material has been established on the SIMTEL20 host computer on the Defense Data Network. This repository has been accessible to any host computer on the network since November 26, 1984.

This repository provides a free source for Ada programs and information. By employing the File Transfer Protocol (FTP) program, users of DDN hosts are able to scan the directories of the repository and transfer files to their hosts. If the files are Ada programs, they may then compile these programs and use them as they desire. Modifying these programs may be within their rights, and they may freely distribute these programs within and without the DoD as they desire, subject to the restrictions specified for each piece of software in its prologue.

The Ada Software Repository is divided into several subdirectories. These directories are organized by topic, and their names and a brief overview of their topics are contained in the file DIRLIST.DOC in PD2:<ADA.GENERAL>.

The Ada Software Repository on SIMTEL20 serves two basic roles: to promote the exchange and use (reusability) of Ada programs and tools (including components) and to promote Ada education (especially by providing several working examples of programs in source form for people to study and modify).

All members of the Ada community are encouraged to freely extract information and programs from the repository as well as make contributions to it. The only restrictions which apply to the access and use of this software are presented in the "Distribution and Copyright" section of the prologue associated with each piece of software.

Ada

PD:<ADA>

This is the top-level directory. The names of the subdirectories (*.DIRECTORY) can be seen here. The listing of all files in all subdirectories ADA.CRCLST) is also stored here. Also, the file FILEUSE.DOC, which contains a listing of all files in the repository, ordered by frequency of use (popularity), is contained here.

Ada-SQL

PD:<ADA.ADA-SQL>

This subdirectory contains files associated wit the development of a standard Ada DBMS interface (Ada/SQL) based on the dpANS Data Base Language SQL. It is anticipated that SQL will be adopted as the Air Force standard Relational data base query language.

Directory: PD:<ADA.ADA-SQL>

DAMES.CMM	833
DAMES.DOC	5283
DAMES.PRO	4945
DAMES.SRC	616438
DAMESABS.DOC	2139
DAMESSRC.DIS	390
DAMESVMS.DIS	1062
RAPPABS.DOC	3647
RAPPNOTES.DOC	6284
RAPPORT.CMM	840
RAPPORT.PRO	4910
RAPPORT.SRC	282884
SQL.CMM	1885
SQL.PRO	5050
SQLDD2.DIS	75
SQLDD2.SRC	51795
SQLDDL.DIS	112
SQLDDL.SRC	42642
SQLDDLRD.ME	2673
SQLDDLTS.IN	2265
SQLDDLTS.OUT	4732
SQLDML.DAT	3845
SQLDML.DIS	120
SQLDML.OUT	10333
SQLDML.SRC	123991
SQLDMLRD.ME	3072
SQLREADME.DOC	1299
SQLSPC.INT	43318
SQLSPC.TXT	140309
SQLSPCRD.ME	284
==========	==========
30 Files	1367455

DAMES DBMS Interface

Machine/System Compiled/Run on: ROLM/DG / AOS

Abstract:

The HQ USAF Assistant Chief of Staff for Information Systems anticipates the adoption of SQL as the Air Force standard Relational data base query language. The Air Force will probably adopt the American National Standard (ANS) Database Language SQL as its Relational query language. A draft proposed American National Standard (dpANS)/International Standard Database Language SQL is in the public review process. Given the above Air Force position, the WIS JPMO began a project with the Institute for Defense Analysis and RACOM Computer Professionals to develop a standard Ada DBMS interface (Ada/SQL) based on the dpANS Database Language SQL.

A "Proposed Binding Ada to Database Language SQL" has been presented to the responsible American National Standards Committee(X3H2). We anticipate its adoption as the DoD and ANS/ISO standard Ada relational DBMS interface and it will be the WIS Standard Ada DBMS interface. As such, we recommend the Ada/SQL interface be used for any development of an Ada DBMS interface.

The RAPPORT and DAMES DBMS Ada interfaces were among the R&D precursors developed to define an Ada DBMS interface. They are provided for information only and their syntax should not be used as a basis to build an Ada interface for any other DBMS.

The following files are associated with this item:

Directory: PD:<ADA.ADA-SQL>

DAMES.CMM	833
DAMES.DOC	5283
DAMES.PRO	4945
DAMES.SRC	616438
DAMESABS.DOC	2139
DAMESSRC.DIS	390
DAMESVMS.DIS	1062
==========	==========
7 Files	631090

RAPPORT

Machine/System Compiled/Run on: TeleSoft 1.3 / VMS

Abstract:

The HQ USAF Assistant Chief of Staff for Information Systems anticipates the adoption of SQL as the Air Force standard Relational data base query language. The Air Force will probably adopt the American National Standard (ANS) Database Language SQL as its Relational query language. A draft proposed American National Standard (dpANS)/International Standard Database Language SQL is in the public review process. Given the above Air Force position, the WIS JPMO began a project with the Institute for Defense Analysis and RACOM Computer Professionals to develop a standard Ada DBMS interface (Ada/SQL) based on the dpANS Database Language SQL.

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The RAPPORT and DAMES DBMS Ada interfaces were among the R&D precursors developed to define an Ada DBMS interface. They are provided for information only and their syntax should not be used as a basis to build an Ada interface for any other DBMS.

The following files are associated with this item:

Directory: PD:<ADA.ADA-SQL>

RAPPABS.DOC	3647
RAPPNOTES.DOC	6284
RAPPORT.CMM	840
RAPPORT.PRO	4910
RAPPORT.SRC	282884
5 Files	298565

SQL DBMS Interface

Machine/System Compiled/Run on: ROLM/DG / AOS

Abstract:

The HQ USAF Assistant Chief of Staff for Information Systems anticipates the adoption of SQL as the Air Force standard Relational data base query language. The Air Force will probably adopt the American National Standard (ANS) Database Language SQL as its Relational query language. A draft proposed American National Standard (dpANS)/International Standard Database Language SQL is in the public review process.

Given the above Air Force position, the WIS JPMO began a project with the Institute for Defense Analysis and RACOM Computer Professionals to develop a standard Ada DBMS interface (Ada/SQL) based on the dpANS Database Language SQL. A "Proposed Binding Ada to Database Language SQL" has been presented to the responsible American National Standards Committee (X3H2). We anticipate its adoption as the DoD and ANS/ISO standard Ada relational DBMS interface and it will be the WIS Standard Ada DBMS interface. As such, we recommend the Ada/SQL interface be used for any development of an Ada DBMS interface.

The following files are associated with this item:

Directory: PD:<ADA.ADA-SQL>

SQL.CMM	1885
SQL.PRO	5050
SQLDD2.DIS	75
SQLDD2.SRC	51795
SQLDDL.DIS	112
SQLDDL.SRC	42642
SQLDDLRD.ME	2673

SQLDDLTS.IN	2265
SQLDDLTS.OUT	4732
SQLDML.DAT	3845
SQLDML.DIS	120
SQLDML.OUT	10333
SQLDML.SRC	123991
SQLDMLRD.ME	3072
SQLREADME.DOC	1299
SQLSPC.INT	43318
SQLSPC.TXT	140309
SQLSPCRD.ME	284
==========	==========
18 Files	437800

AI

PD:<ADA.AI>

This subdirectory contains programs relating to the fields of artificial intelligence, such as expert systems, pattern recognition, and heuristic analysis.

Directory: PD:<ADA.AI>

ALSP.ABS	2038
ALSP.CM2	8457
ALSP.CMM	5951
ALSP.PRO	3642
ALSPDESGN.DOC	92478
ALSPREAD.ME	1561
ALSPREN.SUB	300
ALSPSRC.DIS	165
ALSPTECH.DOC	127481
ALSPTYPES.SRC	214879
ALSPUSER.DOC	87583
EXPERT.ADA	36105
EXPERT.DAT	890
EXPERT.PRO	3368
==========	==========
14 Files	584898

EXPERT

Machine/System Compiled/Run on: VAX 11/785, VMS 4.1, DEC Ada
Abstract:

EXPERT is a backward chaining or goal driven expert system. It is based on two articles, first Sept 1981 BYTE (Duda and Gaschnig) published the expert system in BASIC skirting the use of recursion, second Jan/Feb 85 issue of JOURNAL OF PASCAL,ADA, & MODULA-2 (Darrell
Morgeson) published in Modula-2 with recursion implemented. The listing had one logic error which caused pointer explosion on the last hypothesis in the GETRULE routine. This implementation follows the MODULA-2 design completely and was not designed from the ground up in Ada.

The following files are associated with this item:

Directory: PD:<ADA.AI>

EXPERT.ADA	36105
EXPERT.DAT	890
EXPERT.PRO	3368
3 Files	40363

LISP Routines

Machine/System Compiled/Run on: VAX/VMS DEC Ada

Abstract:

This is a package of types, objects, and functions that emulate the important capabilities of the AI language LISP which are not directly available in Ada. These capabilities will be represented in Ada in a relatively straightforward manner without changing the Ada language definition.

The following files are associated with this item:

Directory: PD:<ADA.AI>

ALSP.ABS	2038
ALSP.CM2	8457
ALSP.CMM	5951
ALSP.PRO	3642
ALSPDESGN.DOC	92478
ALSPREAD.ME	1561
ALSPREN.SUB	300
ALSPSRC.DIS	165
ALSPTECH.DOC	127481
ALSPTYPES.SRC	214879
ALSPUSER.DOC	87583
11 Files	544535

ANSI-LRM

PD:<ADA.ANSI-LRM>

This subdirectory contains a machine-readable copy of the ANSI Version of the Ada Language Reference Manual (LRM). The files were obtained from the directory <ADA-LSN> on ECLB, and the file FTPFILES.SUB shows the FTP process used to copy the files over and the renaming that was done.

Chapters 1-14 and Appendices A-F are included as CHAPxx.DOC (like, CHAP01.DOC or CHAPA.DOC). Error files are also included as CHAPxx.ERR. The Foreword (FOREWORD.DOC, ERR), Postscript (POSTSCRPT.DOC, ERR), and Table of Contents (TOC.DOC) are included. INDEX.DOC contains the index.

Directory: PD:<ADA.ANSI-LRM>

AAREAD.ME	656
CHAP01.DOC	28756
CHAP01.ERR	3882
CHAP02.DOC	25873
CHAP02.ERR	916
CHAP03.DOC	148935
CHAP03.ERR	22863
CHAP04.DOC	93644
CHAP04.ERR	14398
CHAP05.DOC	30966
CHAP05.ERR	815
CHAP06.DOC	37794
CHAP06.ERR	9488
CHAP07.DOC	40501
CHAP07.ERR	4037
CHAP08.DOC	41799
CHAP08.ERR	9116
CHAP09.DOC	62084
CHAP09.ERR	11503
CHAP10.DOC	35205
CHAP10.ERR	9263
CHAP11.DOC	38382
CHAP11.ERR	6773
CHAP12.DOC	45319
CHAP12.ERR	5550
CHAP13.DOC	52136
CHAP13.ERR	3161
CHAP14.DOC	99653
CHAP14.ERR	12395
CHAPA.DOC	26702
CHAPA.ERR	2655
CHAPB.DOC	10518
CHAPB.ERR	1181
CHAPC.DOC	13526
CHAPC.ERR	664
CHAPD.DOC	21166
CHAPE.DOC	19552
CHAPF.DOC	2351
CHAPF.ERR	419
FOREWARD.D16	4202
FOREWARD.DOC	4487
FOREWARD.ERR	2014
FTPFILES.SUB	1951
INDEX.DOC	171677
POSTSCRPT.D16	3416
POSTSCRPT.DOC	3746
POSTSCRPT.ERR	435
TOC.D16	6974
TOC.DOC	7551
49 Files	1201050

Benchmarks

PD:<ADA.BENCHMARKS>

This subdirectory contains various Ada compiler benchmarks. Benchmarks submitted in conjunction with the NOSC tools are located in the Ada Repository BENCHMARKS directory.

Directory: PD:<ADA.BENCHMARKS>

ADAFAIR85.CMM	3978
ADAFAIR85.DOC	241861
ADAFAIR85.PRO	2094
ADAFAIR85.SRC	243002
BENCH.DOC	7291
BENCHABS.DOC	2658
BENCHADA.SRC	75057
BENCHDHRY.ADA	18473
BENCHMARK.CMM	3266
BENCHMARK.PRO	3857
BENCHPFC.DIS	332
BENCHPFC.SRC	81329
BENCHRES.DOC	10307
BENCHSRC.DIS	241
BENENV.INF	103
BENHTOOLS.ADA	10791
BENMATH.ADA	965
BENWHET.COM	262
JPMOBENCH.CMM	3446
JPMOBENCH.DIS	494
JPMOBENCH.DOC	20454
JPMOBENCH.PRO	4039
JPMOBENCH.SRC	115548
PIWG.DOC	14507
PIWG.PRO	3350
PIWG83186.CMM	424
PIWGA831.INC	672
PIWGA831.SRC	241273
PIWGB831.INC	579
PIWGB831.SRC	147989
PIWGC831.INC	809
PIWGC831.SRC	533807
PIWGD831.INC	601
PIWGD831.SRC	201739
SRITESTS.DOC	106035
SRITESTS.PRO	1912
SRITESTS.SRC	108160
TASKING.DOC	110056
TASKING.PRO	3008
TASKING.SRC	66865
40 Files	2391634

ADAFAIR85

Author : LA AdaTEC, POC: Ed Colbert
: Absolute Software
: 220 40th Street
: Manhatten Beach, CA 90266

Machine/System Compiled/Run on: VAX/VMS

Abstract: ADAFAIR85 contains a set of tests/benchmarks used to compare various Ada compilers.

The following files are associated with this item:

Directory: PD:<ADA.BENCHMARKS>

ADAFAIR85.CMM	3978
ADAFAIR85.DOC	241861
ADAFAIR85.PRO	2094
ADAFAIR85.SRC	243002
4 Files	490935

Benchmarks

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

A suite of timing and sizing benchmark programs written in "C", Ada, Fortran and Pascal. The first program in the suite is the Whetstone benchmark, which measures processor speed. This benchmark suite is available in "C", Ada, Fortran and Pascal. The other program in the suite is the Dhrystone benchmark. The Dhrystone benchmark measures statement execution per unit time. Dhrystone is available only for Ada.

The following files are associated with this item:

Directory: PD:<ADA.BENCHMARKS>

BENCH.DOC	7291
BENCHABS.DOC	2658
BENCHADA.SRC	75057
BENCHDHRY.ADA	18473
BENCHMARK.CMM	3266
BENCHMARK.PRO	3857
BENCHPFC.DIS	332
BENCHPFC.SRC	81329
BENCHRES.DOC	10307
BENCHSRC.DIS	241
BENENV.INF	103
BENHTOOLS.ADA	10791
BENMATH.ADA	965
BENWHET.COM	262
14 Files	214932

JPMO Benchmarks

Machine/System Compiled/Run on: Telesoft 1.3 (unvalidated), WICAT/ROS

Abstract:

This tool is a series of very simple benchmarks which are used to test the validity of various assumptions that one might make about the behavior of a compiler. Probably all the implicit assumptions are valid, these tests just check that something has not been overlooked that could severely distort detailed quantitative tests. There should be no significance given to the numerical results of these tests, they just provide a framework for other tests. There is not even a pressing need to make sure of the status (or emptiness) of the machine on which they are run, since the desired comparison is one to another, not to some absolute.

The following files are associated with this item:

Directory: PD:<ADA.BENCHMARKS>

JPMOBENCH.CMM	3446
JPMOBENCH.DIS	494
JPMOBENCH.DOC	20454
JPMOBENCH.PRO	4039
JPMOBENCH.SRC	115548
5 Files	143981

PIWG Benchmarks

Unit name : PIWG Benchmarks
Version : TAPE_8_31_86
Author : ACM SIGAda Performance Issues Working Group (PIWG)

Machine/System Compiled/Run on: Numerous

PIWG is a suite of tests/benchmarks prepared by the Performance Issues Working Group of ACM SIGAda. The purpose of PIWG is to develop the benchmarks and collect and disseminate results.

The PIWG tests have been under development for many years and have been run against many Ada compilers. The PIWG test suite contains over 190 files which include Whetstone (to measure processor speed), Dhrystone (to measure statement execution per unit time), and other benchmarks which test various attributes of the Ada language and their implementations under specific compilers. The PIWG tests must be customized for a particular compiler, and instructions are included to do this.

Some of the items measured by PIWG include:

* task creation-related timing
* dynamic elaboration-related timing
* exception-related timing
* coding style-related timing
* TEXT_IO-related timing
* loop overhead-related timing

* procedure call-related timing
* task-related timing
* compilation, link, and execution times

NOTE: the directory PD:<ADA.PIWG> contains each of the individual files of the PIWG Benchmark Suite, while the directory PD:<ADA.BENCHMARKS> contains the same files grouped as just a few large PAGER files.

The following files are associated with this item:

Directory: PD:<ADA.BENCHMARKS>

PIWG.DOC	14507
PIWG.PRO	3350
PIWG83186.CMM	424
PIWGA831.INC	672
PIWGA831.SRC	241273
PIWGB831.INC	579
PIWGB831.SRC	147989
PIWGC831.INC	809
PIWGC831.SRC	533807
PIWGD831.INC	601
PIWGD831.SRC	201739
11 Files	1145750

SRITESTS

Author: SRI

Machine/System Compiled/Run on: VAX/VMS

Abstract:

SRITESTS contains a set of Ada compiler tests/benchmarks which concentrate on Ada tasking.

The following files are associated with this item:

Directory: PD:<ADA.BENCHMARKS>

SRITESTS.PRO	1912
SRITESTS.SRC	108160
3 Files	216107

Tasking_Benchmarks

Machine/System Compiled/Run on: DEC Ada (Version 1.2) on a VAX 8600

Keywords: tasking, tasking benchmarks, tasking overhead

Abstract:

A set of tasking benchmarks were developed in conjunction with the paper "An Assessment of the Overhead Associated with Tasking Facilities and Task Paradigms in Ada" which appeared in the January, February 1987 Ada Letters. These benchmarks were developed to measure the efficiency of the implementation of the Ada tasking model, and evaluate the additional cost of introducing intermediaries for the various tasking paradigms.

The following files are associated with this item:

Directory: PD:<ADA.BENCHMARKS>

TASKING.DOC	110056
TASKING.PRO	3008
TASKING.SRC	66865
3 Files	179929

CAIS

This directory contains software associated with the Common APSE Interface Set (CAIS).

The CAIS is defined in MIL-STD-CAIS.

Directory: PD:<ADA.CAIS>

CAIS.PRO	4658
CAIS.SRC	1333231
CAISTESTS.PRO	6084
CAISTESTS.SRC	385816
4 Files	1729789

Mitre_CAIS

Machine/System Compiled/Run on: Vax 8600
UNIX
Verdix Ada Development Sys

Abstract:

This CAIS package provides a robust subset of the inter- faces defined in the proposed Military Standard Common Apse Interface Set(CAIS). The goal of MIL-STD-CAIS is to promote tool portability by providing a standardized set of calls for operating system services. It is also hoped that definition of a generalized node model will increase the interoperability of tool sets.

This subset includes:

5.1.1,2,3,5 -- Node_Definitions, Node_Management, Attributes, and Structural_Nodes

5.3.1,1-4,10 -- Io_Definitions, Direct_Io, Sequential_Io, Text_Io, and File_Import_Export (also a few procedures from Scroll_Terminal)

5.4.1-20,21 -- List_Utilities, Identifier_Items, and String_Items

The interfaces not included are Access_Control, Process_Control, Io_Control, the Io device packages, Float_Item, and Integer_Item.

It is intended that this CAIS subset be used to investigate the extent to which CAIS supports the needs of software development tools. Only by rehosting tools and their data to CAIS can the viability of CAIS be determined.

The following files are associated with this item:

Directory: PD:<ADA.CAIS>

CAIS.PRO	4658
CAIS.SRC	1333231
2 Files	1337889

Tests for Mitre CAIS

Machine/System Compiled/Run on: Vax 8600
UNIX
Verdix Ada Development Sys

Abstract:

This set of tests exercises a wide range of the implemented CAIS interfaces. In general the results of the tests are self- documenting. However they are programmer-developed tests and are not as rigorous as might be expected for acceptance testing. They also vary in style. In some instances dependencies upon the state of the node model remain in these tests and thus may require modification.

