INDHOLD AF BRANDSKAB DVBS1
SW2114

Opdateret 94.10.31 / HEJ

IDENTIFIKATION	DATO	INIT	KOMMENTARER
DVBS1.SW2114.rd.2.23	94.10.28	HEJ	Real Time Pascal Compiler
DVBS1.SW2114.rel.2.23-1	94.10.21	HEJ	Master diskette PN: 798-66-088
DVBS1.SW2114.rel.2.23-2	94.10.21	HEJ	Package Description PN: 798-60-201
DVBS1.SW2114.src.2.23	94.10.31	HEJ	Streamer backup af usr2/sw2114
DVBS1.SW2114.rd.2.22	93.09.27	HEJ	Real Time Pascal Compiler
DVBS1.SW2114.rel.2.22-1	93.09.27	HEJ	%(Master diskette PN: 798-66-0xx)
DVBS1.SW2114.rel.2.22-2	93.09.27	HEJ	Package Description PN: 798-60-190
DVBS1.SW2114.src.2.22	93.09.27	HEJ	Streamer backup af usr2/sw2114
DVBS1.SW2114.rel.2.19.1-1	93.08.16	HEJ	Patch til rel 2.19
DVBS1.SW2114.rd.2.19	93.02.23	HEJ	Real Time Pascal Compiler
DVBS1.SW2114.rel.2.19-1	93.02.23	HEJ	%(Master diskette PN: 798-66-071)
DVBS1.SW2114.rel.2.19-2	93.02.23	HEJ	Package Description PN: 798-60-181
DVBS1.SW2114.src.2.19	93.06.11	HEJ	Streamer backup af usr2/sw2114
DVBS1.SW2114.rd.2.14	92.09.01	HEJ	Real Time Pascal Compiler
DVBS1.SW2114.rel.2.14-1	92.09.01	HEJ	Kopi af master PN: 798-66-069
DVBS1.SW2114.src.2.14-1	92.09.01	HEJ	RTP Source #1:4
DVBS1.SW2114.src.2.14-2	92.09.01	HEJ	RTP Source #2:4
DVBS1.SW2114.src.2.14-3	92.09.01	HEJ	RTP Source #3:4
DVBS1.SW2114.src.2.14-4	92.09.01	HEJ	RTP Source #4:4
DVBS1.SW2114.src.2.14-5	92.09.01	HEJ	RTP Manualer (RcTekst)
DVBS1.SW2114.src.2.14-7	92.06.26	HAA	RTP Compiler, source 1 (Telebit)
DVBS1.SW2114.src.2.14-8	92.06.26	HAA	RTP Compiler, source 2 (Telebit)
DVBS1.SW2114.rel.2.7	92.06.16	HEJ	Kun intern release.
DVBS1.SW2114.src.2.7-1	92.06.16	HEJ	RTP Source #1:4
DVBS1.SW2114.src.2.7-2	92.06.16	HEJ	RTP Source #2:4
DVBS1.SW2114.src.2.7-3	92.06.16	HEJ	RTP Source #3:4
DVBS1.SW2114.src.2.7-4	92.06.10	HEJ	RTP Source #4:4
DVBS1.SW2104.rel.2.6	92.01.31	HHA	Release 2.6 overdraget fra HHA.
DVBS1.SW2114.rel.2.6	92.01.31	HHA	Overdraget.
DVBS1.SW2114.src.2.6-1	92.01.30	HHA	RTP Source #1:3 På RC950
DVBS1.SW2114.src.2.6-2	92.01.30	HHA	RTP Source #2:3
DVBS1.SW2114.src.2.6-3	92.01.30	HHA	RTP Source #3:3
DVBS1.SW2114.src.2.6-4	92.02.03	HEJ	RTP Source #1:3 På Partner
DVBS1.SW2114.src.2.6-5	92.02.03	HEJ	RTP Source #2:3
DVBS1.SW2114.src.2.6-6	92.02.03	HEJ	RTP Source #3:3
DVBS1.SW2114.src.2.6-7	89.02.10	JABA	RTP Manual PN: 99110141
DVBS1.SW2114.src.2.6-8	89.12.21	BB	RTP Ref. Manual PN: 99001174

DVBS1.SW2114.src.2.6-9 92.05.06 BB BOBS Sourcer (RC8000)

DVBSI.SW2114.rd. 2.23

Releasestyringsdokument

SW-pakke identifikation		
SW2114, Real Time Pascal Compiler		
Release	**Ansvarlig**	**Dato**
2.23	HEJ	1994-10-28

Genereringssystem

- RC950 UNIX-maskine ('basis1') leveret af ICL DATA.
- SW95705I.3 386/ix (R) Multi-user, Release 2.2 leveret af ICL DATA.
  (indeholder et UNIX System V/386 Release 3.2 fra INTERACTIVE UNIX).
- SW95707I VP/ix Multi-user, Release 1.2 leveret af ICL DATA.
- SW95728I.1 UNIX Transport/Networking, Release 1.0 leveret af ICL DATA.
- Turbo Pascal, Version 5.0 fra Borland
- SW2114 Real Time Pascal Compiler, Release 2.23 leveret af DANOSI.