The tests are:

attribute_ex.a	=> Test Exceptions on Attribute Com
cais_commandos.a	=> Set of Interactive CAIS Commands
copytree_test.a	=> Tests Copy_Tree(+Node), Rename
existree_ex.a	=> Same as Nodetree_ex sans Creates
io_ex_create_test.a	=> Test Exceptions on Text_Io.Create
io_ex_open_test.a	=> Test Exceptions on Text_Io.Open
io_ex_delete_test.a	=> Test Exceptions on Text_Io.Delete
list_test_02_12.a	=> Tests List_Utilities 5.4.2 - 12
list_test_13_ss.a	=> Tests List_Utilities 5.4.13 - 23
list_tstex.a	=> Tests Exceptions on List_Utilities
listutst.a	=> Five Quick List_Utilities Tests
list_utilities_tests-body.a	=> Part of Above
list_utilities_tests-spec.a	=> Part of Above
natt_tst_all.a	=> Test Node Attribute Commands
natt_tst_it.a	=> Test Node Attribute Iterators
new_user.a	=> Adds New_Users
node_mgnt.a	=> Tests some of Node-Management
node_management_tests-body.a	=> Part of Above
node_management_tests-body.a	=> Part of Above

```
nodetree_ex.a              => Tests some Node_Management Excep.
nodetree_cleanup.a                => Deletes Nodes from Above
patt_tst_all.a                 => Test Path Attribute Commands
patt_tst_it.a                    => Test Path Attribute Iterators
struct_nodes.a                 => Main for Structural_Nodes test
structural_nodes_tests-body.a                      => Part of Above
structural_nodes_tests-spec.a                      => Part of Above
test_internals.a               => Test Window into Cais Insides
test_node_iterate.a                      => Tests Node Iterate
text_test.a                           => Tests some of Text_Io
text_io_tests-body.a                       => Part of Above
text_io_tests-spec.a                       => Part of Above
```

The tests should be run when the CAIS is installed and users have been added. They can also be run as regression tests, if the CAIS code is modified. They may be helpful as supplementary (though rudimentary) examples to MIL-STD-CAIS.

The following files are associated with this item:

Directory: PD:<ADA.CAIS>

CAISTESTS.PRO	6084
CAISTESTS.SRC	385816
2 Files	391900

CAIS_Tools

PD:<ADA.CAIS-TOOLS>

This subdirectory contains tools which are compatable with and modified or implemented to run under the CAIS presented in the directory PD:<ADA.CAIS>. These tools have been modified or implemented by Mitre Corporation and internally funded by Mitre.

Directory: PD:<ADA.CAIS-TOOLS>

EDITOR.PRO	7140
EDITOR.SRC	152675
2 Files	159815

Editor

Machine/System Compiled/Run on: VAX 8600 ULTRIX, Sun2 UNIX 4.2
Abstract:

ALED is designed to edit text files. Upon invocation, ALED prompts the user for a file name. If the file exists, its contents (lines) are read in and prepared for editing; if the file does not exist, the file is created and the empty buffer is prepared for editing. ALED is an interactive editor, accepting single-char commands, filling in a command prompt (for more info as needed), and performing its functions in real-time while the user watches. The functions provided include (but are not limited to) the following:

* List Lines
* Insert a Group of Lines into the Edit Buffer
* Delete Lines
* String Search and String Substitution
* Movement Within the Edit Buffer
* Reading in a File After a Specified Line
* Writing out a Range of Lines to a File
* Built-in, online Documentation (Summary)

ALED's design includes an input line editor, which allows the user to edit text as he types it.

The following files are associated with this item:

Directory: PD:<ADA.CAIS-TOOLS>

EDITOR.PRO	7140
EDITOR.SRC	152675
2 Files	159815

Compilation_Order

PD:<ADA.COMPILATION-ORDER>

This subdirectory contains software which deals with the analysis of groups of Ada programs to determine the proper compilation order. Other information pertaining to the interrelationship of software segments of a system may be obtained as well.

Directory: PD:<ADA.COMPILATION-ORDER>

COABS.CO	622
COABS.NOT	236
COMPDOC.DIS	74
COMPORD.CMM	1456
COMPORD.CO	202
COMPORD.DOC	75149
COMPORD.PRO	3550
COMPORD.SRC	291226
COMPORD.TST	68764
COMPTST.DIS	284
COREAD.ME	4855
11 Files	446418

Compilation Order

Machine/System Compiled/Run on: DEC Ada, SUN Ada, VAX/VMS, SUN

Abstract:

The Compilation Order Requirements Report computes a proper compilation order for given Ada source files. It then generates a report showing the computed compilation order and outputs it to the default output file.

The following files are associated with this item:

Directory: PD:<ADA.COMPILATION-ORDER>

COABS.CO	622
COABS.NOT	236
COMPDOC.DIS	74
COMPORD.CMM	1456
COMPORD.CO	202
COMPORD.DOC	75149
COMPORD.PRO	3550
COMPORD.SRC	291226
COMPORD.TST	68764
COMPTST.DIS	284
COREAD.ME	4855
11 Files	446418

Directory: PD:<ADA.COMPONENTS>

ABSTRACT.CMM	2263
ABSTRACT.CO	2657
ABSTRACT.PRO	3334
ABSTRACT.SRC	572620
4 Files	580874

Components

PD:<ADA.COMPONENTS>

This is the components subdirectory. Software components, including general-purpose procedures, packages, and generics, are stored here. Examples are: math packages, TERMCAP routines, generic linked list packages, and dynamic string packages.

Directory: PD:<ADA.COMPONENTS>

ABSTRACT.CMM	2263
ABSTRACT.CO	2657
ABSTRACT.PRO	3334
ABSTRACT.SRC	572620
CAS2.ADA	6942
CAS2.PRO	2452
CAS3.ADA	8259
CAS3.PRO	2755
CDUPDATE.ADA	57663
CDUPDATE.PRO	3561
CLI.CMM	2001
CLI.DIS	92
CLI.PRO	3745
CLI.SRC	30039
COUNTADA.CMM	1217
COUNTADA.PRO	4139
COUNTADA.SRC	4587
CPA.CMM	162

CPA.PRO	2397
CPA.SRC	2318
CSET.PRO	3582
CSET.SRC	16764
DSTR1.ADA	8598
DSTR1.PRO	3014
DSTR2.ADA	14129
DSTR2.PRO	2993
DSTR3.ABS	6272
DSTR3.CMM	2068
DSTR3.PRO	4570
DSTR3.SRC	16707
DSTR3.TST	7261
DUNIT.CMM	184
DUNIT.PRO	3041
DUNIT.SRC	29965
FGET.PRO	3207
FGET.SRC	11155
FILECOMP.ADA	85866
FILECOMP.PRO	3808
GARBAGE.PRO	2646
GARBAGE.SRC	6536
IOSPT.PRO	3858
IOSPT.SRC	16526
LIMPRIOR.ADA	7374
LIMPRIOR.PRO	3461
LIST.ADA	17483
LIST.PRO	3397
MESSAGEIO.ADA	25068
MESSAGEIO.PRO	3121
NAMELIST.CMM	436
NAMELIST.PRO	2496
NAMELIST.SRC	21435
NEWABS.DIS	2768
NEWABS.PRO	3319
NEWABS.SRC	659811
PARSER.PRO	4258
PARSER.SRC	11086
PERMUTATE.ADA	11226
PERMUTATE.PRO	3326
PRIOR.ADA	6398
PRIOR.PRO	3582
QSORT.PRO	1568
QSORT.SRC	7325
RESERVE.AD	1306
RESERVE.PRO	3382
RESERVE.SRC	23186
SAFEIO.ADA	9730
SAFEIO.PRO	3661
SDEPDEC.PRO	3154
SDEPDEC.SRC	27034
SDEPDG.ADA	4513
SDEPDG.PRO	4215
SEARCH.ADA	19994

SEARCH.PRO	3322
SLIST.PRO	2802
SLIST.SRC	23821
SORTARRY.ADA	62225
SORTARRY.CMM	638
SORTARRY.PRO	3380
STACK.ADA	6833
STACK.PRO	3309
TBD.ADA	13212
TBD.PRO	5322
TOD.ADA	78532
TOD.PRO	3600
VDT100.PRO	3332
VDT100.SRC	15113
VLENGTHIO.PRO	3883
VLENGTHIO.SRC	120626
88 Files	2215016

Abstractions

Machine/System Compiled/Run on: DEC Ada, VMS

Abstract:

ABSTRACTIONS contains a number of low-level support routines which are used by NOSC tools created by Intermetrics. Several routines are of general utility.

ABSTRACTIONS is used by NOSC/WIS tools 5.1.1, 5.1.2, 6.1.2, and 6.2. See also NEW_ABSTRACTIONS.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

ABSTRACT.CMM	2263
ABSTRACT.CO	2657
ABSTRACT.PRO	3334
ABSTRACT.SRC	572620
4 Files	580874

CAS2

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This procedure calculates the "STATEMENTS" of a valid Ada fragment specified by a FILE_NAME string parameter. It need not be a complete compilation unit, but it should have closed all open parens and strings.

The Ada statement is defined by a semicolon terminator outside of comments, parentheses, or string or character literals. This definition is insensitive to formatting or layout of the source.

There are exotic cases for which this will misestimate the count but we have never encountered one in real code.

This procedure is derived from Bill Whitaker's original COUNT_OF_ADA_STATEMENTS, and it does not change his original algorithm. It adds a line count and a character-checksum hash (sum of POS values of all non-space characters in the file mod 256).

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

CAS2.ADA	6942
CAS2.PRO	2452
2 Files	9394

CAS3

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This procedure calculates the "STATEMENTS" of a valid Ada fragment specified by a FILE_NAME string parameter. It need not be a complete compilation unit, but it should have closed all open parens and strings.

The Ada statement is defined by a semicolon terminator outside of comments, parentheses, or string or character literals. This definition is insensitive to formatting or layout of the source.

There are exotic cases for which this will misestimate the count but we have never encountered one in real code.

This procedure is derived from Bill Whitaker's original COUNT_OF_ADA_STATEMENTS, and it does not change his original algorithm. It adds a line count and a character-checksum hash (sum of POS values of all non-space characters in the file mod 256). It also adds a count of the comment lines (over CAS2, which does not).

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

CAS3.ADA	8259
CAS3.PRO	2755
2 Files	11014

CDUPDATE

Machine/System Compiled/Run on: DG MV10000, ROLM ADE
VAX 11/780, DEC ACS
RATIONAL R1000

Abstract:

This generic package contains routines to perform files revision control. Given a baseline ASCII file, and one or more update decks stored in a single file, it generates an updated or downdated version of the baseline. The update decks can be generated automatically by the package File_Compare_Utilities

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

CDUPDATE.ADA	57663
CDUPDATE.PRO	3561
2 Files	61224

CLI

Machine/System Compiled/Run on: Telesoft 1.3 (unvalidated), WICAT/ROS

Abstract:

The Command Language Interpreter (CLI) implements the tools found in chapters one and two of "Software Tools in Pascal" by Brian W. Kernighan and P.J. Plauger. The commands available for execution are: copy, charcount, linecount, wordcount, detab, entab, overstrike, compress, expand, translit and quit. Most of the commands read subsequent text from the terminal modifying it in one way or another.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

CLI.CMM	2001
CLI.DIS	92
CLI.PRO	3745
CLI.SRC	30039
4 Files	35877

CAS

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This function calculates the "statements" of a valid Ada fragment specified by a FILE_NAME string parameter. It need not be a complete compilation unit but it should have closed all open parentheses and and string brackets. The number of statements of code is returned as an integer. The Ada statement is defined by a semicolon

terminator outside of comments, parentheses, or string or character literals. The definition is insensitive to formatting or layout of the source. This copy of the function is embedded in a test and driver program. The driver has a feature of correcting for the common error of leaving out the extensiOn on a file name. The nature of this extension is system dependent and a ".TXT" extension is used.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

COUNTADA.CMM	1217
COUNTADA.PRO	4139
COUNTADA.SRC	4587
3 Files	9943

Compools_in_Ada

Machine/System Compiled/Run on: VAX 11/780, VMS 4.4, DEC Ada

Abstract:

CPA - Compools in Ada

CPA.SRC -- This file contains the programs for the compool like structure in Ada. This structure is similar to a common block.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

CPA.CMM	162
CPA.PRO	2397
CPA.SRC	2318
3 Files	4877

Character Set

Machine/System Compiled/Run on: DG MV 10000, ROLM ADE

Abstract:

CHARACTER_SET provides a number of test routines which determine if a given character falls into a particular class of characters. See the visible section for details. It also provides routines for character and string letter case conversion (to lower case, to upper case) and for naming control characters.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

CSET.PRO	3582
CSET.SRC	16764

2 Files	20346

Dynamic String

Machine/System Compiled/Run on: DG MV 10000, ROLM ADE

Abstract:

This package creates and manipulates dynamic (variable-length) strings under Ada. See the source code for further details and documentation.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

DSTR1.ADA	8598
DSTR1.PRO	3014
2 Files	11612

Dynamic String

Machine/System Compiled/Run on: DG MV 10000 with ROLM ADE
DEC VAX 11/780 with DEC Ada

Abstract:

Dynamic_Strings is a generic package which provides a set of routines to manipulate dynamic strings. See the documentation in the source code for references to magazine articles et al.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

DSTR2.ADA	14129
DSTR2.PRO	2993
2 Files	17122

Dynamic String 3

Machine/System Compiled On: VAX 8600 / Ultrix / VERDIX

Abstract:

This is a package of several string manipulation functions based on a built-in dynamic string type DYN_STRING. It is an adaptation and extension of the package proposed by Sylvan Rubin of Ford Aerospace and Communications Corporation in the Nov/Dec 1984 issue of the Journal of Pascal, Ada and Modula-2. Some new functions have been added, and much of the body code has been rewritten.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

DSTR3.ABS	6272
DSTR3.CMM	2068
DSTR3.PRO	4570
DSTR3.SRC	16707
DSTR3.TST	7261
==========	==========
5 Files	36878

DIMENSIONAL_UNITS

Machine/System Compiled/Run on: DEC Ada on VAX
APLEX (Telegen 2) on Gould 32/97 running MPX

Keywords: Dimensional Units

Abstract:

This package provides useful parent types for derived dimensional units. That is, it makes it possible to do this:

```
type Feet is new Integer_Unit;
type Radians is new Float_Unit.
```

Objects of type Feet can be added together, but can't be multiplied together to get a result in feet. See Dr. Dobb's Journal of Software Tools issue #127 (May 1987) page 50 for a complete description of how to use this package.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

DUNIT.CMM	184
DUNIT.PRO	3041
DUNIT.SRC	29965
==========	==========
3 Files	33190

FGET

Machine/System Compiled/Run on: DG MV 10000, ROLM ADE
DEC VAX 11/785, DEC Ada

Abstract:

Package FGET manipulates an object which is a text file. Its main purpose is to return characters from this file, allowing one-character look-ahead. A character which has been obtained from the file via GETC can be returned to the file by an UNGETC, in which case the next GETC will return the same character again. Additionally, GETC returns ASCII.CR if the end of a text line is reached and ASCII.ETX if the end of the file is reached.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

FGET.PRO	3207	
FGET.SRC	1	1155
2 Files	14362	

FILECOMP

Machine/System Compiled/Run on: DG MV10000, ROLM ADE
VAX 11/780, DEC ACS
RATIONAL R1000

See_Also: CDUPDATE

Abstract:

This generic package contains routines to compare two ASCII files. It produces as output a side-by-side listing of both files, showing their differences in a very readable format, and also produces an update deck which can be used to provide a mapping between the two files. This update deck is meant to be input for a revision control package, called Context_Directed_Update_Utilities.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

FILECOMP.ADA	85866
FILECOMP.PRO	3808
2 Files	89674

Garbage Collection

Machine/System Compiled/Run on: Data General MV/10000 running the Ada Development Environment 2.2

Abstract:

This is a generic garbage collector. It simply maintains an internal linked list of items which have been freed then reuses these items when more are needed.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

GARBAGE.PRO	2646
GARBAGE.SRC	6536
2 Files	9182

I/O Support

Machine/System Compiled/Run on: DG MV 10000, ROLM ADE

Abstract:

IO_SUPPORT is a companion package for SYSDEP, a system dependencies package that provides console input and console output without echo on the input and without control character interpretation. IO_SUPPORT, which employs SYSDEP, provides an input line editor and interfaces to the routines in SYSDEP which provide a greater degree of functionality than SYSDEP itself provides.

For applications which are embedded and do not require features of TEXT_IO other than simple character or string I/O, IO_SUPPORT with SYSDEP offer an alternative to withing in the entire TEXT_IO package.

The philosophy behind creating SYSDEP is to provide low-level I/O routines which can be built upon to implement applications which require raw I/O, such as communications servers and character-oriented tools. IO_SUPPORT goes one step further by providing a set of commonly-used routines around SYSDEP, preventing the need for constantly reinventing the basic wheel.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

IOSPT.PRO	3858
IOSPT.SRC	16526
2 Files	20384

Limited Prioritized Queue

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This generic package creates a Prioritized Queue of a User-defined Limited number of objects. The Queue is First-In, First-Out except where overridden by the priority. The priority may be any discrete type. It is assumed that the priorities are from lowest to highest. The type of data structure to be instantiated for the queue may be any type having assignment and equality. Other types may be enqueued by using access types. (i.e. Access variable pointing to a task.)

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

LIMPRIOR.ADA	7374
LIMPRIOR.PRO	3461
2 Files	10835

Linked List

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This package provides a number of routines which can be used to manipulate a doubly-linked list. See the visible section for a rather complete set of documentation on the routines.

Each element of the list is of the following structure:

```
   RECORD

  element_pointer; -- ptr
        previous: element_pointer; -- ptr
   END RECORD;
```

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

LIST.ADA	17483
LIST.PRO	3397
2 Files	20880

Message I/O

Machine/System Compiled/Run on: VAX 11/785 VMS 4.1
DEC Ada

Abstract:

This package is used for sending messages to the defaut output file. See the visible part for the details of the structure of the messages. Minor changes to this package (including making the length of certain fields generic parameters) would make this package much more versatile.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

MESSAGEIO.ADA	25068
MESSAGEIO.PRO	3121
2 Files	28189

Namelist

Machine/System Compiled/Run on: VAX 11/780, VMS 4.4, DEC Ada

Abstract:

NAMELIST - An input package which implements the FORTRAN NAMELIST capability.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

NAMELIST.CMM	436
NAMELIST.PRO	2496
NAMELIST.SRC	21435
3 Files	24367

New Abstractions

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

NEW_ABSTRACTIONS contains a number of low-level support routines which are used by NOSC tools created by Intermetrics. Several routines are of general utility.

NEW_ABSTRACTIONS is used by NOSC/WIS tools 4.1.1 and 4.1.2. See also ABSTRACTIONS.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

NEWABS.DIS	2768
NEWABS.PRO	3319
NEWABS.SRC	659811
3 Files	665898

Parser

Machine/System Compiled/Run on: DG MV10000 (ROLM ADE) and
DEC VAX 11/785 (DEC Ada)

Abstract:

PARSER is a generic parser that functions in a manner similar to the ARGC/ARGV parser of UNIX. It contains one procedure, PARSE, which accepts a string as input and returns ARGC, a count of the number of tokens in the string, and ARGV, a vector of strings, each string containing a token.

PARSER is instantiated with two strings (DEL for DELIMITER and DEL_TOKEN for DELIMITER_TOKEN). The DEL string is composed of characters which delimit each token (and are not a part of the token). All characters less than space are automatically delimiters, and the DEL string should contain at least one character (such as a space). DEL_TOKEN is a string composed of characters which delimit tokens an which are tokens themselves. If "=" is a DEL_TOKEN, for example, then "CAT= DOG" is composed of three tokens, "CAT", "=", and "DOG", where if "=" is a DEL, then "CAT= DOG" is composed of two tokens, "CAT" and "DOG". This assumes that the space character is a DEL.

PARSER may also be instantiated with ARGC_LIMIT, which indicates the maximum number of tokens allowed. If this limit is exceeded, then the last ARGV token contains the remainder of the string. The default value of ARGC_LIMIT is 20.

ARG_STRING_LENGTH is the last instantiation option for PARSER. It indicates the maximum length of an ARGV string, and it defaults to 80.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

PARSER.PRO	4258
PARSER.SRC	11086
2 Files	15344

Permutations Class

Machine/System Compiled/Run on: DG MV/10000 ADE 2.2

Abstract:

This is a generic package which, given an array of items, forms all possible permutations using these items. The package does so by providing a generic permutation class, within which is an iterator. The iterator has a generic formal subprogram to which it passes each permutation.

The package may make a nice example of the following Ada features: nested generics, recursion, generic formal subprograms as a method of implementing an iterator.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

PERMUTATE.ADA	11226
PERMUTATE.PRO	3326
2 Files	14552

Prioritized Queue

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This generic package creates a Prioritized Queue of objects. The Queue is First-In, First-Out except where overridden by the priority.

The priority may be any discrete type. It is assumed that the priorities are from lowest to highest. The type of data structure to be instantiated for the queue may be any type having assignment and equality. Other types may be enqueued by using access types. (i.e. Access variable pointing to a task.) The space for the Queue is allocated dynamically with garbage collection left up to the target system.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

PRIOR.ADA	6398
PRIOR.PRO	3582
2 Files	9980

Quick Sort

Machine/System Compiled/Run on: DG MV 10000, Ada Development Environment

Abstract:

This generic procedure uses the QuickSort algorithm to sort an array of any base type with any discrete index type.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

QSORT.PRO	1568
QSORT.SRC	7325
2 Files	8893

Ada Reserved Word Identification

Machine/System Compiled/Run on: DEC Ada, DEC 8600

Abstract:

This package contains the single function "is_Ada_reserved_word". It returns with either a "true" or "false" to the statement "the input character string is a reserved word in the Ada language".

The contribution of the function is that it executes very quickly, being an implementation of the algorithm defined by David Wolverton in "A Perfect Hash Function for Ada Reserved Words", as published in Ada Letter, July-August 1984. It is much faster than either linear or binary searches of all the Ada reserved words.

A test driver is included, as is sample test data.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

RESERVE.AD	1306
RESERVE.PRO	3382
RESERVE.SRC	23186
3 Files	27874

Safe IO

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This generic package allows the user to input data types from the keyboard while checking the input for errors. (Proper Type: syntax and ranges.)

A procedure for checking input of characters for a proper subrange of the character set is provided.

When an error is encountered, an error message is displayed and the user is allowed to reenter. Output routines are provided to allow the user to do I/O with only one instantiation. Screen manipulation (i.e. NEW_LINE) should be done with TEXT_IO directly.

Instantiations require a FIELD_WIDTH which specifies the maximum field width for the input of the corresponding type.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

SAFEIO.ADA	9730
SAFEIO.PRO	3661
2 Files	13391

SYSDEP DEC

Machine/System Compiled/Run on: DG MV 10000, ROLM ADE
DEC VAX 11/785, DEC Ada

Abstract:

SYSDEP2 provides a "standard" mechanism for character-at-a- time I/O under Ada. The I/O is without echo or special interpretation (such as abort code trapping) on input.

This SYSDEP2 submission is implemented for the Data General MV 10000 running the ROLM ADE and for the DEC VAX 11/785 running DEC Ada.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

SDEPDEC.PRO	3154
SDEPDEC.SRC	27034
2 Files	30188

SYSDEP DG

Machine/System Compiled/Run on: DG MV 10000, ROLM ADE

Abstract:

SYSDEP provides GET, PUT, and IS_VALID_CHARACTER as basic I/O routines which are defined as follows:

GET - return the next character from the console without any interpretation (all 128 ASCII characters may be input with exceptions as noted by IS_VALID_CHARACTER) and without echo (echo must be supplied by the user)

PUT - output the indicated character without interpretation (any valid character, noted by IS_VALID_CHARACTER, may be output by PUT

This simple pair of defined functions permits a more flexible and constant I/O configuration than that provided by TEXT_IO and opens up the door to future tools written in Ada, such as communications servers. Adaption of SYSDEP to interface thru CAIS definitions, when such definitions are established and placed in use, can be done at a later time. OPEN_CONSOLE and CLOSE_CONSOLE must be called before the first use of PUT or GET and after the last use of PUT or GET, resp.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

SDEPDG.ADA	4513
SDEPDG.PRO	4215
2 Files	8728

SEARCH

Machine/System Compiled/Run on: DG MV10000, ROLM ADE
VAX 11/780, DEC ACS
RATIONAL R1000

Abstract:

This generic package contains binary and sequential searching routines for arrays. A full paper describing this unit's capabilities is available by contacting the author (see the prologue file for address).

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

SEARCH.ADA	19994
SEARCH.PRO	3322
2 Files	23316

Singly Linked List

Machine/System Compiled/Run on: VAX/VMS 4.1/VMS 4.1

Abstract:

This package provides an abstract singly linked list with a single point of reference.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

SLIST.PRO	2802
SLIST.SRC	23821
2 Files	26623

SORTARRY

Machine/System Compiled/Run on: DG MV10000, ROLM ADE
VAX 11/780, DEC ACS
RATIONAL R1000
(others)

Abstract:

This generic package contains several array sorting routines.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

SORTARRY.ADA	62225
SORTARRY.CMM	638
SORTARRY.PRO	3380
3 Files	66243

STACK

Machine/System Compiled/Run on:DG MV 10000, ROLM ADE

Abstract:

This is a generic package that provides the types, procedures and exceptions to define an abstract stack and its corresponding operations. Using an instantiation of this generic package, one can declare multiple versions of a stack of type GENERIC_STACK. The stack operations provided include:

1. clear the stack,
2. pop the stack,
3. push an element onto the stack, and
4. access the top element on the stack.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

STACK.ADA	6833
STACK.PRO	3309
2 Files	10142

TBD

Machine/System Compiled/Run on: Vax 11/785 VMS 4.1 Dec-Ada

Abstract:

TBD stands for "To Be Determined". This package is intended to be used during design to aid in producing partial designs that are expressed in valid Ada. It also may be used advantageously in development while the implementation is incomplete or in rapid prototyping.

In particular, it supplies type definitions, range limits, and default values which may be used to assist in describing unknown or partially defined types, objects, and values. In addition, it supplies a place-holding procedure call.

If this TBD_PACKAGE is used, simple searches for the string "TBD" may be used to find many places where the design is incomplete.

N.B.: The types defined here should be used to derive those used in the design, rather than being used directly (see the usage given below for examles of the style).

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

TBD.ADA	13212
TBD.PRO	5322
2 Files	18534

TOD

Machine/System Compiled/Run on: DG MV10000, ROLM ADE
VAX 11/780, DEC ACS
RATIONAL R1000

Abstract:

This package contains time-of-day conversion routines. One routine takes practically any time/date STRING and converts it to CALENDAR.TIME format. The other routine takes a CALENDAR.TIME value and converts it to a STRING containing the day name, full date, and time (resolution to the nearest second).

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

TOD.ADA	78532
TOD.PRO	3600
2 Files	82132

VDT100

Machine/System Compiled/Run on: Telesoft Ada 1.5, VAX

Abstract:

VDT100.SRC contains a package which provides a set of routines to interface with a VT100 computer terminal, providing procedures for functions such as cursor positioning and clear screen. Included is a test program, which is a solution to the Towers of Hanoi.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

VDT100.PRO	3332
VDT100.SRC	15113
2 Files	18445

Variable-Length Direct I/O

Machine/System Compiled/Run on: VAX 11/785 VMS 4.1
DEC Ada

Abstract:

This is a package similar to DIRECT_I that operates on records of variable length. The body of this package may use CAIS utilities in the future.

This package allows the user to write elements of differing lengths to a single direct access file. This package can be used to write data of all types to a single file (with the aid of UNCHECKED_CONVERSION). The DATA_FILE_IO package in the Ada repository serves as an example of how this can be accomplished.

This package also reduces the time-per-byte-of-data-transfered by reducing the number of calls to the run time libraray routines associated with the predefined generic package DIRECT_IO. This is accomplished by placing many incoming records into a large buffer and then writng the entire buffer to an external file as a single element (vice versa for reading). Bytes_Per_Block, the only generic parameter for this package, determines the size (in bytes) of this buffer.

The following files are associated with this item:

Directory: PD:<ADA.COMPONENTS>

VLENGTHIO.PRO	3883
VLENGTHIO.SRC	120626
2 Files	124509

Cross_Reference

PD:<ADA.CROSS-REFERENCE>

This subdirectory contains tools which generate cross-reference listing of Ada programs.

Directory: PD:<ADA.CROSS-REFERENCE>

ADAREF.COM	682
ADAREF.DOC	628
ADAREF.PAS	23786
ADAREF.PRO	3147
4 Files	28243

Ada_Cross_Reference

Machine/System Compiled/Run on: DEC VAX 11/785, DEC Pascal

Abstract:

This is an Ada cross reference program, written in Pascal. Adapted from an original work by Wirth in his book "Algorithms + Data Structures = Programs", several modifications were made to create the present form. See the opening comments for authors and revision history.

The following files are associated with this item:

Directory: PD:<ADA.CROSS-REFERENCE>

ADAREF.COM	682
ADAREF.DOC	628
ADAREF.PAS	23786
ADAREF.PRO	3147
4 Files	28243

Data Base Management

PD:<ADA.DBMS>

This directory contains Ada software components and programs directly related to Data Base Management functions.

Directory: PD:<ADA.DBMS>

MIMS.CMM	1061
MIMS.PRO	4253
MIMS.SRC	81285
3 Files	86599

MIMS

Machine/System Compiled/Run on: ROLM Ada, DG

Abstract:

As a demonstration of the use of Ada for command and control applications, the current airborne and ground mobile systems at SAC (600,000 LOC - JOVIAL) are being consolidated into a mobile data management system using a common data format and query language with graphical display capabilities. The system includes an integrated data management system, automatic and manual update of the data, ad hoc data retrieval, building and maintaining displays as well as interaction with the working file, display transfers, and manual backup. It uses a multiple task environment to interface with several I/O devices, enter data into and retrieve data from similar systems across the communication links, and provide timely access to about 500 million characters of data.

Three packages (two generic) are provided from the MIMS at this time: balanced trees, source scanner, and variable lists.

The following files are associated with this item:

Directory: PD:<ADA.DBMS>

MIMS.CMM	1061
MIMS.PRO	4253
MIMS.SRC	81285
==========	==========
3 Files	86599

DDN

PD:<ADA.DDN>

This subdirectory contains tools and components related to the Defense Data Network, its file transfer, mail, and communications facilities. Implementations of the TCP/IP communications protocol, the FTP file transfer tool, and the SMTP mail handler are included.

Directory: PD:<ADA.DDN>

FTP.COM	1080
FTP.PRO	3733
FTP.SRC	375318
FTPBATCH.COM	548
FTPSMTP.CMM	1253
IFACE.COM	512
IFACE.SRC	48820
IFACEBAT.COM	570
SMTP.COM	658
SMTP.PRO	3733
SMTP.SRC	68638
SMTPBAT.COM	545
SMTPSER.COM	1020
SMTPWICAT.DAT	198
SMTPWICAT.SRC	77005
TCPBATCMP.SUB	561
TCPBATTST.CO	551
TCPCOMP.SUB	1265
TCPIP.CMM	1248

TCPIP.DEMO	1315
TCPIP.PRO	3831
TCPSTAND.SRC	17698
TCPSTBAT.CO	181
TCPSTCOMP.CO	110
TCPSUB.SRC	364325
TCPTEST.CO	407
TCPTEST.SRC	29627
TCPWICAT.DAT	360
TCPWICAT.SRC	383241
TELBAT.CO	555
TELNET.CMM	1264
TELNET.CO	808
TELNET.PRO	3642
TELNET.SRC	194
TELWICAT.SRC	218505
USERNAMES.LCL	66
USERSMAN.DIS	103
USERSMAN.DOC	105163
WICATMISC.SRC	102526
==========	==========
40 Files	2094573

FTP

Machine/System Compiled/Run on: Telesoft 1.5 (unvalidated), WICAT/ROS

Abstract:

These tools provide the ability to transfer files and to send and receive mail among users on diverse hosts. File transfer will use Ada SEQUENTIAL_IO calls to read and write files and will interface to TCP(CDRL 0001) to send data across communication lines and will interface to Telnet to send and receive all commands and replies. The Simple Mail Transfer Protocol to be implemented is RFC821.

The following files are associated with this item:

Directory: PD:<ADA.DDN>

FTP.COM	1080
FTP.PRO	3733
FTP.SRC	375318
FTPBATCH.COM	548
FTPSMTP.CMM	1253
IFACE.COM	512
IFACE.SRC	48820
IFACEBAT.COM	570
USERNAMES.LCL	66
WICATMISC.SRC	102526
USERSMAN.DIS	103
USERSMAN.DOC	105163
==========	==========
12 Files	639692

SMTP/FTP

Machine/System Compiled/Run on: Telesoft 1.5 (unvalidated), WICAT/ROS

Abstract:

These tools provide the ability to transfer files and to send and receive mail among users on diverse hosts. File transfer will use Ada SEQUENTIAL_IO calls to read and write files and will interface to TCP(CDRL 0001) to send data across communication lines and will interface to Telnet to send and receive all commands and replies. The Simple Mail Transfer Protocol to be implemented is RFC821.

The following files are associated with this item:

Directory: PD:<ADA.DDN>

SMTP.COM	658
SMTP.PRO	3733
SMTP.SRC	68638
SMTPBAT.COM	545
SMTPSER.COM	1020
SMTPWICAT.DAT	198
SMTPWICAT.SRC	77005
IFACE.COM	512
IFACE.SRC	48820
IFACEBAT.COM	570
USERNAMES.LCL	66
WICATMISC.SRC	102526
USERSMAN.DIS	103
USERSMAN.DOC	105163
==========	==========
14 Files	409557

TCP/IP

Machine/System Compiled/Run on: Telesoft 1.5 (unvalidated), WICAT/ROS

Abstract:

The proposed tools provide communication with the Utility layer(TCP) corresponding to RFC793 and with Internet(IP). An operating system interface to VAX VMS will be provided. Internet Control Message Protocol (ICMP) will be provided as part of IP. These protocols allow multiuser access and message priority. A Test System will be provided to demonstrate these protocols, generate test scenarios, and display intermediate data.

The following files are associated with this item:

Directory: PD:<ADA.DDN>

TCPBATCMP.SUB	561
TCPBATTST.CO	551
TCPCOMP.SUB	1265
TCPIP.CMM	1248

TCPIP.DEMO	1315
TCPIP.PRO	3831
TCPSTAND.SRC	17698
TCPSTBAT.CO	181
TCPSTCOMP.CO	110
TCPSUB.SRC	364325
TCPTEST.CO	407
TCPTEST.SRC	29627
TCPWICAT.DAT	360
TCPWICAT.SRC	383241
WICATMISC.SRC	102526
USERSMAN.DIS	103
USERSMAN.DOC	105163
17 Files	1012512

TELNET

Machine/System Compiled/Run on: Telesoft 1.5 (unvalidated), WICAT/ROS

Abstract:

This tool will implement RFC-854 of the TELNET protocal supporting a bidirectional, eight-bit byte oriented communications facility. This approach encompasses three main ideas: Network Virtual Terminal (NVT), negotiated options, and a symmetric view of terminals and processes.

The following files are associated with this item:

Directory: PD:<ADA.DDN>

TELBAT.CO	555
TELNET.CMM	1264
TELNET.CO	808
TELNET.PRO	3642
TELNET.SRC	273396
TELWICAT.DAT	194
TELWICAT.SRC	218505
IFACE.COM	512
IFACE.SRC	48820
IFACEBAT.COM	570
WICATMISC.SRC	102526
USERSMAN.DIS	103
USERSMAN.DOC	105163
13 Files	756058

Debuggers

PD:<ADA.DEBUGGER>

This subdirectory contains Ada source-level debuggers. A Symbolic Debugger is included.

Directory: PD:<ADA.DEBUGGER>

SD.ABS	1801
SD.CMM	3098
SD.HLP	12212
SD.MAN	269466
SD.PRO	4203
SD.SRC	889057
SD2.HLP	21414
SDGRAMMAR.GRM	82491
SDREAD.ME	5546
SDREAD.ME2	238
SDTCF.DAT	2023
SDTEST.DAT	112103
SDTEST.DIS	54
13 Files	1403706

Symbolic Debugger

Machine/System Compiled/Run on: DEC Ada / VMS

Abstract:

Interactive debugger will provide debugging and diagnostic aids at the Ada statement level through an "Ada-like" command language. Capabilities include: (1) Setting, resetting and displaying breakpoints; (2) Setting and displaying Ada program variables; (3) Tracing program execution at statement, block or unit level; (4) Snap dumps in printing format form or raw data form to occur periodically or on demand; (5) Execution frequency profiles for each Ada statement and entry/exit to each program block and unit, with optional report showing percentage of total execution time spent in each code block and in each statement within a block. Tool consists of source instrumentation module, debugger module and a report generator.

The following files are associated with this item:

Directory: PD:<ADA.DEBUGGER>

SD.ABS	1801
SD.CMM	3098
SD.HLP	12212
SD.MAN	269466
SD.PRO	4203
SD.SRC	889057
SD2.HLP	21414
SDGRAMMAR.GRM	82491
SDREAD.ME	5546
SDREAD.ME2	238
SDTCF.DAT	2023
SDTEST.DAT	112103
SDTEST.DIS	54
13 Files	1403706

Editors

PD:<ADA.EDITORS>

This directory contains the source code and documentation on some text editors written in Ada.

Directory: PD:<ADA.EDITORS>

ED.CMM	3859
ED.DOC	47972
ED.PRO	7045
ED.SRC	69604
ED2.DOC	47230
ED2.PRO	7266
ED2.SRC	74495
WP.ABS	3985
WP.CMM	1272
WP.CVT	842
WP.PRO	3856
WPCOMMON.DIS	113
WPCOMMON.SRC	150501
WPCRT.DIS	130
WPCRT.SRC	197491
WPEDHLP.DIS	78
WPEDITOR.DIS	426
WPEDITOR.HLP	42714
WPEDITOR.SRC	636103
WPFORMAT.DAT	52484
WPFORMAT.DIS	312
WPFORMAT.SRC	486814
==========	=========
22 Files	1834592

Editors

Machine/System Compiled/Run on: DG MV 10000, ROLM ADE

Abstract:

ALED is designed to edit text files. Upon invocation, ALED prompts the user for a file name. If the file exists, its contents (lines) are read in and prepared for editing; if the file does not exist, the file is created and the empty buffer is prepared for editing. ALED is an interactive editor, accepting singlechar commands, filling in a command prompt (for more info as needed), and performing its functions in realtime while the user watches. The functions provided include (but are not limited to) the following:

* List Lines
* Insert a Group of Lines into the Edit Buffer
* Delete Lines
* String Search and String Substitution
* Movement Within the Edit Buffer
* Reading in a File After a Specified Line
* Writing out a Range of Lines to a File

* Built-in, online Documentation (Summary)

The following files are associated with this item:

Directory: PD:<ADA.EDITORS>

ED.CMM	3859
ED.DOC	47972
ED.PRO	7045
ED.SRC	69604
4 Files	128480

Editor 2

Machine/System Compiled/Run on: DG MV 10000, ROLM ADE

Abstract:

ALED is designed to edit text files. Upon invocation, ALED prompts the user for a file name. If the file exists, its contents (lines) are read in and prepared for editing; if the file does not exist, the file is created and the empty buffer is prepared for editing. ALED is an interactive editor, accepting singlechar commands, filling in a command prompt (for more info as needed), and performing its functions in realtime while the user watches. The functions provided include (but are not limited to) the following:

* List Lines
* Insert a Group of Lines into the Edit Buffer
* Delete Lines
* String Search and String Substitution
* Movement Within the Edit Buffer
* Reading in a File After a Specified Line
* Writing out a Range of Lines to a File
* Built-in, online Documentation (Summary)

The following files are associated with this item:

Directory: PD:<ADA.EDITORS>

ED2.DOC	47230
ED2.PRO	7266
ED2.SRC	74495
3 Files	128991

Word Processor

Compiler: Telesoft 1.3 (unvalidated), WICAT/ROS

Abstract:

WORD_PROCESSOR is a tool for creating, modifying, and formatting ASCII text files. This package contains an editor and a text formatter which are for use by the general user. It also contains a utility for defining the help screens which are available to

the general user as well as a utility for defining new type fonts. TEXT_EDITOR is a tool which allows a SOURCE_FILE to be edited.

TEXT_FORMATTER is a tool which formats the SOURCE_FILE according to the default format and imbedded formatting commands. The output is sent to the destination device or file.

DEFINE_HELP_FILE is a tool which processes a help file in ASCII format to a format allowing fast access to each of the various help screens. It is for use by the systems's manager to modify user help information to his particular audience.

ADD_TYPE_FONT is a tool which adds new type font definitions to the text formatter's font table. It is for use by the system's manager to define new fonts when new device capabilities are added at a site.

The following files are associated with this item:

Directory: PD:<ADA.EDITORS>

WP.ABS	3985
WP.CMM	1272
WP.CVT	842
WP.PRO	3856
WPCOMMON.DIS	113
WPCOMMON.SRC	150501
WPCRT.DIS	130
WPCRT.SRC	197491
WPEDHLP.DIS	78
WPEDITOR.DIS	426
WPEDITOR.HLP	42714
WPEDITOR.SRC	636103
WPFORMAT.DAT	52484
WPFORMAT.DIS	312
WPFORMAT.SRC	486814
==========	==========
15 Files	1577121

Education

PD:<ADA.EDUCATION>

This is the education subdirectory. Sample programs, tutorials, and online courseware are located here.

Directory: PD:<ADA.EDUCATION>

ADA1FOR.DOC	5190
ADA2FOR.DOC	1428
ADASOFTR.DOC	7802
BIBLIO.DOC	4369
BOOT.DOC	8646
COMPOOLS.DOC	6789
FOR1ADA.DOC	2770
GLOSSARY.DOC	40187
OBJECT.DOC	8793

PDLSURVEY.DOC	10491
PNOTE1.DOC	1948
PORT1.DOC	14059
PROGERRS.DOC	75861
TEXTBOOKS.BIB	9136
TEXTBOOKS.DOC	87808
TEXTS.DOC	26291
TITR.DOC	71075
TITRINTRO.DOC	1309
20 Files	422787

Ada to FORTRAN

These files contain information and examples of interfacing Ada routines to FORTRAN routines.

File Name	Purpose
ADA1FOR.DOC	Ada-to-FORTRAN
ADA2FOR.DOC	
FOR1ADA.DOC	FORTRAN-to-Ada

The following files are associated with this item:

Directory: PD:<ADA.EDUCATION>

ADA1FOR.DOC	5190
ADA2FOR.DOC	1428
FOR1ADA.DOC	2770
3 Files	9388

General Information

These files contain general information not filed under other categories.

File Name	Purpose
BOOT.DOC	Bootstrapping Oneself in the use of the ASR and its special tools which should be installed on your local host computer
GLOSSARY.DOC	Glossary of Ada Terms

The following files are associated with this item:

Directory: PD:<ADA.EDUCATION>

BOOT.DOC	8646
GLOSSARY.DOC	40187
2 Files	48833

Object-Oriented Design

These files contain information on object-oriented design techniques.

File Name	Purpose
OBJECT.DOC	On Object-Oriented Design

The following files are associated with this item:

Directory: PD:<ADA.EDUCATION>

OBJECT.DOC	8793
1 Files	8793

Productivity Data

These files contain software productivity information on Ada-related projects.

File Name	Purpose
PRODUCT.DOC	Productivity Information from TI

The following files are associated with this item:

Directory: PD:<ADA.EDUCATION>

PRODUCT.DOC	14059
1 Files	14059

Programming Style/Errors

These files contain notes and comments on Ada programming style, software engineering, and related topics.

File Name	Purpose
COMPOOLS.DOC	General comments, software engineering, Ada, Compools and common blocks (and their desirability/lack of desirability)

These files contain information on common Ada programming errors.

File Name	Purpose
PNOTE*.DOC	Programming Notes
PROGERRS.DOC	Common Ada Programming Errors

The following files are associated with this item:

Directory: PD:<ADA.EDUCATION>

PNOTE1.DOC	4834
PNOTE2.DOC	1948

PROGERRS.DOC	75861
COMPOOLS.DOC	6789
4 Files	89432

Technical Reports

These files contain technical reports from live Ada projects. Productivity information and "lessons learned" information are included.

File Name	Purpose
ADASOFTR.DOC	by Adasoft
PORT1.DOC	by Honeywell
TITR*.*	by TI

The following files are associated with this item:

Directory: PD:<ADA.EDUCATION>

ADASOFTR.DOC	7802
TITR.DOC	71075
TITRINTRO.DOC	1309
PORT1.DOC	34001
4 Files	114187

Texts

These files contain information on Ada books.

File Name	Purpose
BIBLIO.DOC	Bibliography
TEXT*.*	Text Book Information and Reviews

The following files are associated with this item:

Directory: PD:<ADA.EDUCATION>

BIBLIO.DOC	4369
TEXTBOOKS.BIB	9136
TEXTBOOKS.DOC	87808
TEXTS.DOC	26291
4 Files	127604

External_Tools

PD:<ADA.EXTERNAL-TOOLS>

This subdirectory contains several miscellaneous tools which are helpful in developing Ada code but are not written in Ada or pertain to specific environments. For example, an Ada language development interface for the EMACS editor can be found here.

Directory: PD:<ADA.EXTERNAL-TOOLS>

ADAFORM.MSG	13195
ADAFORM.PRO	16694
ADAMODE.DOC	802
ADAMODE.OLD	19176
ADAMODE.PRO	3017
ADAMODE.SRC	30163
GRAMMAR.PRO	7366
GRAMMAR.SRC	45547
READ.ME	177
==========	==========
10 Files	139669

Ada_Emacs_Mode

Machine/System Compiled/Run on: Vax 11/780 with Unix 4.2BSD
Emacs version = Gosling #264

Abstract:

This set of files constitues a special 'ada-mode' for use with the Emacs editor. See the file 'ada-mode-help.doc' for more information.

The following files are associated with this item:

Directory: PD:<ADA.EXTERNAL-TOOLS>

ADAMODE.DOC	802
ADAMODE.OLD	19176
ADAMODE.PRO	3017
ADAMODE.SRC	30163
==========	==========
4 Files	53158

Ada_Form

Machine/System Compiled/Run on: UNIX using LEX & CC

Abstract:

> NOTE: This is a UNIX lex input file. You need a lex processor (and C compiler) for this tool!! This tool is NOT in Ada.

Adaform takes a legal Ada program as input and adds Scribe commands. The output is then run through Scribe. The form of the output follows the typesetting conventions in the Ada LRM, with reserved words in lower-case/boldface. Additionally, comments are in italics. Adaform uses the Scribe indexing capability to produce an index of types, packages, procedures, etc, indexed by both name and 'class'. For instance, package

Text_IO would be entered as "Text_IO, package" and "Package, Text_IO". Adaform is based on the lex input from H. Fisher's Ada grammar.

The following files are associated with this item:

Directory: PD:<ADA.EXTERNAL-TOOLS>

ADAFORM.MSG	13195
ADAFORM.PRO	3532
ADAFORM.SRC	16694
==========	==========
3 Files	33421

Ada Grammar

Machine/System Compiled/Run on: UNIX

Abstract:

This grammar is organized in the same order as the syntax summary in appendix E of the ANSI Ada Reference Manual. All reserved words are written in upper case letters. The lexical categories numeric_literal, string_literal, etc, are viewed as terminals. The rules for pragmas as stated in chapter 2, section 8, have been incorporated in the grammar. Comments are included wherever we had to deviate from the syntax given in appendix E. Different symbols used here (to comply with yacc requirements) are of note:

{,something}	is denoted ...something..
{something}	is denoted ..something..
[something]	is denoted .something.

Constructs involving meta brackets, e.g., ...identifier.. are represented by a nonterminal formed by concatenating the construct symbols (as ...identifier.. in the example) for which the rules are given at the end. When reading this grammar, it is important to note that all symbols appearing in the rules are separated by one or more blanks. A string such as 'identifier_type_mark is actually a single nonterminal symbol defined at the end of the rules. The " symbol is used to indicate that the rest of the line is a comment, just as in yacc programs.

This grammar is presented here in a form suitable for input to a yacc parser generator. It has been processed by the Bell System III lex/yacc combination, and tested against over 400 ACVC tests.

The following files are associated with this item:

Directory: PD:<ADA.EXTERNAL-TOOLS>

GRAMMAR.PRO	7366
GRAMMAR.SRC	45547
==========	==========
2 Files	52913

Forms_Generator

PD:<ADA.FORMGEN>

This subdirectory contains tools for the generation of forms for use by Ada programs. The forms generator will display and accept input into a form (in a screen-oriented fashion via the virtual terminal) in such a way that this mechanism is transparent to the Ada program using it. Instead, the program simply reads fields from the form via procedure interfaces.

Directory: PD:<ADA.FORMGEN>

FORM2.CMM	1377
FORM2.DOC	68423
FORM2.PRO	4062
FORM2.SRC	273663
FORM2.TST	44739
FORM2MAN.DOC	78596
==========	==========
6 Files	470860

Forms Generator 2

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This tool is used to seperate an application's procedural code from the code required to drive a terminal. The system will provide both an interactive and batch interface that enables an application programmer to design a screen format and save the representation in a machine readable form. The Form Executor package will provide procedural and functional interfaces that enable a program to access the output of the system and present it to a terminal. This toolset will support asynchronous ASCII terminals with single character transmission capabilities.

The following files are associated with this item:

Directory: PD:<ADA.FORMGEN>

FORM2.CMM	1377
FORM2.DOC	68423
FORM2.PRO	4062
FORM2.SRC	273663
FORM2.TST	44739
FORM2MAN.DOC	78596
==========	==========
6 Files	470860

General

PD:<ADA.GENERAL>

This is the General Information subdirectory. Notes, comments, usage information, and other data are stored here.

Directory: PD:<ADA.GENERAL>

AAREAD.ME	1238

ADAREPOS.DOC	1837
ARCHIVE.DOC	25914
ASRSUPP.DOC	1211
CHECKOUT.DOC	1846
COPY1RT.DOC	4434
COPY2RT.DOC	5777
COPY3RT.DOC	11313
COPYRITE.DOC	22887
COPYRTGNU.DOC	6547
CRC.DOC	4998
DIRLIST.DOC	10664
FINDME.DOC	3025
FLOPDIST.DOC	2887
FTP.DOC	27559
FTP1.DOC	17334
FTP2.DOC	20267
FTPADAINF.DOC	2248
FTPDIST.DOC	1069
FTPECLB.DOC	5763
INDEX.DOC	2665
KERCOMM.DOC	6974
KERFLYER.DOC	13588
KERMICRO.DOC	28992
KERMIT.DOC	16560
KEROPS.DOC	16822
KERREAD.ME	1904
LBR.DOC	952
MINDEX.TOC	20599
MLIST.DOC	2183
NAMING.DOC	1833
NEWSLTR.DOC	935
OPERATE.DOC	1606
PROLOGUE.ADA	1904
PROLOGUE.DOC	1581
READTAPE.FOR	10000
SAMPLE.PRO	2723
SUBMIT.DOC	4769
TAPEDIST.DOC	2401
USENET.DOC	2041
UUCPBIT.DOC	2457
WELCOME.DOC	37725
WELCOME.PRO	1714
43 Files	361746

Copyright Information

These files help to explain the legal meanings of the terms "copyright" and "public domain." All software in the ASR is in the public domain and is not subject to copyright protection as such.

File Name	Purpose

COPY1RT.DOC	General Copyright Information
COPY2RT.DOC	
COPY3RT.DOC	
COPYRITE.DOC	A Lawyer's Message on the Subject
COPYRTGNU.DOC	The Copyright Associated with Richard Stallman's GNU

The following files are associated with this item:

Directory: PD:<ADA.GENERAL>

COPY1RT.DOC	4434
COPY2RT.DOC	5777
COPY3RT.DOC	11313
COPYRITE.DOC	22887
COPYRTGNU.DOC	6547
5 Files	50958

FTP

These files contain information on the use of the FTP (File Transfer Protocol) facility of the DDN (Defense Data Network). FTP is used to copy files from one DDN host computer to another, and understanding of FTP is essential in order to access the files in the Ada Software Repository (ASR) through the DDN.

File Name	Purpose
FTP.DOC	Introductory Information
FTP1.DOC	More Information and Examples
FTP2.DOC	More Information and Examples
FTPADAINF.DOC	Accessing Ada-Info on ADA20 via FTP
FTPECLB.DOC	Examples of Using FTP from USC-ECLB (similar to ADA20)

The following files are associated with this item:

Directory: PD:<ADA.GENERAL>

FTP.DOC	27559
FTP1.DOC	17334
FTP2.DOC	20267
FTPADAINF.DOC	2248
FTPDIST.DOC	1069
FTPECLB.DOC	5763
6 Files	74240

Master Index Contents

This file contains a listing of the table of contents for the Master Index to the Ada Software Repository.

The following files are associated with this item:

Directory: PD:<ADA.GENERAL>

MINDEX.TOC	20599
==========	==========
1 File	20599

KERMIT

These file contain information on the KERMIT file transfer protocol. KERMIT is a very robust protocol which has been recommended by the Network Information Center (NIC) of the Defense Data Network (DDN) for file transfers from DDN host computers to personal computers through the DDN. Designed by Columbia University, KERMIT is useful in moving files from your DDN host computer into your local computing environment for use at your facility (if, of course, your DDN host computer is not your local computing environment).

File Name	Purpose
KERREAD.ME	The Latest AAAREAD.ME File from CU20B
KERMIT.DOC	General Information
KERFLYER.DOC	More General Information
KERMICRO.DOC	Using KERMIT with Microcomputers
KERCOMM.DOC	Commercial Use of Kermit
KEROPS.DOC	Listing of Kermit Implementations by Operating System

The following files are associated with this item:

Directory: PD:<ADA.GENERAL>

KERCOMM.DOC	6974
KERFLYER.DOC	13588
KERMICRO.DOC	28992
KERMIT.DOC	16560
KEROPS.DOC	16822
KERREAD.ME	1904
==========	==========
6 Files	84840

Operational Information

These files contain operational information on the Ada Software Repository (ASR). This information is a useful supplement to the information contained in the files mentioned in the Welcome_Message section.

File Name	Purpose
ARCHIVE.DOC	General Overview of All Archives on SIMTEL20
CHECKOUT.DOC	Checkout Procedures (not implemented at this time)
CRC.DOC	Information on How to Compute CRC's and the Associated Programs
LBR.DOC	Information on LBR Files (useful when dealing with non-ASR archives)
PROLOGUE.ADA	Source to the ASR Prologue (required with all submissions)
PROLOGUE.DOC	Documentation on the ASR Prologue

READTAPE.FOR	FORTRAN Program Useful for Reading ASR Tapes Under AX/VMS
SAMPLE.PRO	Sample ASR Prologue
SUBMIT.DOC	Instructions on How to Make Submissions to the ASR
USENET.DOC	Brief on the USENET Computer Network
UUCPBIT.DOC	Brief on UUCP and the BITNET Computer Network

The following files are associated with this item:

Directory: PD:<ADA.GENERAL>

ARCHIVE.DOC	25914
CHECKOUT.DOC	1846
CRC.DOC	4998
LBR.DOC	952
PROLOGUE.ADA	1904
PROLOGUE.DOC	1581
READTAPE.FOR	10000
SAMPLE.PRO	2723
SUBMIT.DOC	4769
USENET.DOC	2041
UUCPBIT.DOC	2457
==========	==========
11 Files	59185

Welcome Message

The following files contain information which is of general interest to the users of the Ada Software Repository (ASR). Most of these files are components of the Welcome Message which is sent to all new subscribers of the ADA-SW electronic mailing list.

File Name	Purpose
AAREAD.ME	Overview of the ASR
ADAREPOS.DOC	More Overview of the ASR
DIRLIST.DOC	Listings and Brief Descriptions of All Subdirectories
FINDME.DOC	Instructions on How to Locate Items in the ASR
FTP.DOC	General Instructions on How to Use FTP (File Transfer Protocol)
MLIST.DOC	Brief on the ADA-SW Electronic Mailing List
OPERATE.DOC	Statement of Operation
TAPEDIST.DOC	Details on the Tape Distribution Facility and How to Acquire a Tape of the ASR
WELCOME.PRO	Introduction to the Welcome Message
WELCOME.DOC	Welcome Message

The following files are associated with this item:

Directory: PD:<ADA.GENERAL>

AAREAD.ME	1238
ADAREPOS.DOC	1837
DIRLIST.DOC	10664
FINDME.DOC	3025
FTP.DOC	27559

MLIST.DOC	2183
OPERATE.DOC	1606
TAPEDIST.DOC	2401
WELCOME.DOC	37723
WELCOME.PRO	1714
10 Files	89950

Graphical_Kernel_System

PD:<ADA.GKS>

This subdirectory contains routines associated with a Graphical Kernel System.

Directory: PD:<ADA.GKS>

GKS.PRO	4471
GKS0A.CMM	2051
GKS0A.COM	7201
GKS0A.SRC	1156972
GKSMA.CMM	2218
GKSMA.COM	5073
GKSMA.SRC	834603
GKSUSER.DOC	252763
8 Files	2265352

Graphic Kernel System

Machine/System Compiled/Run on: ROLM Ada, DG

Abstract:

The Graphic Kernel System (GKS) is a device independent software package which implements the draft GKS bindin to ANSI Ada for GKS levels Ma, Oa, 1a, 2a, Mb, Ob, 1b, Mc, and 1c. GKS/Ada will support selective visibility, independent VDI and VDM interfaces, the configuration of multiple graphic device drivers, and independent packaging of the various GKS levels.

The complete GKS will include a prototype metafile generator/driver, and a metafile interpreter. Device-dependent software must be included to drive the Lexidata color rastor device and the Summagraphics graphics tablet. Ada software to support contour processing requirements, includinggrid generation, mathematical interpolation and contour map generation needs to be developed. Also, the GKS and provides for the delivery of WIS-compatible equipment capable of high quality 35mm color slides directly from graphics displays.

The following files are associated with this item:

Directory: PD:<ADA.GKS>

GKS.PRO	4471
GKS0A.CMM	2051
GKS0A.COM	7201

GKS0A.SRC	1156972
GKSMA.CMM	2218
GKSMA.COM	5073
GKSMA.SRC	834603
GKSUSER.DOC	252763
==========	==========
8 Files	2265352

Management_Tools

PD:<ADA.MANAGEMENT-TOOLS>

This subdirectory contains tools for use in managing an Ada software development project. Status tracking and Manpower estimation tools are included.

Directory: PD:<ADA.MANAGEMENT-TOOLS>

MANAGE.CMM	1094
MANAGE.PRO	3795
MANAGETR.DOC	25044
MANPOWER.DIS	167
MANPOWER.DOC	18973
MANPOWER.PRO	3795
MANPOWER.SRC	19412
PPLANNER.ABS	1594
PPLANNER.CMM	774
PPLANNER.DOC	144593
PPLANNER.PRO	3590
PPLANNER.SRC	394030
PPLANNER.TST	47041
PPLANSRC.DIS	178
PPLANTST.DIS	410
RT.ABS	2503
RT.CMM	627
RT.EXP	2640
RT.LIS	37874
RT.PRO	3915
RT.SRC	393200
RTGRM.LIS	37874
RTREAD.ME	3348
RTSRC.DIS	1673
RTTEST.DAT	59084
RTTEST.DIS	1576
RTUSER.MAN	16393
TRACKDOC.DIS	67
TRACKER.CMM	1092
TRACKER.DOC	262297
TRACKER.INS	2924
TRACKER.PRO	3795
TRACKER.SRC	456782
TRACKER.TST	37240
TRACKSRC.DIS	1432
==========	==========
35 Files	1990826

Cost Estimation

Machine/Compiler: Data General, ROLM ADE

Abstact :

The cost estimation tool uses the COCOMO model. It produces manpower and schedule estimates. The project scheduler is based on SIMPERT which is a Monte Carlo simulation and review technique. It is useful in assessing the effects of requirement changes and schedule delays, and in risk analysis. It produces critical path and schedule, the probability of completing on schedule, and Gantt chart graphics. The Input File generator allows the user to build input files for COCOMO or SIMPERT, and then to modify such files.

The following files are associated with this item:

Directory: PD:<ADA.MANAGEMENT-TOOLS>

PPLANNER.ABS	1594
PPLANNER.CMM	774
PPLANNER.DOC	144593
PPLANNER.PRO	3590
PPLANNER.SRC	394030
PPLANNER.TST	47041
PPLANSRC.DIS	178
PPLANTST.DIS	410
8 Files	592210

General Management

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

The TRACKR program tracks the progress within projects and generates reports, estimates time to complete a project, and estimates project requirements. INPREP builds the data file for TRACKR interactively and outputs error messages for invalid data. The MANPOWER program based on the Simple Boehm Model produces manpower loading curves for several calculated schedules based on the number of lines of code and type of system.

The following files are associated with this item:

Directory: PD:<ADA.MANAGEMENT-TOOLS>

MANAGE.CMM	1094
MANAGE.PRO	3795
MANAGETR.DOC	25044
3 Files	29933

Manpower

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

The TRACKR program tracks the progress within projects and generates reports, estimates time to complete a project, and estimates project requirements. INPREP builds the data file for TRACKR interactively and outputs error messages for invalid data. The MANPOWER program based on the Simple Boehm Model produces manpower loading curves for several calculated schedules based on the number of lines of code and type of system.

The following files are associated with this item:

Directory: PD:<ADA.MANAGEMENT-TOOLS>

MANPOWER.DIS	167
MANPOWER.DOC	18973
MANPOWER.PRO	3795
MANPOWER.SRC	19412
4 Files	42347

Requirements_Tracker

Machine/System Compiled/Run on: Dec Ada / VMS

Abstract:

This tool is used to trace routines and declarations in the source code back to specific paragraphs in a requirements document. For each requirement referenced in a source file, the output listing shows what program units reference that requirement. An intermediate file containing the pairs (location in code, reference cited) can be saved for use in subsequent invocations. When used in this way, the output report can show requirements traced to more than one source file.

The following files are associated with this item:

Directory: PD:<ADA.MANAGEMENT-TOOLS>

RT.ABS	2503
RT.CMM	627
RT.EXP	2640
RT.LIS	37874
RT.PRO	3915
RT.SRC	393200
RTGRM.LIS	37874
RTREAD.ME	3348
RTSRC.DIS	1673
RTTEST.DAT	59084
RTTEST.DIS	1576
RTUSER.MAN	16393
12 Files	560707

Directory: PD:<ADA.COMPONENTS>

NEWABS.DIS	2768
NEWABS.PRO	3319
NEWABS.SRC	659811
3 Files	665898

Project Tracking

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

The TRACKR program tracks the progress within projects and generates reports, estimates time to complete a project, and estimates project requirements. INPREP builds the data file for TRACKR interactively and outputs error messages for invalid data. The MANPOWER program based on the Simple Boehm Model produces manpower loading curves for several calculated schedules based on the number of lines of code and type of system.

The following files are associated with this item:

Directory: PD:<ADA.MANAGEMENT-TOOLS>

TRACKDOC.DIS	67
TRACKER.CMM	1092
TRACKER.DOC	262297
TRACKER.INS	2924
TRACKER.PRO	3795
TRACKER.SRC	456782
TRACKER.TST	37240
TRACKSRC.DIS	1432
8 Files	765629

Math_Library

PD:<ADA.MATH>

This subdirectory contains packages of math routines. All routines are written in Ada. Routines for trig functions, exponential functions, matrix manipulation, bit manipulation, and others are contained here.

Directory: PD:<ADA.MATH>

BIT.ADA	9918
BIT.PRO	3181
CODYWAITE.CMM	572
CODYWAITE.DOC	13104
CODYWAITE.PRO	2504
CODYWAITE.SRC	77400
CODYWAITE.TST	106938
DATE.CMM	179

DATE.PRO	3380
DATE.SRC	52159
GSET.ADA	7144
GSET.PRO	3321
KALINSTAL.DOC	33085
KALMAN.CMM	568
KALMAN.DIS	117
KALMAN.PRO	3628
KALMAN.SRC	441244
KALTEST.DAT	21447
KALTEST.DIS	44
KALV1.DIS	113
KALV1.DOC	584614
KALV2.DIS	56
KALV2.DOC	655958
LOGICAL.ADA	8581
LOGICAL.CMM	289
LOGICAL.PRO	2992
M36.ABS	2748
M36.CMM	565
M36.DEL	3988
M36.DOC	228759
M36.PRO	4998
M36.SRC	244196
M36DOC.DIS	101
M36PRGRPT.DIS	168
M36REN.SUB	363
M36SRC.DIS	152
M36TEST.DIS	184
M36TEST.SRC	81784
MATHFUN.CMM	171
MATHFUN.DAT	11013
MATHFUN.PRO	2887
MATHFUN.SRC	28563
MATRIX.ADA	17612
MATRIX.PRO	2698
MLIB.CMM	572
MLIB.PRO	3167
MLIB2.CMM	1212
MLIB2.PRO	4574
MLIB2.SRC	47299
MLIBDEC.ADA	53520
MLIBTS.ADA	50567
51 Files	2824397

Bit Functions

Machine/System Compiled/Run on: MV/1000, Rolm/ADE version 2.20

Abstract:

This package represents a collection of routines which allow the Ada programmer the ability of perform bit operations on objects of type INTEGER. The functions include the ability to extract/insert bit fields, shift objects left or right, and/or objects and create bit masks.

The following files are associated with this item:

Directory: PD:<ADA.MATH>

BIT.ADA	9918
BIT.PRO	3181
2 Files	13099

Cody-Waite Math Library

Machine/System Compiled/Run on: Rational R1000, VAX (DEC), others

Abstract:

A set of elementary math functions (generic on digits <>) corresponding to the FORTRAN intrinsic functions. The implementation of the body uses the truncated polynominals method of Cody and Waite. This is a set of easily understood code ment to be machine independent. They are not particularly fast. They could be optimized for particular machines. A fairly extensive set of test procedures are also provided.

The available functions and constants are:

```
   Pi      : constant := 3.14159_26535_89793_23846_26433_83279_50288_41972;
   E       : constant := 2.71828_18284_59045_23536_02874_71352_66249_77572;
   Log_Of_2  : constant := 0.69314_71805_59945_30941_72321_24158_17656_80755;
   Log_Of_10 : constant := 2.30258_50929_94045_68401_77914_54684_36420_76011;

   function Sign (X, Y : Floating) return Floating;
-- Returns the value of X with the sign of Y

   function Max (X, Y : Floating) return Floating;
-- Returns the algebraicly larger of X and Y
   function Min (X, Y : Floating) return Floating;
-- Returns the algebraicly smaller of X and Y

   function Truncate (X : Floating) return Floating;
-- Returns the floating value of the integer no larger than X
-- Truncates toward zero
   function Round (X : Floating) return Floating;
-- Returns the floating value of the integer nearest X

   procedure Set_Ran_Key (K : in Floating := Floating (0.0));
-- Can reset the random number generator
   function Ran return Floating;
-- A random number between zero and one

   function Sqrt (X : Floating) return Floating;
   function Cbrt (X : Floating) return Floating;
```

```
function Log (X : Floating) return Floating;
function Log10 (X : Floating) return Floating;
function Exp (X : Floating) return Floating;
function "**" (X, Y : Floating) return Floating;

function Sin (X : Floating) return Floating;
function Cos (X : Floating) return Floating;
function Tan (X : Floating) return Floating;
function Cot (X : Floating) return Floating;

function Asin (X : Floating) return Floating;
function Acos (X : Floating) return Floating;
function Atan (X : Floating) return Floating;
function Atan2 (V, U : Floating) return Floating;

function Sinh (X : Floating) return Floating;
function Cosh (X : Floating) return Floating;
function Tanh (X : Floating) return Floating;
```

The following files are associated with this item:

Directory: PD:<ADA.MATH>

CODYWAITE.CMM	572
CODYWAITE.DOC	13104
CODYWAITE.PRO	2504
CODYWAITE.SRC	77400
CODYWAITE.TST	106938
==========	==========
5 Files	200518

Date

Machine/System Compiled/Run on: DEC VAX 11/750, DEC Ada v1.3

Abstract:

This generic package provides arithmetic and logical operations for dates. It strongly parallels the required CALENDAR package, but differs primarily in the range of dates handled. Like CALENDAR, routines such as SPLIT, MONTH, DAY, and YEAR are available.

The differences between this package and CALENDAR are reflected in the range of dates, the inclusion of a DAY_NAME function, and the ability to specify a date with a year and an annual Julian day number *. A day is the smallest unit of time in this package.

An important feature is the ability to subtract dates over the full range of years. Thus, you can for example, calculate the number of days between 10/15/1986 and 1/1/1988. Another important feature is the ability to add (or subtract) x number of days from a date and obtain a date x days in the future (or past).

The following files are associated with this item:

Directory: PD:<ADA.MATH>

DATE.CMM	179
DATE.PRO	3380
DATE.SRC	52159
3 Files	55718

Set Manipulation

Machine/System Compiled/Run on: DG MV 10000 with ROLM ADE
DEC VAX 11/780 with DEC Ada

Abstract:

Set_Package contains a series of generic routines which can be instantiated to create routines which provide a series of set manipulation functions for sets of enumeration or numeric objects. The functions in Set_Package include:

set intersection
set union
set membership
set element count

and others

The following files are associated with this item:

Directory: PD:<ADA.MATH>

GSET.ADA	7144
GSET.PRO	3321
2 Files	10465

Kalman Filter Tracking

Machine/System Compiled/Run on: DEC Ada / VMS

Abstract:

This tool will consist of a Kalman Filter, a simple track-plot correlation model, an accounting procedure which handles track maintenance details, and an output procedure. The filter will be callable from outside the package as well as internally.

The following files are associated with this item:

Directory: PD:<ADA.MATH>

KALINSTAL.DOC	33085
KALMAN.CMM	568
KALMAN.DIS	117
KALMAN.PRO	3628
KALMAN.SRC	441244
KALTEST.DAT	21447
KALTEST.DIS	44
KALV1.DIS	113

KALV1.DOC	584614
KALV2.DIS	56
KALV2.DOC	655958
==========	==========
11 Files	1740874

Logical Operations

Machine/System Compiled/Run on: CCUR_3200MPS, C3-Ada R00-00

Abstract:

This package provides logical operations such as AND, OR, XOR, NOT, SHIFT, ROTATE, on operands of type INTEGER. It is portable to any two's complement machine.

The following files are associated with this item:

Directory: PD:<ADA.MATH>

LOGICAL.ADA	8581
LOGICAL.CMM	289
LOGICAL.PRO	2992
==========	==========
3 Files	11862

Machine Arithmetic

Machine/System Compiled/Run on: VAX/VMS TeleSoft

Abstract:

The purpose of this package is to emulate 36 bit machine host arithmetic on a 32 bit host machine. This package will provide support for 36 bit integer, real, and double precision real numbers in the form of the standard predefined arithmetic operations. The ranges of the supported types are as follows:

Integer
  range of -2**35 to 2**35-1
Real
  range of 10**-38 to 10**38 and 0
  mantissa => 27 bit binary fraction
  exponent => -128 to 127
Double Precision Real
  range of 10**-38 to 10**38 and 0
  mantissa => 63 bit binary fraction
  exponent => -128 to 127

Any errors which occur during use of the arithmetic exception declaration in the package specification can be changed to a rename of the predefined exception "NUMERIC_ERROR" for programs needing to handle arithmetic errors in a general fashion. Conversion functions are provided to assist in programming mixed operand (32 and 36 bit) arithmetic, and to facilitate IO. These functions should be renamed if they

will be used extensively so that the impact of the readability of a program's arithmetic expressions is minimized. The underlying arithmetic will be performed in twos complement arithmetic.

The following files are associated with this item:

Directory: PD:<ADA.MATH>

M36.ABS	2748
M36.CMM	565
M36.DEL	3988
M36.DOC	228759
M36.PRO	4998
M36.SRC	244196
M36DOC.DIS	101
M36PRGRPT.DIS	168
M36REN.SUB	363
M36SRC.DIS	152
M36TEST.DIS	184
M36TEST.SRC	81784
==========	==========
12 Files	568006

Math_Functions

Machine/System Compiled/Run on: VAX 11/780, VMS 4.4, DEC Ada

Abstract:

MATHFUN - Selected math functions for integer and floating point math. Functions for one- and two-dimensional arrays are included.

MATHFUN.SRC -- This file contains math functions and array functions programs with test programs. The programs include:

1) MATHGENI -- generic package of integer math functions
2) MATHGENF -- generic package of floating point math functions
3) MATHFUNG -- generic package of three component types
4) ARRAYFG1 -- generic package of one dimensional array functions (vectors)
5) ARRAYFG2 -- generic package of two dimensional array functions (matrices)
6) ARRAYFG -- generic package of three array component types

The following files are associated with this item:

Directory: PD:<ADA.MATH>

MATHFUN.CMM	171
MATHFUN.DAT	11013
MATHFUN.PRO	2887
MATHFUN.SRC	28563
==========	==========
4 Files	42634

Matrix Manipulation

Machine/System Compiled/Run on: VMS VAX 11/780, Telesoft Ada

Abstract:

MATRIX_PACKAGE is a general purpose matrix package. It defines data types VECTOR and MATRIX, and contains functions to perform general matrix algebra operations. It provides for addition, subtraction, and multiplication of VECTORS, MATRICES and SCALARS. It also provides for matrix inversion and vector dot product.

The following files are associated with this item:

Directory: PD:<ADA.MATH>

MATRIX.ADA	17612
MATRIX.PRO	2698
2 Files	20310

Math Library 1

Machine/System Compiled/Run on: Telesoft Ada (DEC VAX)
DEC Ada (DEC VAX)

Abstract:

MATHLIB-TELESOFT and MATHLIB-DEC are two versions of the same mathlib. This library contains five Ada packages which provide the following math functions:

SQRT (Square Root)		CBRT (Cube Root)	
LOG (Base E)		LOG10 (Base 10)	
EXP	**		
SIN	COS	TAN	
ASIN	ACOS	ATAN	ATAN2
SINH	COSH	TANH	

Other functions are provided as well.

The following files are associated with this item:

Directory: PD:<ADA.MATH>

MLIB.CMM	572
MLIB.PRO	3167
MLIBDEC.ADA	53520
MLIBTS.ADA	50567
4 Files	107826

Math Library 2

Machine/System Compiled/Run on: Telesoft and DEC Ada, VAX/VMS

Abstract:

This package is a floating mantissa definition of a binary FLOAT. It was first used on the DEC-10 and the VAX but should work for any since the parameters are obtained by initial sizing on the actual hardware. Otherwise the parameters could be set in the spec if known. This is a preliminary package that defines the properties of the particular floating point type for which we generate the math routines.

The constants are those required by the routines described in "Software Manual for the Elementary Functions" W. Cody and W. Waite, Prentice-Hall 1980. Actually most are needed only for the test programs rather than the functions themselves. Most of these could be in the form of attributes if all the floating types to be considered were those built into the compiler, but we also want to be able to support user defined types such as software floating types of greater precision than the hardware affords, or types defined on one machine to simulate another.

The following files are associated with this item:

Directory: PD:<ADA.MATH>

MLIB2.CMM	1212
MLIB2.PRO	4574
MLIB2.SRC	47299
3 Files	53085

Menu

PD:<ADA.MENU>

This subdirectory contains software used in the generation of menus. Applications programs may use these menu generators as front- ends.

Directory: PD:<ADA.MENU>

MMAN.CMM	1546
MMAN.DAT	9802
MMAN.DOC	107541
MMAN.PRO	3562
MMAN.SRC	175108
MMAN.TST	3469
MMANDAT.DIS	37
MMANDOC.ABS	2784
MMANDOC.DIS	35
MMANSRC.CO	506
MMANTST.DIS	69
MMGR.CMM	5079
MMGR.CO	928
MMGR.DOC	149510
MMGR.PRO	3910
MMGR.SRC	262235
MMGR.TST	12750
MMGRABS.CO	622
MMGRDEMO.CO	304
MMGRDEMO.DOC	3020
MMGRNOTES.ABS	236

MMGRTR.DOC	7802
22 Files	750855

Menu Manager

Machine/System Compiled/Run on: ROLM Ada, DG

Abstract:

This Package allows users to create and modify any display menus without requiring any modification of the Menu Manager programs. It processes menu definitions written in a menu definition language and residing in external files.

The following files are associated with this item:

Directory: PD:<ADA.MENU>

MMAN.CMM	1546
MMAN.DAT	9802
MMAN.DOC	107541
MMAN.PRO	3562
MMAN.SRC	175108
MMAN.TST	3469
MMANDAT.DIS	37
MMANDOC.ABS	2784
MMANDOC.DIS	35
MMANSRC.CO	506
MMANTST.DIS	69
11 Files	304459

Menu Manager 2

Machine/System Compiled/Run on: Telesoft 1.3 (unvalidated), IBM DOS

Abstract:

VIDEO is a menu manager package that is divided into four functional areas. It will provide application programmers with the ability to run various application systems from a menu driven user interface. Applications to be invoked via menu selections may be written in any language providing the PRAGMA INTERFACE is supported. The four functional areas are initialization of the overall application system, modeling of the application system, running the application, and diagramming the system.

The following files are associated with this item:

Directory: PD:<ADA.MENU>

MMGR.CMM	5079
MMGR.CO	928
MMGR.DOC	149510
MMGR.PRO	3910
MMGR.SRC	262235

MMGR.TST	12750
MMGRABS.CO	622
MMGRDEMO.CO	304
MMGRDEMO.DOC	3020
MMGRNOTES.ABS	236
MMGRTR.DOC	7802
==========	==========
11 Files	446396

Message_Handling

PD:<ADA.MESSAGE-HANDLING>

This subdirectory contains tools for use in message handling facilities and message transfer.

Directory: PD:<ADA.MESSAGE-HANDLING>

GMHF.CMM	1359
GMHF.DIS	60763
GMHF.PRO	3660
GMHF.SRC	519388
GMHFFD.DOC	34956
GMHFSRC.DIS	1333
GMHFTR.DOC	26322
GMHFUSER.DOC	88070
UNITREP.CMM	886
UNITREP.DOC	1799
UNITREP.PRO	3768
UNITREP.SRC	458113
==========	==========
12 Files	1200417

Message Handler

Machine/System Compiled/Run on: Telesoft 2.1, VAX/VMS

Abstract:

This tool may be used to edit any formatted message type that can be defined within the specified boundries of the "generic message". The tool is delivered with instances defined for several Rainform message types and one Non_Rainform message type. Additional types may be instantiated with a recompilation.

The following files are associated with this item:

Directory: PD:<ADA.MESSAGE-HANDLING>

GMHF.CMM	1359
GMHF.DIS	60763
GMHF.PRO	3660
GMHF.SRC	519388
GMHFFD.DOC	34956
GMHFSRC.DIS	1333

GMHFTR.DOC	26322
GMHFUSER.DOC	88070
8 Files	735851

UNITREP Software Model

Machine/System Compiled/Run on: Telesoft 1.5 (unvalidated), VAX/VMS

Abstract:

UNITREP consists of four subsystems: Message Input and Validation (MIV), Database Management (DBM), Man/Machine Interface (MMI), and Systems Utilities (SYS). DBM interfaces to an Intelligent Database Machine (IDM) back end relational database processor. The UNITREP database stores validated UNITREP messages from all organizations and units in the United States armed forces and some foreign forces under U.S. control.

The following files are associated with this item:

Directory: PD:<ADA.MESSAGE-HANDLING>

UNITREP.CMM	886
UNITREP.DOC	1799
UNITREP.PRO	3768
UNITREP.SRC	458113
4 Files	464566

Metrics

PD:<ADA.METRICS>

This subdirectory contains tools used to perform metrics analysis of Ada software. Tools for path analysis, performance analysis, and other metrics reports are included.

Directory: PD:<ADA.METRICS>

APATH.CMM	1355
APATH.DOC	1885
APATH.PRO	4208
APATHRD.ME	268
COMPMEAS.ABS	2349
COMPMEAS.CMM	4098
COMPMEAS.COM	1483
COMPMEAS.PRO	2519
COMPMEAS.SUB	703
HALSTEAD.CMM	3490
HALSTEAD.CO	969
HALSTEAD.DOC	34907
HALSTEAD.ME	3950
HALSTEAD.PL	2200
HALSTEAD.PRO	2519
HALSTEAD.SRC	1031145

HALSTEAD.TST	30606
MCCABE.CNT	2187
MCCABE.DOC	15250
MCCABE.DSS	1864
MCCABE.DST	4720
MCCABE.GRM	38028
MCCABE.ME	4974
MCCABE.PRO	2519
MCCABE.RNO	8390
MCCABE.SRC	432177
MCCABE.TST	56485
PANAL.CMM	1333
PANAL.PRO	3446
PANALABS.DOC	1676
PANALREAD.ME	268
PERFORM.ABS	1737
PERFORM.CMM	1357
PERFORM.ME	268
PERFORM.PRO	3877
SINST.ABS	2027
SINST.CMM	1345
SINST.INS	1806
SINST.ME	268
SINST.PRO	3596
SINSTRTM.SRC	195456
SINSTTDOC.DIS	214
SINSTTOOL.DOC	251056
SINSTTOOL.SRC	1194799
SMETRIC.ABS	1908
SMETRIC.CMM	1411
SMETRIC.ME	268
SMETRIC.PRO	3716
==========	=========
48 Files	3367080

Automatic Path Analyzer

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This tool consists of four modules. The Source Instrumenter inserts breakpoints (software probes) into Ada source programs to transfer control to execution monitor. The Execution Monitor traces paths executed and records information on execution frequency of each Ada program unit, code block and statement. The Control Program controls execution of the Ada program, allows users to execute Ada programs repetitively, and permits user input. The Report Generator provides comprehensive analysis of data collected from probes and outputs this information for each set of test parameters on frequency of path execution for each Ada program and each program unit.

The following files are associated with this item:

Directory: PD:<ADA.METRICS>

APATH.CMM	1355
APATH.DOC	1885
APATH.PRO	4208
APATHRD.ME	268
SINST.ABS	2027
SINST.CMM	1345
SINST.INS	1806
SINST.ME	268
SINST.PRO	3596
SINSTRTM.SRC	195456
SINSTTDOC.DIS	214
SINSTTOOL.DOC	251056
SINSTTOOL.SRC	1194799
==========	==========
13 Files	1658283

Complexity Measures

Machine/System Compiled/Run on: VAX/VMS/DEC Ada

Abstract:

The Complexity Measures Report will analyze program units for complexity as measured by Halstead and McCabe. The program unit and its complexity will be output to the default output file. If the measured complexity exceeds a desired maximum complexity, the program unit is flagged on the output listing.

The following files are associated with this item:

Directory: PD:<ADA.METRICS>

COMPMEAS.ABS	2349
COMPMEAS.CMM	4098
COMPMEAS.COM	1483
COMPMEAS.PRO	2519
COMPMEAS.SUB	703
HALSTEAD.CMM	3490
HALSTEAD.CO	969
HALSTEAD.DOC	34907
HALSTEAD.ME	3950
HALSTEAD.PL	2200
HALSTEAD.PRO	2519
HALSTEAD.SRC	1031145
HALSTEAD.TST	30606
MCCABE.CNT	2187
MCCABE.DOC	15250
MCCABE.DSS	1864
MCCABE.DST	4720
MCCABE.GRM	38028
MCCABE.ME	4974
MCCABE.PRO	2519
MCCABE.RNO	8390
MCCABE.SRC	432177
MCCABE.TST	56485

23 Files	1687532

Directory: PD:<ADA.COMPONENTS>

ABSTRACT.CMM	2263
ABSTRACT.CO	2657
ABSTRACT.PRO	3334
ABSTRACT.SRC	572620
4 Files	580874

Path Analyzer

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This tool will produce a report on the frequency of execution of paths in an Ada program. The number of executions of each path will be reported.

The following files are associated with this item:

Directory: PD:<ADA.METRICS>

PANAL.CMM	1333
PANAL.PRO	1676
PANALREAD.ME	268
SINST.ABS	2027
SINST.CMM	1345
SINST.INS	1806
SINST.ME	268
SINST.PRO	3596
SINSTRTM.SRC	195456
SINSTTDOC.DIS	214
SINSTTOOL.DOC	251056
SINSTTOOL.SRC	1194799
13 Files	1657290

Ada Performance Analyzer

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This tool measures system timing to identify those subprograms which require a high percentage of total execution time. Two modules comprise the tool. The execution monitor records information on timing and frequency of execution of each Ada program unit. The report generator provides execution time statistics for each program unit including maximum, minimum and average execution times, and percentage of total execution time.

The following files are associated with this item:

Directory: PD:<ADA.METRICS>

PERFORM.ABS	1737
PERFORM.CMM	1357
PERFORM.ME	268
PERFORM.PRO	3877
SINST.ABS	2027
SINST.CMM	1345
SINST.INS	1806
SINST.ME	268
SINST.PRO	3596
SINSTRTM.SRC	195456
SINSTTDOC.DIS	214
SINSTTOOL.DOC	251056
SINSTTOOL.SRC	1194799
==========	==========
13 Files	1657806

Source Instrumenter

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This tool inserts breakpoints in Ada source code. These "software hooks" will be used to trace the execution of an Ada program. Normally, hooks will be placed at entry/exit and decision points. A user option allows for breakpoints at every statement.

The following files are associated with this item:

Directory: PD:<ADA.METRICS>

SINST.ABS	2027
SINST.CMM	1345
SINST.INS	1806
SINST.ME	268
SINST.PRO	3596
SINSTRTM.SRC	195456
SINSTTDOC.DIS	214
SINSTTOOL.DOC	251056
SINSTTOOL.SRC	1194799
==========	==========
9 Files	1650567

Self Metric Analysis

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This tool instruments Ada source code for measurement and analysis of program timing, loop execution counts, state of control variables at decision points, the maximum,

minimum and average value of selected variables. The tool consists of a source instrumentation module, execution monitor and a report generator.

The following files are associated with this item:

Directory: PD:<ADA.METRICS>

SMETRIC.ABS	1908
SMETRIC.CMM	1411
SMETRIC.ME	268
SMETRIC.PRO	3716
SINST.ABS	2027
SINST.CMM	1345
SINST.INS	1806
SINST.ME	268
SINST.PRO	3596
SINSTRTM.SRC	195456
SINSTTDOC.DIS	214
SINSTTOOL.DOC	251056
SINSTTOOL.SRC	1194799
==========	==========
13 Files	1657870

Miscellaneous_Tools

PD:<ADA.TOOLS>

This is the miscellaneous tools subdirectory. Sources to various tools which do not fit into the categories of the other subdirectories are placed here.

Directory: PD:<ADA.TOOLS>

A970.PRO	3441
A970.SRC	95322
A970.TXT	632
CALC.CM2	1417
CALC.CMM	549
CALC.PRO	3616
CALC.SRC	25971
CALCREN.SUB	127
CALCSRC.DIS	62
CAS.ADA	2470
CBREAK.CMM	581
CBREAK.PRO	3542
CBREAK.SRC	28407
CBREAKREN.SUB	90
CONSTRCT.CMM	572
CONSTRCT.DOC	31539
CONSTRCT.PRO	4184
CONSTRCT.SRC	147191
CREATETB.DOC	4387
CREATETB.PRO	4524
CREATETB.SRC	48345
FCHECK.DOC	5048
FCHECK.PRO	3791

FCHECK.SRC	20881
PRP.ABS	2297
PRP.CMM	568
PRP.DAT	56208
PRP.DOC	23028
PRP.PRO	3578
PRP.RPT	11352
PRP.SRC	636152
PRPDATA.DIS	46
PRPDEBUG.DOC	1036
PRPREN.SUB	391
PRPSRC.DIS	260
PRPTEST.DAT	11048
PRPTEST.DIS	91
WMGS.CMM	578
WMGS.MEN	11582
WMGS.PRO	3587
WMGS.SRC	304280
WMGSBP.INP	191412
WMGSCMD.FLS	8608
WMGSCMDFL.DIS	242
WMGSMATH.TST	5389
WMGSMENU.DIS	135
WMGSREAD.ME	118
WMGSSRC.DIS	451
==========	==========
49 Files	1717591

A970

Machine/System Compiled/Run on: DG MV 10000 (ROLM ADE)
DEC VAX 11/785 (DEC Ada)

Abstract:

The purpose of PROG970 is to program the TVI 970 terminal from a file, setting a variety of its features. These features include the following:

- o User Message Line
- o Function Keys
- o Cursor Type
- o Key Click
- o 25th Line Display
- o Answerback Sequence
- o Programmable Keys
- o Personal Messages
- o Other User-Definable Char Sequences

The following files are associated with this item:

Directory: PD:<ADA.TOOLS>

A970.PRO	3441
A970.SRC	95322

A970.TXT	632
3 Files	99395

Calculator Functions

Machine/System Compiled/Run on: WICAT/ROS TeleSoft

Abstract:

This tool provides an on-line calculator function. It is set up to handle only integers at the present time. One-letter variables may be defined and used. The parser for expressions was generated by LR on the VAX. Expressions are terminated by a semi-colon. The program normally terminates with a CTRL-B. Error handling is non-existent at this time, so syntactic errors will also cause the program to exit.

The following files are associated with this item:

Directory: PD:<ADA.TOOLS>

CALC.CM2	1417
CALC.CMM	549
CALC.PRO	3616
CALC.SRC	25971
CALCREN.SUB	127
CALCSRC.DIS	62
6 Files	31742

CAS

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

This function calculates the "STATEMENTS" of a valid Ada fragment specified by a FILE_NAME string parameter. It need not be a complete compilation unit but it should have closed all open parentheses and string brackets. The number of STATEMENTS of code is returned as an INTEGER.

The Ada statement is defined by a semicolon terminator outside of comments, parentheses, or string or character literals. This definition is insensitive to formatting or layout of the source.

There are exotic cases for which this will misestimate the count but we have never encountered one in real code.

This copy of the function is embedded in a test and driver program. Running the program on its own source file should give The driver has an additional feature of correcting for the common error of leaving out the extension on a file name. The nature of this extension is system dependent and a ".TXT" is used.

The following files are associated with this item:

Directory: PD:<ADA.TOOLS>

CAS.ADA	8465
CAS.PRO	2470
==========	==========
2 Files	10935

Combine and Break

Machine/System Compiled/Run on: WICAT/ROS TeleSoft

Abstract:

These tools are user to combine separate files into a single file, and to break single files into separate files. The code works on file banners which immediately precede each file. These tools normally are used to "break" a single source code file into the compilable subunits of the file. "Combine" is used to append all of the subunits into one file.

The following files are associated with this item:

Directory: PD:<ADA.TOOLS>

CBREAK.CMM	581
CBREAK.PRO	3542
CBREAK.SRC	28407
CBREAKREN.SUB	90
==========	==========
4 Files	32620

CONSTRUCT and CREATE_CO

Machine/System Compiled/Run on: Intellimac 7000M
UNIX
Telesoft unvalidated

Abstract:

The function of Construct is to perform the minimal number of system commands to bring a project up to date given that changes to project files have occurred. If a project is already up to date, Construct will indicate this and no commands will be performed. Construct can also be used to supply descriptive information in the form of dependency graphs and name lists of project files.

Create_CO reads a set of Ada source code files and creates a configuration object which describes the dependencies that exist among the files. The configuration object is formatted so that it may be read by Construct. In determining dependencies, Create_CO observes the filenaming conventions of the TeleSoft Ada compiler (i.e., filename extensions of .text, .sym, .code) and the compiler's language restriction that specifications and bodies of Ada packages reside in the same file.

The following files are associated with this item:

Directory: PD:<ADA.TOOLS>

CONSTRCT.CMM	572
CONSTRCT.DOC	31539
CONSTRCT.PRO	4184
CONSTRCT.SRC	147191
==========	==========
4 Files	183486

CREATE_TB

Machine/System Compiled/Run on: Intellimac 7000M
UNIX
Telesoft unvalidated

Abstract:

CREATE_TB scans text files and creates a table by selecting specified line entries. The text files are assumed to contain standardized entries which are repeated in each file. CREATE_TB extracts a subset of these entries compressing their text into a specified column width for printing in a tabular form. The entries to be extracted and the width of each column may be specified by the user for each table. CREATE_TB will scan a group of files identified by a UNIX file pattern(including *, ?, or selectors [aeiou]) and it also recognizes PAGE headers of the form:

```
::::::::::::          --::::::::::::
FILENAME      or      --FILENAME
::::::::::::          --::::::::::::
```

as file separators.

The following files are associated with this item:

Directory: PD:<ADA.TOOLS>

CREATETB.DOC	4387
CREATETB.PRO	4524
CREATETB.SRC	48345
==========	==========
3 Files	57256

File Checker

Machine/System Compiled/Run on: DG MV 10000, ROLM ADE
DEC VAX 11/780, DEC Ada

Abstract:

FILE_CHECKER uses CAS3 to count the number of Ada statements (terminated by semicolons), the number of lines of code, and a checksum of the non-space (excludes tabs, CR, LF, FF, HT, and spaces) characters in a group of files.

FILE_CHECKER asks for one file name after another; the user terminates his input by striking RETURN to the file name prompt. FILE_CHECKER then gives a summary

report of this data on all files listed. Include files may be specified along with other file names.

Ada components used by FILE_CHECKER include GENERIC_LIST and CAS3. CHARACTER_SET is used by CAS3. All are in the Ada Repository in the COMPONENTS subdirectory.

The following files are associated with this item:

Directory: PD:<ADA.TOOLS>

FCHECK.DOC	5048
FCHECK.PRO	3791
FCHECK.SRC	20881
3 Files	29720

Propagation Prediction (for Radio)

Machine/System Compiled/Run on: /TeleSoft 1.5

Abstract:

PROP_LINK is an interactive program to evaluate the signal performance and noise of a set of RF propagation links. The program allows the user to input transmission and receiver data for up to 300 nodes, each with up to 15 transmitters and 15 receivers. RF propagation routines will be based on the SIMSTAR RF propagation capabilities.

The following files are associated with this item:

Directory: PD:<ADA.TOOLS>

PRP.ABS	2297
PRP.CMM	568
PRP.DAT	56208
PRP.DOC	23028
PRP.PRO	3578
PRP.RPT	11352
PRP.SRC	636152
PRPDATA.DIS	46
PRPDEBUG.DOC	1036
PRPREN.SUB	391
PRPSRC.DIS	260
PRPTEST.DAT	11048
PRPTEST.DIS	91
13 Files	746055

Map Generator

Machine/System Compiled/Run on: TeleSoft 2.1 / VMS

Abstract:

Inputs from operator will define map details, define and label fixed points; optional inputs will define three-dimensional display. Generator allows views of the earth from different projections, incorporates zoom capability, displays specified areas of interest.

The following files are associated with this item:

Directory: PD:<ADA.TOOLS>

WMGS.CMM	578
WMGS.MEN	11582
WMGS.PRO	3587
WMGS.SRC	304280
WMGSBP.INP	191412
WMGSCMD.FLS	8608
WMGSCMDFL.DIS	242
WMGSMATH.TST	5389
WMGSMENU.DIS	135
WMGSREAD.ME	118
WMGSSRC.DIS	451
==========	==========
11 Files	526382

Newsletters

PD:<ADA.NEWS>

This subdirectory contains the Ada Software Repository (ASR) Newsletters. They are numbered sequentially, starting at 001. File names are ASRnnn.DOC.

Directory: PD:<ADA.NEWS>

AIC42.DOC	31301
AIC43.DOC	41422
AIC44.DOC	32581
ASR001.DOC	30356
ASR002.DOC	33850
ASR003.DOC	32418
ASR004.DOC	29401
ASR005.DOC	36056
ASR006.DOC	15779
ASR007.DOC	15591
ASR008.DOC	52902
ASR010.DOC	54778
ASR011.DOC	96746
ASR012.DOC	82467
ASR012.SUP	114576
SNAP01.DOC	3754
SNAP02.DOC	10523
SNAP03.DOC	12600
==========	==========
19 Files	740254

AIC Newsletters

The following files are Newsletters put out by the Ada Information Clearinghouse. They are recommended reading.

The following files are associated with this item:

Directory: PD:<ADA.NEWS>

AIC42.DOC	31301
AIC43.DOC	41422
AIC44.DOC	32581
3 Files	105304

ASR Newsletters

The following files are Newsletters on the Ada Software Repository and associated activities. They are packed with useful information an are recommended reading for all users of the Ada Software Repository.

These newsletters may be obtained from the PD:<ADA.NEWS> subdirectory of the ASR or users may subscribe to have them delivered by conventional mail (for a minor fee). One newsletter is issued each month. In order to subscribe for mail delivery of the newsletters, write or telephone Echelon:

Echelon, Inc.
885 N. San Antonio Road
Los Altos, CA 94022
415/948-3820

Echelon can provide details on the current price for a year's subscription.

The following files are associated with this item:

Directory: PD:<ADA.NEWS>

ASR001.DOC	30356
ASR002.DOC	33850
ASR003.DOC	32418
ASR004.DOC	29401
ASR005.DOC	36056
ASR006.DOC	15779
ASR007.DOC	15591
ASR008.DOC	13153
ASR009.DOC	52902
ASR010.DOC	54778
ASR011.DOC	96746
ASR012.DOC	82467
ASR012.SUP	114576
13 Files	608073

Snapshots

These files contain snapshots of the Ada Software Repository (ASR). These snapshots list each directory in the ASR and show their sizes. The snapshots provide an overview of the ASR, provide a means to quickly find out how much is available in the various subject areas, and allow the reader to follow the growth of the ASR.

The following files are associated with this item:

Directory: PD:<ADA.NEWS>

SNAP01.DOC	3754
SNAP02.DOC	10523
SNAP03.DOC	12600
3 Files	26877

Online_Documentation

PD:<ADA.ONLINE-DOC>

This directory contains supporting files for the online documentation system of the Ada Repository.

Directory: PD:<ADA.ONLINE-DOC>

HELP.DAT	208744
HELP.EX	10538
HELP.EX2	8145
HELP.EX3	21666
HELP.PRO	4129
HELP.SRC	63360
6 Files	316582

HELP System

Machine/System Compiled/Run on: VAX 11/785 (VMS 4.2), DEC Ada

Abstract:

The HELP System is a collection of programs which provide an interactive online documentation facility. Data for the facility is prepared as a conventional text file which is formatted in an outline form, as follows:

```
0 Topic-Name
        <text of topic>
1 1st-Level-Subtopic
        <text of subtopic>
...
9 9th-Level-Subtopic
        <text>
1 2nd-1st-Level-Subtopic
        <text>
...
1 3rd-1st-Level-Subtopic
```

...
0 Next-Topic
...

The level numbers do not have to be consecutive, and the lower the level number is, the higher its entry appears in the hierarchy (level 4 elements appear before level 6). There may be as many topics at each level as desired. A line containing only a dot (.) character causes a break between screens when the help file is displayed to the user:

this line appears on one screen
.
this line appears on the next screen (at the top)

The HELP System consists of three programs: HELP, HELP_BUILD, and HELP_ANALYZE.

The HELP program is used to display information contained in a help file. This information is in the form of a direct-access file created by the HELP_BUILD program. Briefly:

text of help file
V
HELP_BUILD
V
direct-access help file
V
HELP displays info to user

The HELP_ANALYZE program displays the structure hierarchy of a direct access file which is created by HELP_BUILD.

The following files are associated with this item:

Directory: PD:<ADA.ONLINE-DOC>

HELP.EX	10538
HELP.EX2	8145
HELP.EX3	21666
HELP.PRO	4129
HELP.SRC	63360
5 Files	107838

Pager

PD:<ADA.PAGER>

This subdirectory contains tools which create and manipulated paged files. All SRC files are paged files, which are files composed of several smaller files separated by a special flag.

Directory: PD:<ADA.PAGER>

PAGE.ADA	6007
PAGE.PRO	3373
PAGER.DOC	17470

PAGER.PRO	3835
PAGER.SRC	86752
UNPAGE.ADA	5618
UNPAGE.PRO	3660
==========	==========
7 Files	126715

Page

Machine/System Compiled/Run on: DG MV 10000, ROLM ADE

Abstract:

PAGE creates a text file containing several other text files separated by the lines:

```
::::::::
filename
::::::::
```

where 'filename' is the name of the file which follows. It accepts as input the name of an output file (file to be generated) and the names of the input files, where striking a RETURN to the input file name prompt terminates the input of the list of names.

UNPAGE is the complement of PAGE, which extracts the component files from the combined file.

The following files are associated with this item:

Directory: PD:<ADA.PAGER>

PAGE.ADA	6007
PAGE.PRO	3373
==========	==========
2 Files	9380

Pager

Machine/System Compiled/Run on: DG MV10000, ROLM ADE
DEC VAX 11/785, DEC Ada

Abstract:

PAGER is a tool which creates, extracts from, and scans paged files, where a paged file is a file composed of one or more files prefixed by banners. PAGER is based in concept on the UNPAGE tool submitted to the Ada Repository on SIMTEL20 by Mitre Corporation.

Paged files are convenient mechanisms for storing related files. They reduce cluttering in the directories and simplify the file transfer process (to and from the Ada Repository, for example) by requiring the user to transfer only one file in order to obtain all files pertinent to a particular project or tool. Additionally, paged files are text files which can be handled more readily than the 8-bit binary images associated with other file grouping mechanisms. Paged files may be manipulated by a text editor if necessary.

The following files are associated with this item:

Directory: PD:<ADA.PAGER>

PAGER.DOC	17470
PAGER.PRO	3835
PAGER.SRC	86752
3 Files	108057

Unpage

Machine/System Compiled/Run on: Intellimac 7000M
UNIX
Telesoft unvalidated

Abstract:

UNPAGE is a program which complements the UNIX page command. The UNIX page command can be used to combine several source files, interspersing file headers of the form:

```
::::::::::::
FILENAME
::::::::::::
```

UNPAGE reads such a file breaking the subfiles into separate files as indicated by the filename headers. UNPAGE has been enhanced to also recognize file headers which have the format of an Ada comment:

```
--::::::::::::
--FILENAME
--::::::::::::
```

The following files are associated with this item:

Directory: PD:<ADA.PAGER>

UNPAGE.ADA	5618
UNPAGE.PRO	3660
2 Files	9278

PDL

PD:<ADA.PDL>

This subdirectory contains software associated with Ada Program Design Languages and tools to support the Ada program designer. Such tools include tools for data dictionary manipulation and design analysis. There may be some overlap between this directory and software which may fall into the PDL category that is scattered among the other subdirectories.

Directory: PD:<ADA.PDL>

DD.CMM	603
DD.PRO	3792
DD.SRC	347983
DDABS.DOC	2159
DDICTSRC.DIS	1202
DDICTTEST.DAT	1729
DDICTUSER.MAN	42780
DDICTUSER.RNO	33827
DDREAD.ME	4291
DOCMGR.CMM	597
DOCMGR.CO	1839
DOCMGR.DOC	213056
DOCMGR.PRO	2970
DOCMGR.SRC	580340
DOCMGRRD.ME	1623
GAD.CM2	2030
GAD.CMM	585
GAD.PRO	4760
GAD.SRC	1034745
GADABS.DOC	3036
GADCDR.MIN	8994
GADDESIGN.DOC	269602
GADEXAMPL.GPH	102578
GADHELP.HLP	43523
GADSRC.DIS	1615
GADTECH.INF	187808
GADUSERS.MAN	185315
==========	==========
27 Files	3083382

Data Dictionary

Machine/System Compiled/Run on: DEC Ada / VMS

Abstract:

The data dictionary is a collection of records which contain various data on Ada declarations and programs. Tools are provided to create, edit, and extract information from the data dictionary. The format and content of each kind of entry in the data dictionary is user defineable. Associated with each type of record is a display form for use while interactively creating or updating the data dictionary entry.

The following files are associated with this item:

Directory: PD:<ADA.PDL>

DD.CMM	603
DD.PRO	3792
DD.SRC	347983
DDABS.DOC	2159
DDICTSRC.DIS	1202
DDICTTEST.DAT	1729
DDICTUSER.MAN	42780

DDICTUSER.RNO	33827
DDREAD.ME	4291
9 Files	438366

Directory: PD:<ADA.COMPONENTS>

NEWABS.DIS	2768
NEWABS.PRO	3319
NEWABS.SRC	659811
3 Files	665898

Documentation Manager

Machine/System Compiled/Run on: VAX/VMS/DEC Ada

Abstract:

The document manager maintains a catalog of configuration items stored in the system. Configuration items may be obtained from the catalog for read-only use, or for modification. Only one modifiable copy can be checked out at a time. When a modified configuration item is returned to the library, a new version number is assigned to it, so that all versions of an item can be obtained from the catalog. Items in the catalog have attributes associated with them and items can be selected by attribute as well as by name and version number. For example, an attribute can be the name of the person who created the configuration item. One can then easily find all configuration items created by a certain person.

The following files are associated with this item:

Directory: PD:<ADA.PDL>

DOCMGR.CMM	597
DOCMGR.CO	1839
DOCMGR.DOC	213056
DOCMGR.PRO	2970
DOCMGR.SRC	580340
DOCMGRRD.ME	1623
6 Files	800425

Graphics to PDL Aid

Machine/System Compiled/Run on: DEC Ada / VMS

Abstract:

The Graphic Ada Designer is a specialized tool for creating graphical Object Oriented Design Diagrams (OODDs) for Ada programs and the Program Design Language (PDL) representations associated with each OODD. The Graphic Ada Designer is principally targeted towards the interactive development of these block-like diagrams in support of the development of Ada software. In particular it is designed to support a variant of the Ada Graphic Notation developed by SYSCON from the Object Oriented Design work of

Grady Booch and a presentation on graphical techniques for analysis given by Dr. R. Buhr of Carleton University (see "Software Engineering with Ada" by Grady Booch, and "System Design with Ada" by R.J.A. Buhr).

The Graphic Ada Designer requires a bit-mapped graphics terminal supporting at least a minimal display list capability. The implementation will use GKS interfaces when possible. Significant emphasis will be placed on the transportability of the applications software, with execution efficiency being a secondary consideration (i.e., when due to its device and system dependent nature).

The following files are associated with this item:

Directory: PD:<ADA.PDL>

GAD.CM2	2030
GAD.CMM	585
GAD.PRO	4760
GAD.SRC	1034745
GADABS.DOC	3036
GADCDR.MIN	8994
GADDESIGN.DOC	269602
GADEXAMPL.GPH	102578
GADHELP.HLP	43523
GADSRC.DIS	1615
GADTECH.INF	187808
GADUSERS.MAN	185315
==========	==========
12 Files	1844591

PIWG Benchmarks

PIWG is a suite of tests/benchmarks prepared by the Performance Issues Working Group of ACM SIGAda. The purpose of PIWG is to develop the benchmarks and collect and disseminate results. The PIWG tests have been under development for many years and have been run against many Ada compilers. The PIWG test suite contains over 190 files which include Whetstone (to measure processor speed), Dhrystone (to measure statement execution per unit time), and other benchmarks which test various attributes of the Ada language and their implementations under specific compilers. The PIWG tests must be customized for a particular compiler, and instructions are included to do this.

Directory: PD:<ADA.PIWG>

A000001.ADA	84
A000002.ADA	0
A000011.ADA	375
A000012.ADA	842
A000013.ADA	2626
A000014.ADA	725
A000015.ADA	208
A000016.ADA	2275
A000021.ADA	869
A000022.ADA	961
A000031.ADA	981
A000032.ADA	5719
A000033.ADA	5271

A000041.ADA	1414
A000042.ADA	1379
A000043.ADA	3011
A000044.ADA	867
A000049.ADA	5612
A000051.ADA	1144
A000052.ADA	1461
A000053.ADA	1847
A000054.ADA	1892
A000055.ADA	4142
A000091.ADA	14609
A000092.ADA	13291
A000093.ADA	19353
A000094.ADA	28430
A000098.ADA	2877
A000099.ADA	2663
A000100.ADA	1608
A000101.ADA	766
A000102.ADA	712
A000103.ADA	1834
A000104.ADA	289
A000105.ADA	797
A000106.ADA	323
A000107.ADA	464
ACOMPILE.CLI	993
ACOMPILE.COM	1421
ACOMPILE.LR1	47045
C000001.ADA	2675
C000002.ADA	2721
C000003.ADA	2387
COMPILE.CLI	815
COMPILE.COM	1235
COMPILE.L78	16102
COMPILE.L86	23081
COPY.COM	6450
COPY.R10	2142
D000001.ADA	2907
D000002.ADA	2962
D000003.ADA	3083
D000004.ADA	3201
E000001.ADA	2584
E000002.ADA	3299
E000004.ADA	3589
F000001.ADA	2190
F000002.ADA	2335
G000001.ADA	2635
G000002.ADA	2951
G000003.ADA	2424
G000004.ADA	2731
G000005.ADA	2443
G000006.ADA	2590
G000007.ADA	2259
GETPIWG.SUB	3714
L000001.ADA	7801

L000002.ADA	7858
L000003.ADA	7893
P000001.ADA	1916
P000002.ADA	2267
P000003.ADA	2408
P000004.ADA	2505
P000005.ADA	2446
P000006.ADA	2482
P000007.ADA	2478
P000010.ADA	2919
P000011.ADA	3585
P000012.ADA	2952
P000013.ADA	3278
PIWG.DOC	14507
PIWG.PRO	3350
PIWG83186.CMM	424
READ.ME	8987
T000001.ADA	2322
T000002.ADA	2425
T000003.ADA	2993
T000004.ADA	2864
T000005.ADA	4661
T000006.ADA	3866
T000007.ADA	2507
TAPE.LOG	6797
TAPEDIST.LTR	5198
WCOMPILE.COM	2535
Z000001.ADA	3151
Z000003.ADA	5288
Z000004.ADA	12997
Z000005.ADA	11752
Z000006.ADA	6205
Z000007.ADA	1523
Z000008.ADA	13584
Z000009.ADA	12980
Z000010.ADA	6114
Z000011.ADA	14769
Z000012.ADA	21034
Z000013.ADA	8106
Z000014.ADA	11251
Z000015.ADA	2349
Z000016.ADA	7843
Z000016A.ADA	13704
Z000017.ADA	8012
Z000017A.ADA	13305
Z000018.ADA	2089
Z000020.ADA	6307
Z000021.ADA	12642
Z000022.ADA	1603
Z000023.ADA	2771
Z000110.ADA	120
Z000111.ADA	1312
Z000111.COM	2536
Z000111D.CLI	2170

Z000111D.COM	4307
Z000112.ADA	2652
Z000113.ADA	6672
Z000114.ADA	13373
Z00011D.L86	10607
Z000121.ADA	2943
Z000122.ADA	6043
Z000123.ADA	15343
Z000124.ADA	30845
Z000131.ADA	1137
Z000132.ADA	2398
Z000133.ADA	6178
Z000134.ADA	12480
Z000141.ADA	5032
Z000142.ADA	10332
Z000143.ADA	26232
Z000151.ADA	6124
Z000152.ADA	12524
Z000153.ADA	31724
Z000161.ADA	5839
Z000162.ADA	11839
Z000171.ADA	5083
Z000172.ADA	10183
Z000173.ADA	25483
Z000181.ADA	1162
Z000182.ADA	2322
Z000183.ADA	5802
Z000184.ADA	11606
Z000191.ADA	4807
Z000192.ADA	9707
Z000193.ADA	24407
Z000201.ADA	2151
Z000202.ADA	4351
Z000203.ADA	10951
Z000211.ADA	3451
Z000212.ADA	6951
Z000213.ADA	17451
Z000221.ADA	722
Z000222.ADA	1742
Z000223.ADA	3444
Z000224.ADA	7044
Z000231.ADA	1446
Z000232.ADA	2886
Z000233.ADA	7206
Z000234.ADA	14412
Z000241.ADA	740
Z000242.ADA	1460
Z000243.ADA	3620
Z000244.ADA	7223
Z000254.ADA	8666
Z000264.ADA	6867
Z000274.ADA	21964
Z000281.ADA	241
Z000282.ADA	491

Z000283.ADA	1241
Z000284.ADA	2492
Z000291.ADA	542
Z000292.ADA	1102
Z000293.ADA	2782
Z000294.ADA	5584
Z000295.ADA	11384
Z000301.ADA	1157
Z000302.ADA	2367
Z000303.ADA	5997
Z000304.ADA	12050
Z000311.ADA	321
Z000312.ADA	651
Z000313.ADA	1641
Z000314.ADA	3292
Z000315.ADA	6692
ZCOMPILE.CLI	590
ZCOMPILE.COM	1177
ZCOMPILE.ICC	514
ZCOMPILE.L86	2449
196 Files	1133191

PIWG Benchmarks

Unit name : PIWG Benchmarks
Version : TAPE_8_31_86
Author : ACM SIGAda Performance Issues Working Group (PIWG)

Machine/System Compiled/Run on: Numerous

PIWG is a suite of tests/benchmarks prepared by the Performance Issues Working Group of ACM SIGAda. The purpose of PIWG is to develop the benchmarks and collect and disseminate results.

The PIWG tests have been under development for many years and have been run against many Ada compilers. The PIWG test suit contains over 190 files which include Whetstone (to measure processor speed), Dhrystone (to measure statement execution per unit time), and other benchmarks which test various attributes of the Ada language and their implementations under specific compilers. The PIWG tests must be customized for a particular compiler, and instructions are included to do this.

Some of the items measured by PIWG include:

* task creation-related timing
* dynamic elaboration-related timing
* exception-related timing
* coding style-related timing
* TEXT_IO-related timing
* loop overhead-related timing
* procedure call-related timing
* task-related timing
* compilation, link, and execution times

NOTE: the directory PD:<ADA.PIWG> contains each of the individual files of the PIWG Benchmark Suite, while the directory PD:<ADA.BENCHMARKS> contains the same files grouped as just a few large PAGER files.

The following files are associated with this item:

Directory: PD:<ADA.PIWG>

A000001.ADA	84
A000002.ADA	0
A000011.ADA	375
A000012.ADA	842
A000013.ADA	2626
A000014.ADA	725
A000015.ADA	208
A000016.ADA	2275
A000021.ADA	869
A000022.ADA	961
A000031.ADA	981
A000032.ADA	5719
A000033.ADA	5271
A000041.ADA	1414
A000042.ADA	1379
A000043.ADA	3011
A000044.ADA	867
A000049.ADA	5612
A000051.ADA	1144
A000052.ADA	1461
A000053.ADA	1847
A000054.ADA	1892
A000055.ADA	4142
A000091.ADA	14609
A000092.ADA	13291
A000093.ADA	19353
A000094.ADA	28430
A000098.ADA	2877
A000099.ADA	2663
A000100.ADA	1608
A000101.ADA	766
A000102.ADA	712
A000103.ADA	1834
A000104.ADA	289
A000105.ADA	797
A000106.ADA	323
A000107.ADA	464
ACOMPILE.CLI	993
ACOMPILE.COM	1421
ACOMPILE.LR1	47045
C000001.ADA	2675
C000002.ADA	2721
C000003.ADA	2387
COMPILE.CLI	815
COMPILE.COM	1235
COMPILE.L78	16102
COMPILE.L86	23081

COPY.COM	6450
COPY.R10	2142
D000001.ADA	2907
D000002.ADA	2962
D000003.ADA	3083
D000004.ADA	3201
E000001.ADA	2584
E000002.ADA	3299
E000004.ADA	3589
F000001.ADA	2190
F000002.ADA	2335
G000001.ADA	2635
G000002.ADA	2951
G000003.ADA	2424
G000004.ADA	2731
G000005.ADA	2443
G000006.ADA	2590
G000007.ADA	2259
GETPIWG.SUB	3714
L000001.ADA	7801
L000002.ADA	7858
L000003.ADA	7893
P000001.ADA	1916
P000002.ADA	2267
P000003.ADA	2408
P000004.ADA	2505
P000005.ADA	2446
P000006.ADA	2482
P000007.ADA	2478
P000010.ADA	2919
P000011.ADA	3585
P000012.ADA	2952
P000013.ADA	3278
PIWG.DOC	14507
PIWG.PRO	3350
PIWG83186.CMM	424
READ.ME	8987
T000001.ADA	2322
T000002.ADA	2425
T000003.ADA	2993
T000004.ADA	2864
T000005.ADA	4661
T000006.ADA	3866
T000007.ADA	2507
TAPE.LOG	6797
TAPEDIST.LTR	5198
WCOMPILE.COM	2535
Z000001.ADA	74
Z000002.ADA	3151
Z000003.ADA	5288
Z000004.ADA	12997
Z000005.ADA	11752
Z000006.ADA	6205
Z000007.ADA	1523

Z000008.ADA	13584
Z000009.ADA	12980
Z000010.ADA	14769
Z000012.ADA	21034
Z000013.ADA	8106
Z000014.ADA	11251
Z000015.ADA	2349
Z000016.ADA	7843
Z000016A.ADA	13704
Z000017.ADA	8012
Z000017A.ADA	13305
Z000018.ADA	2089
Z000020.ADA	6307
Z000021.ADA	12642
Z000022.ADA	1603
Z000023.ADA	2771
Z000110.ADA	120
Z000111.ADA	1312
Z000111.COM	2536
Z000111D.CLI	2170
Z000111D.COM	4307
Z000112.ADA	2652
Z000113.ADA	6672
Z000114.ADA	13373
Z00011D.L86	10607
Z000121.ADA	2943
Z000122.ADA	6043
Z000123.ADA	15343
Z000124.ADA	30845
Z000131.ADA	1137
Z000132.ADA	2398
Z000133.ADA	6178
Z000134.ADA	12480
Z000141.ADA	5032
Z000142.ADA	10332
Z000143.ADA	26232
Z000151.ADA	6124
Z000152.ADA	12524
Z000153.ADA	31724
Z000161.ADA	5839
Z000162.ADA	11839
Z000171.ADA	5083
Z000172.ADA	10183
Z000173.ADA	25483
Z000181.ADA	1162
Z000182.ADA	2322
Z000183.ADA	5802
Z000184.ADA	11606
Z000191.ADA	4807
Z000192.ADA	9707
Z000193.ADA	24407
Z000201.ADA	2151
Z000202.ADA	4351
Z000203.ADA	10951

Z000211.ADA	3451
Z000212.ADA	6951
Z000213.ADA	17451
Z000221.ADA	722
Z000222.ADA	1742
Z000223.ADA	3444
Z000224.ADA	7044
Z000231.ADA	1446
Z000232.ADA	2886
Z000233.ADA	7206
Z000234.ADA	14412
Z000241.ADA	740
Z000242.ADA	1460
Z000243.ADA	3620
Z000244.ADA	7223
Z000254.ADA	8666
Z000264.ADA	6867
Z000274.ADA	21964
Z000281.ADA	241
Z000282.ADA	491
Z000283.ADA	1241
Z000284.ADA	2492
Z000291.ADA	542
Z000292.ADA	1102
Z000293.ADA	2782
Z000294.ADA	5584
Z000295.ADA	11384
Z000301.ADA	1157
Z000302.ADA	2367
Z000303.ADA	5997
Z000304.ADA	12050
Z000311.ADA	321
Z000312.ADA	651
Z000313.ADA	1641
Z000314.ADA	3292
Z000315.ADA	6692
ZCOMPILE.CLI	590
ZCOMPILE.COM	1177
ZCOMPILE.ICC	514
ZCOMPILE.L86	2449
196 Files	1133191

Pointers

PD:<ADA.POINTERS>

This is the pointers subdirectory. Information on other sources of software and information (such as the USC-ECLB resources) is presented here. This data pertains to both on- and off-net resources.

Directory: PD:<ADA.POINTERS>

ACVC.DOC	382

ACVCSUITE.INF	1293
ADA1INFO.INF	3187
ADA2INFO.INF	1613
ADADOC.INF	9739
ADAED.DOC	1886
ADAINF.INF	16553
ADAPLANS.INF	55289
ADARBBS.INF	9282
AJPOSTAFF.INF	1512
ALSSTAT.INF	10954
APSEEVAL.INF	39521
ARMYALS.DOC	327
ARTEWG.INF	2960
BIBORDER.INF	2529
CAISSTAT.INF	1163
COMPEVAL.INF	61019
COMPILERS.INF	69632
CONTACTS.INF	4127
D34051.MSG	2660
D34051.TXT	18550
D34052.MSG	1149
D34052.TXT	7494
DIANA.INF	2723
DODD5000.INF	11611
ECLBENCH.DOC	3094
EVINFO.INF	3749
IBMPCADA.DOC	4660
IEEEPDL.TXT	14332
IMPGUIDE.DOC	1289
ISO.INF	8759
KAPSE.INF	1664
KITINFO.INF	2850
MCCR.INF	3091
NATOADA.INF	2227
SEI.DOC	398
ST1750A.INF	3164
TRADEMARK.INF	11770
VALFACIL.INF	1920
VALIDATE.INF	66002
VALINFO.INF	2869
==========	==========
41 Files	468993

DoDD 3405.XX

These files contain messages on and the text of DoD Directive 3405.1 ("Computer Programming Language Policy") and DoD Directive 3405.2 ("Use of Ada in Weapon Systems"). DoDD 3405.1 supercedes DoDD 5000.31.

The following files are associated with this item:

Directory: PD:<ADA.POINTERS>

D34051.MSG	2660

D34051.TXT	18550
D34052.MSG	1149
D34052.TXT	7494
==========	==========
4 Files	29853

IEEE RP for Ada as a PDL

IEEE Recommended Practice for
Ada as a Program Design Language

IEEE Std 990-1987

1.1 Scope. This document provides recommendations reflecting the state of the art and alternate approaches to good practice for characteristics of Program Design Languages (PDLs) based on the syntax and semantics of the Ada Programming Language. In this recommended practice, these are referred to as Ada PDLs.

The following files are associated with this item:

Directory: PD:<ADA.POINTERS>

IEEEPDL.TXT	14332
==========	==========
1 Files	14332

ADA20 Information

INDEX TO FILES OBTAINED FROM ADA-INFO ON THE ADA20 HOST

FORMAT KEY:
1st Line - Ada Software Repository File Name
Rest - ADA-INFO File Name, Date, and Description

All files are in PD:<ADA.POINTERS> except when noted.

==========

ADA1INFO.INF
ADA-DDN.HLP 06-25-86 3187 This file contains
information on how to access the
Ada-Info files on the Ada20.
(Point of Contact: Gil Austin)

ADA2INFO.INF
DDN-ACCESS.HLP 06-17-86 1731 This file contains
information on how to access the
XXX-info files on the Ada20.
(Point of Contact: Gil Austin)

ACVCSUITE.INF
ACVC.HLP 06-16-86 1173 This file contains information on how
to obtain copies of the Ada Compiler
Validation Capability (ACVC) Test Suite.
(Ada IC point of contact: Julie Davis)

ADAINF.INF
DOCU-REF.HLP 06-24-86 14411 This file contains a list of Ada related documents, including the agency from which each document is available.
(Ada IC point of contact: Mary Armstrong)
(NOTE: includes data on validated compilers)

ADAPLANS.INF
IMPL-MAT.HLP 06-09-86 40801 This file contains a list of Ada language implementations.
(Ada IC point of contact: Greg Kee)
(NOTE: INCLUDES PLANNED COMPILERS)

ADARBBS.INF
ADA-RBBS.HLP 06-25-86 7874 This file contains information on how to access the Ada IC bulletin Board at (202)694-0215.
(Ada IC point of contact: Gilbert Austin)

AJPOSTAFF.INF
AJPO-STF.HLP 06-09-86 1566 This file contains the names, addresses and phone numbers of AJPO personnel.
(Ada IC point of contact: Greg Kee)

ALSSTAT.INF
ALS-STAT.HLP 06-09-86 5944 This file contains the latest updates on the Ada Language System.
(Ada IC point of contact: Becky Reile)

APSEEVAL.INF
APSEEVAL.DOC This file contains "Generic APSE Evaluation Questions" by Paul Dobbs of General Dynamics for the E&V Team

ARTEWG.INF
ARTEWG-INFORMATION-ACCESS.HLP 06-25-86 2960 This file contains a description of how to access the online files in the ARTEWG-INFO directory.
(AdaIC POC : Gil Austin)

BIBORDER.INF
ADA-BIB.HLP 06-09-86 1834 This file contains a description of the Ada Bibliography Volumes I and II as well as ordering information.
(Ada IC point of contact: Becky Reile)

CAISSTAT.INF
CAISUPDT.HLP 06-09-86 2527 This file contains information regarding the current status of the MIL-STD-CAIS.
(Ada IC point of contact: Larry Thomas)

COMPEVAL.INF

COMPEVAL.DOC 09-11-84 This file contains "Evaluation Criteria for Ada Compilers" by Elizabeth Kean of RADC for the E&V Team

COMPILERS.INF
VAL-COMP.HLP 06-23-86 23809 This file contains a list of currently validated Ada compilers.
(Ada IC point of contact: Mary Armstrong)

CONTACTS.INF
CONTACTS.HLP 06-09-86 5574 This file contains a list of contacts for Ada Information.
(Ada IC point of contact: Greg Kee)

DIANA.INF
DIANA.HLP 06-09-86 2735 This file contains information on DIANA and how to obtain the DIANA reference manual.
(Ada IC contact: Sharon Guenterberg)

DODD5000.INF
DODDIREC.HLP 06-09-86 11262 This file contains a copy of DoD Directive 5000.31 which was circulated with USDRE Richard Delauer's memorandum of 6/10/83.
(Ada IC point of contact: Greg Kee)

EVINFO.INF
EV-INFORMATION-ACCESS.HLP 06-17-86 3749 This file contains a description of the purposes of the Evaluation and Validation Task.
(point of contact: Gil Austin)

IMPGUIDE.INF
IMPGUIDE.HLP 06-09-86 3919 This file contains an explanation of how to obtain the revised Ada Compiler Validation Implementers' Guide.
(Ada IC point of contact: David Scheidt)

ISO.INF
ISO-STAT.HLP 06-09-86 8333 This file contains update and status reports on the international Standards Organization.
(Ada IC point of contact: Larry Thomas)

KAPSE.INF
KAPSE.HLP 06-09-86 1555 This file contains information on how to obtain the latest Kapse Interface Team (KIT) Public Report.
(Ada IC point of contact: Greg Kee)

KITINFO.INF
KIT-INFORMATION-ACCESS.HLP 06-17-86 2850 This file contains information on how to access the KIT-info directory on the Ada20 computer.

(point of contact: Gil Austin)

MCCR.INF
DEF-MCCR.HLP 06-09-86 3084 This file contains contains the DOD-Wide guidelines for Acquiring Computer Resources under the Armed Services Procurement Act. (Ada IC point of contact: Gil Austin)

NATOADA.INF
NATO-ADA.HLP 06-13-86 2227 This file contains contains information on NATO's adaption of the Ada Language as their common HOL in military systems. (Ada IC point of contact: Greg Kee)

ST1750A.INF
1750A.HLP 06-09-86 2072 This file contains information on the status of MIL-STD-1750A (Sixteen Bit Computer Instruction Set Architecture). (Ada IC point of contact: Becky Reile)

TRADEMARK.INF
TRADEMRK.HLP 06-09-86 9602 This file contains guidelines for using the Ada trademark. (Ada IC point of contact: Julie Davis)

VALFACIL.INF
VALFACIL.HLP 06-09-86 1804 This file contains a list of the Ada Validation Facilities (AVFs) performing Ada Compiler Validation Capability tests. (Ada IC point of contact: Julie Davis)

VALIDATE.INF
VAL-POL.HLP 06-09-86 79104 This file contains the draft version of the Ada Validation Policies and Procedures Document, distributed 2/86. (Ada IC point of contact: Mary Armstrong)

VALINFO.INF
VALIDATION-INFORMATION-ACCESS.HLP 06-17-86 2869 This file contains information on how to access the Validation-info directory on the Ada20 computer. (POC : Gil Austin)

PD:<ADA.EDUCATION>GLOSSARY.DOC
GLOSSARY.HLP 06-09-86 25418 This file contains an alphabetical listing of Ada-related terms and their meanings. (Ada IC point of contact: Dave Scheidt)

PD:<ADA.EDUCATION>TEXTBOOKS.BIB
TEXT-BIB.HLP 06-09-86 9163 This file contains a list of Ada Language textbooks, arranged alphabetically by title. (Ada IC point of contact: Rebecca Reile)

PD:<ADA.EDUCATION>TEXTBOOKS.DOC
ADABOOKS.HLP 06-09-86 86656 This file contains abstracts of many
of the Ada textbooks listed in the file
TEXT-BIB.HLP.
(Ada IC point of contact: Rebecca Reile)

PD:<ADA.NEWS>AICnnn.DOC
NEWSLTR.HLP 06-11-86 31301 This file contains the most recent issue of
the Quarterly Ada IC newsletter, currently
the MAY, 1986 issue.
(Ada IC point of contact: Larry Thomas)

The following files are associated with this item:

Directory: PD:<ADA.POINTERS>

ACVCSUITE.INF	1293
ADA1INFO.INF	3187
ADA2INFO.INF	1613
ADADOC.INF	9739
ADAINF.INF	16553
ADAPLANS.INF	55289
ADARBBS.INF	1512
ALSSTAT.INF	10954
APSEEVAL.INF	39521
ARTEWG.INF	2960
BIBORDER.INF	2529
CAISSTAT.INF	1163
COMPEVAL.INF	61019
COMPILERS.INF	69632
CONTACTS.INF	4127
DIANA.INF	2723
DODD5000.INF	11611
EVINFO.INF	3749
ISO.INF	8759
KAPSE.INF	1664
KITINFO.INF	2850
MCCR.INF	3091
NATOADA.INF	2227
ST1750A.INF	3164
TRADEMARK.INF	11770
VALFACIL.INF	1920
VALIDATE.INF	66002
VALINFO.INF	2869
==========	==========
29 Files	412772

SIMTEL20 Pointer Files

The following files are in PD:<ADA.POINTERS> in the Ada Software Repository on SIMTEL20. These files are provided in addition to the INF files from ADA20.

File Name Purpose

ACVC.DOC	Pointer to Ada Compiler Validation Facility at Wright-Patterson AFB
ADAED.DOC	Pointer to Ada/Ed data
ARMYALS.DOC	Pointer to Army ALS information source
ECLBENCH.DOC	Listing of Benchmark Files on ADA20
IBMPCADA.DOC	Data on Ada compilers for the IBM PC's
SEI.DOC	Pointer to Software Engineering Institute information

The following files are associated with this item:

Directory: PD:<ADA.POINTERS>

ACVC.DOC	382
ADAED.DOC	1886
ARMYALS.DOC	327
ECLBENCH.DOC	3094
IBMPCADA.DOC	4660
IMPGUIDE.DOC	1289
SEI.DOC	398
7 Files	12036

Pretty_Printers

PD:<ADA.PRETTY-PRINTERS>

This subdirectory contains pretty printers for Ada source programs. The pretty printers reformat the Ada source programs in order to outline the structure of the programs and provide other useful information for the programmer.

Directory: PD:<ADA.PRETTY-PRINTERS>

ADAFMT.COM	663
ADAFMT.DOC	628
ADAFMT.PAS	142504
ADAFMT.PRO	3570
AFMT2.COM	703
AFMT2.PAS	169567
AFMT2.PRO	3837
FORMATTER.CMM	3405
FORMATTER.PRO	4104
FORMATTER.SRC	149649
PRET.CMM	1340
PRET.CO	165
PRET.DOC	73494
PRET.PRO	3677
PRET.SRC	334770
PRET.TST	12901
PRETABS.CO	622
PRETABS.NOT	236
PRETDIS.DOC	100
PRETREAD.ME	4606
PRETTEST.DIS	150
PRETUPD.SRC	228450

22 Files	1139141

Pretty_Printer

Ada Pretty Printing Program

Machine/System Compiled/Run on: DEC VAX 11/785, DEC Pascal

Abstract:

This program takes as input an Ada program and reformats the program according to a standard set of pretty printing rules. No effort is made to detect or correct syntactic errors. See the comments at the front of the program for credits, revision history, and details on the pretty printing rules and operation.

ADAFMT is the original program, extracted from NOSC-TECR with permission of Col Bill Whitaker. ADAFMT1 is a modified version which contains one minor problem: "package ... is new" constructs cause the indentation level to increase. Provided files include a short documentation file (ADAFMT.DOC) and command files (ADAFMT.COM and
ADAFMT1.COM).

The following files are associated with this item:

Directory: PD:<ADA.PRETTY-PRINTERS>

ADAFMT.COM	663
ADAFMT.DOC	628
ADAFMT.PAS	142504
ADAFMT.PRO	3570
4 Files	147365

Pretty_Printer_2

Machine/System Compiled/Run on: DEC VAX 11/785, DEC Pascal

Abstract:

This program takes as input an Ada program and reformats the program according to a standard set of pretty printing rules. No effort is made to detect or correct syntactic errors. See the comments at the front of the program for credits, revision history, and details on the pretty printing rules and operation.

ADAFMT is the original program, extracted from NOSC-TECR with permission of Col Bill Whitaker. ADAFMT1 is a modified version which contains one minor problem: "package ... is new" constructs cause the indentation level to increase. Provided files include a short documentation file (ADAFMT.DOC) and command files (ADAFMT.COM and ADAFMT1.COM). ADAFMT2 has corrected all known bugs in ADAFMT1 and has extended the completeness and functionality of the program.

The following files are associated with this item:

Directory: PD:<ADA.PRETTY-PRINTERS>

AFMT2.COM	703
AFMT2.PAS	169567
AFMT2.PRO	3837
3 Files	174107

Source Formatter

Machine/System Compiled/Run on: Telesoft 1.3 (unvalidated), WICAT/ROS

Abstract:

Package FORMATTER follows a top-down recursive decent algorithm whose theory can be found in most compiler theory books. This formatter is designed to work for only those programs that are syntactically perfect. Due to the size of the system that these programs were written on, this package had to be split in two at the last minute. Now, in package FORMAT_2, one can find the few procedures that did not call any other procedure - those being the ones that could be moved because the compiler did not implement bodystubs or any type of "separate" capability. The package was written with a Telesoft_Ada compiler, which followed nonANSI standard Ada.

The following files are associated with this item:

Directory: PD:<ADA.PRETTY-PRINTERS>

FORMATTER.CMM	3405
FORMATTER.PRO	4104
FORMATTER.SRC	149649
3 Files	157158

Source Formatter 2

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

The standard format of source code listed with this tool shall be the format used in the Ada LRM. Options shall allow the user to specify the number of spaces per indent level, the form for printing categories of key words and identifiers (eg, upper case, lower case, etc.), and similiar parameters which can be varied without deviating from the LRM.

The following files are associated with this item:

Directory: PD:<ADA.PRETTY-PRINTERS>

PRET.CMM	1340
PRET.CO	165
PRET.DOC	73494
PRET.PRO	3677
PRET.SRC	334770
PRET.TST	622

PRETABS.NOT	236
PRETDIS.DOC	100
PRETREAD.ME	4606
PRETTEST.DIS	150
PRETUPD.SRC	228450
==========	==========
12 Files	660511

Directory: PD:<ADA.COMPONENTS>

ABSTRACT.CMM	2263
ABSTRACT.CO	2657
ABSTRACT.PRO	3334
ABSTRACT.SRC	572620
==========	==========
4 Files	580874

Program_Stubber

PD:<ADA.STUBBER>

This subdirectory contains Ada program body stubber tools. They analyze the definition of an Ada software design and generate software bodies as stubs to be filled in later during development.

Directory: PD:<ADA.STUBBER>

STUB2.CMM	142
STUB2.DIS	234
STUB2.PRO	5872
STUB2.SRC	128470
STUBBER.CMM	3852
STUBBER.DIS	51
STUBBER.PRO	3906
STUBBER.SRC	81309
==========	==========
8 Files	223836

Body Stubber

Machine/System Compiled/Run on: Telesoft 1.3 (unvalidated), WICAT/ROS

Abstract:

This program reads an Ada specification and generates a corresponding Body with stubs for all subprograms. The compiler used to write these programs was a 1982 (non ANSI Standard) Ada compiler, so these packages will need to be updated before they will run on a Mil Std 1815A Ada compiler. All of the compiler peculiarities, editor dependencies, and filer dependencies have been moved to the ROS_DEPENDENCIES package, with the exception of any peculiarities that might occur due to using 1982 nonANSI standard Ada.

The following files are associated with this item:

Directory: PD:<ADA.STUBBER>

STUB2.CMM	142
STUB2.DIS	234
STUB2.PRO	5872
STUB2.SRC	128470
STUBBER.CMM	3852
STUBBER.DIS	51
STUBBER.PRO	3906
STUBBER.SRC	81309
8 Files	223836

Simulation

PD:<ADA.SIMULATION>

This subdirectory contains programs and tools associated with performing simulations, such as queuing simulations.

Directory: PD:<ADA.SIMULATION>

QSAP.ABS	2167
QSAP.CMM	956
QSAP.DOC	135857
QSAP.PRO	4048
QSAP.SRC	336254
QSAP.TST	1549
QSAPHELP.DIS	888
QSAPHELP.FIL	26169
QSAPSRC.DIS	110
QSAPTST.DIS	66
10 Files	508064

Queuing Simulation

Machine Compiled/Run on: Data General, ROLM ADE

Abstract:

This tool will simulate the statistical behavior of networks and queues, such as in communication systems, transportation and logistics. It will provide a stand-alone, single performance prediction function. It will provide useful performance prediction information to a user sizing, reconfiguring, or upgrading a system configuration. Data is provided interactively and describes a network to be modelled. This tool includes complex computational algorithms and thus is unusual among the precursors. It is predicted that 3000 FORTRAN lines will convert to 3750 Ada lines. The coordination of the Ada PDL design and the conversion of existing FORTRAN code may present difficulties.

The following files are associated with this item:

Directory: PD:<ADA.SIMULATION>

QSAP.ABS	2167
QSAP.CMM	956

QSAP.DOC	135857
QSAP.PRO	4048
QSAP.SRC	336254
QSAP.TST	1549
QSAPHELP.DIS	888
QSAPHELP.FIL	26169
QSAPSRC.DIS	110
QSAPTST.DIS	66
==========	==========
10 Files	508064

Spelling_Checkers

PD:<ADA.SPELLER>

This subdirectory contains spelling checkers written in Ada. Dictionaries are also included here.

Directory: PD:<ADA.SPELLER>

SP2ACRONY.DCT	29559
SP2HELP.INI	4758
SP2MASTER.DCT	393794
SPELL2.CMM	1296
SPELL2.DOC	32564
SPELL2.PRO	4121
SPELL2.SRC	766341
SPELL2.TST	127616
==========	==========
8 Files	1360049

Speller 2

Machine/System Compiled/Run on: DEC Ada, VAX/VMS

Abstract:

Procedure SPELLER is an interactive spell checking utility. The "default" format shall be interactive. Options allow the user to

* enable auxiliary dictionary search
* merge two or more dictionaries together
* list the contents of a specified dictionary
* execute in batch mode
* generate an output file containing all suspect words
* disable the MASTER dictionary and or enable the ACRONYM dictionary

This procedure establishes the first level user interface. From this level the user will be able to access the HELP facility, merge two or more dictionaries, list out a dictionary and begin the spell checking process of a document.

The following files are associated with this item:

Directory: PD:<ADA.SPELLER>

SP2ACRONY.DCT	29559
SP2HELP.INI	4758
SP2MASTER.DCT	393794
SPELL2.CMM	1296
SPELL2.DOC	32564
SPELL2.PRO	4121
SPELL2.SRC	766341
SPELL2.TST	127616
8 Files	1360049

Starter_Kit

PD:<ADA.STARTER-KIT>

This subdirectory contains tools which are useful in accessing the software in the repository. It includes the PAGER tool, which is used to assemble and disassembled SRC (paged) files.

Directory: PD:<ADA.STARTER-KIT>

HELP.PTR	353
LART.DOC	10936
LART.PRO	2694
LART.SRC	31860
PAGER.PTR	169
5 Files	46012

Load_AR_Tape

Machine/System Compiled/Run on: Data General MV10000,
Rolm ADE

Keywords: Ada Repository, ANSI Standard Tapes, Automated Loading

Abstract:

The program, Load_AR_Tape, and it's supporting packages, automate the process of loading the ANSI standard tape copies into a Data General MV10000. The directory structure of the Ada repository is preserved.

The following files are associated with this item:

Directory: PD:<ADA.STARTER-KIT>

LART.DOC	10936
LART.PRO	2694
LART.SRC	31860
3 Files	45490

Style_Checkers

PD:<ADA.STYLE>

This subdirectory contains Ada style checking tools. They analyze Ada source code and report on various aspects of the programming style, such as consistent indentation and use of long variable names.

Directory: PD:<ADA.STYLE>

CHECK.ABS	1712
CHECK.CM2	567
CHECK.CMM	1404
CHECK.DOC	17475
CHECK.PRO	3564
CHECK.SRC	413277
CHECK.TST	117647
CHECKRD.ME	4080
PROF.CMM	1368
PROF.CO	92
PROF.DOC	68844
PROF.PRO	3895
PROF.SRC	255248
PROFABS.CO	622
PROFABS.NOT	236
PROFDOC.DIS	64
PROFREAD.ME	2849
STND.CMM	1373
STND.CO	123
STND.DOC	74984
STND.PRO	3752
STND.SRC	282653
STND.TST	125
STNDABS.CO	622
STNDABS.NOT	236
STNDDOC.DIS	79
STNDREAD.ME	3918
STYLE.ABS	1714
STYLE.DIS	139
STYLE.ME	4080
STYLE.PRO	3386
STYLE2.PRO	3454
STYLE2.SRC	408164
STYLECMP.DIS	3117
STYLEDOC.DIS	84
STYLEDOC.SRC	18088
STYLEINS.RPT	4228
STYLESRC.DIS	124
STYLESRC.SRC	409663
STYLETST.DIS	518
STYLETST.SRC	116759
==========	==========
41 Files	2234327

Standards Checker

Machine/System Compiled/Run on: ROLM Ada, DG MV10000

Abstract:

The style checker will examine an Ada program and try to pick pieces of the program which follow incorrect style conventions. These conventions themselves will be determined by a file of parameters which can be editted to "tailor" the style to local (or contractual) conventions.

The following files are associated with this item:

Directory: PD:<ADA.STYLE>

CHECK.ABS	1712
CHECK.CM2	567
CHECK.CMM	1404
CHECK.DOC	17475
CHECK.PRO	3564
CHECK.SRC	413277
CHECK.TST	117647
CHECKRD.ME	4080
==========	==========
8 Files	559726

Statement Profiler

Machine/System Compiled/Run on: AIE Ada, VM-UTS

Abstract:

The Statement Profiler counts every instance of each of the various types of Ada statements in the given program unit bodies, including comments, distinguishing whole-line comments from comments on a line of code. From these raw counts, a series of ratios and percentages can then be computed and shown in a table. The raw counts or the profile table is written to the default output file. This information can then be used to determine when program are inadequately commented or overly complex.

The following files are associated with this item:

Directory: PD:<ADA.STYLE>

PROF.CMM	1368
PROF.CO	92
PROF.DOC	3895
PROF.SRC	255248
PROFABS.CO	622
PROFABS.NOT	236
PROFDOC.DIS	64
PROFREAD.ME	2849
==========	==========
9 Files	333218

Directory: PD:<ADA.COMPONENTS>

ABSTRACT.CMM	2263
ABSTRACT.CO	2657
ABSTRACT.PRO	3334
ABSTRACT.SRC	572620
==========	==========
4 Files	580874

Standards Checker 2

Machine/System Compiled/Run on: AIE Ada, VM-UTS

Abstract:

The Standard Checke checks a source file to see that it conforms to local programming standards. These standards include maximum number of lines per program unit, maximum number of arguments to a subprogram, use of pragmas, use of rep specs, use of named literals, naming of types and variables, etc. An annotated listing is output showing any misuse of these language constructs.

The following files are associated with this item:

Directory: PD:<ADA.STYLE>

STND.CMM	1373
STND.CO	123
STND.DOC	74984
STND.PRO	3752
STND.SRC	282653
STND.TST	125
STNDABS.CO	622
STNDABS.NOT	236
STNDDOC.DIS	79
STNDREAD.ME	3918
==========	==========
10 Files	367865

Directory: PD:<ADA.COMPONENTS>

ABSTRACT.CMM	2263
ABSTRACT.CO	2657
ABSTRACT.PRO	3334
ABSTRACT.SRC	572620
==========	==========
Files	580874

Style Checker

Machine/System Compiled/Run on: DG MV 10000, ROLM ADE

Abstract:

The style checker will examine an Ada program and try to pick pieces of the program which follow incorrect style conventions. These conventions themselves will be determined by a

file of parameters which can be editted to "tailor" the style to local (or contractual) conventions.

Both physical and logical style features will be checked for including indentation, use of blank space, names, use of reserved words (such as restricting certain features, i.e., gotos), nesting levels, parameter passing, and comments.

The following files are associated with this item:

Directory: PD:<ADA.STYLE>

STYLE.ABS	1714
STYLE.DIS	139
STYLE.ME	4080
STYLE.PRO	3386
STYLECMP.DIS	3117
STYLEDOC.DIS	84
STYLEDOC.SRC	18088
STYLEINS.RPT	4228
STYLESRC.DIS	124
STYLESRC.SRC	409663
STYLETST.DIS	518
STYLETST.SRC	116759
12 Files	561900

Style Checker 2

Machine/System Compiled/Run on: DEC VAX 11/785, DEC Ada

Abstract:

The style checker will examine an Ada program and try to pick pieces of the program which follow incorrect style conventions. These conventions themselves will be determined by a file of parameters which can be editted to "tailor" the style to local (or contractual) conventions.

Both physical and logical style features will be checked for including indentation, use of blank space, names, use of reserved words (such as restricting certain features, i.e., gotos), nesting levels, parameter passing, and comments.

The following files are associated with this item:

Directory: PD:<ADA.STYLE>

STYLE2.PRO	3454
STYLE2.SRC	408164
2 Files	411618

Virtual_Terminal

PD:<ADA.VIRTERM>

This subdirector contains tools for a virtual terminal package, which performs screen-oriented functions by reading terminal characteristics from a UNIX-like TERMCAP data base. The application program can call routines in these packages and not be concerned with the type of terminal being addressed.

Directory: PD:<ADA.VIRTERM>

CURSES.PRO	2903
CURSES.SRC	24734
VT2.CMM	902
VT2.PRO	3728
VT2.SRC	224728
VT2.TST	63335
VT2SPEC.DOC	330874
VT2TEST.DOC	176436
VT2USER.DOC	127918
9 Files	955558

Curses Interface

Machine/System Compiled/Run on: VADS VAX/UNIX 4.06

Abstract:

This package provides an interface to the UNIX curses package through Ada.

The following files are associated with this item:

Directory: PD:<ADA.VIRTERM>

CURSES.PRO	2903
CURSES.SRC	24734
2 Files	27637

Virtual Terminal 2

Machine/System Compiled/Run on: ROLM ADE, DG MV10000

Abstract:

The ANSI virtual terminal is a program level interface providing support for scroll, page and form-mode terminals. This package uses a terminal capabilities database to determine the capabilities of a variety of terminals. This package was designed to enhance the transportability of the source code and interoperability of the terminal capabilities database.

The following files are associated with this item:

Directory: PD:<ADA.VIRTERM>

VT2.CMM	902
VT2.PRO	3728
VT2.SRC	224728
VT2.TST	63335

VT2SPEC.DOC	330874
VT2TEST.DOC	176436
VT2USER.DOC	127918
7 Files	927921

WIS_ADA_Tools

PD:<ADA.WIS-ADA-TOOLS>

This directory contains information about the software tools submitted by the Naval Oceans Systems Center (NOSC). An abstract of the tools is included.

These tools were paid for by WIS (WWMCCS Information Systems).

Directory: PD:<ADA.WIS-ADA-TOOLS>

ABSTRACT.DOC	105309
CONTENTS.DOC	54324
REFFILES.DOC	190757
3 Files	350390