Pakkebeskrivelse skrives med 'Word' i
'h:\common\swvedl\pakkebsk\software\sw2114.223'
og en ascii kopi flyttes til release/fut/readme21.14.
Pakken dvs. masterdisketten, genereres ved at bruge 'make' i job/release.

Kildetekster

(Hvor ikke andet er angivet er filer placeret på basis1 under /usr2/sw2114)
Versionsoversigt er placeret i job/release/versions.log.

Specifikationsdokumenter

Reference Manual for the Programming Language Teal Time Pascal, PN 991 10 141
Real Time Pascal Compiler, Reference Manual, PN: 990 01 464

Vedligeholdelsesdokumenter

Filen adm/readme indeholder en vejledning til pakkevedligeholdelse.
Notater om compileren er samlet i 10 ringbind.
Nogle dokumenter og pakkejournal er i h:\common\swpakker\sw2114.

Arkivkopi

Backupbåndet indeholder følgende kataloger (med subkataloger):

/usr2/sw2114
/usr2/swutil
/usr/vpix

Backupbåndet er lavet med jobbet 'job/backupjob', der anvender cpio til skrivningen af af båndet.

Backupbåndet kan indlæses igen med programmet cpio, f.ex
cpio -itv </dev/tape (indholdsliste)
cpio -icvBduml [filepattern] </dev/tape

Testværktøjer

Jobbet 'test/comp.bat' bruges til oversættelse af en samling test programmer, der er navngivet *.rtp.
De andre directories under 'test' indeholder programeksempler, der er brugt til fejlfinding.

DANOSI

INDHOLD AF BRANDSKAB DVBS1
SW2114

Opdateret 93.09.27 / HEJ

IDENTIFIKATION	DATO	INIT	KOMMENTARER
DVBS1.SW2114.rd.2.22	93.09.27	HEJ	Real Time Pascal Compiler
DVBS1.SW2114.rel.2.22-1	93.09.27	HEJ	%(Master diskette PN: 798-66-0xx)
DVBS1.SW2114.rel.2.22-2	93.09.27	HEJ	Package Description PN: 798-60-190
DVBS1.SW2114.src.2.22	93.09.27	HEJ	Streamer backup af usr2/sw2114
DVBS1.SW2114.rel.2.19.1-1	93.08.16	HEJ	Patch til rel 2.19
DVBS1.SW2114.rd.2.19	93.02.23	HEJ	Real Time Pascal Compiler
DVBS1.SW2114.rel.2.19-1	93.02.23	HEJ	%(Master diskette PN: 798-66-071)
DVBS1.SW2114.rel.2.19-2	93.02.23	HEJ	Package Description PN: 798-60-181
DVBS1.SW2114.src.2.19	93.06.11	HEJ	Streamer backup af usr2/sw2114
DVBS1.SW2114.rd.2.14	92.09.01	HEJ	Real Time Pascal Compiler
DVBS1.SW2114.rel.2.14-1	92.09.01	HEJ	Kopi af master PN: 798-66-069
DVBS1.SW2114.src.2.14-1	92.09.01	HEJ	RTP Source #1:4
DVBS1.SW2114.src.2.14-2	92.09.01	HEJ	RTP Source #2:4
DVBS1.SW2114.src.2.14-3	92.09.01	HEJ	RTP Source #3:4
DVBS1.SW2114.src.2.14-4	92.09.01	HEJ	RTP Source #4:4
DVBS1.SW2114.src.2.14-5	92.09.01	HEJ	RTP Manualer (RcTekst)
DVBS1.SW2114.src.2.14-7	92.06.26	HAA	RTP Compiler, source 1 (Telebit)
DVBS1.SW2114.src.2.14-8	92.06.26	HAA	RTP Compiler, source 2 (Telebit)
DVBS1.SW2114.rel.2.7	92.06.16	HEJ	Kun intern release.
DVBS1.SW2114.src.2.7-1	92.06.16	HEJ	RTP Source #1:4
DVBS1.SW2114.src.2.7-2	92.06.16	HEJ	RTP Source #2:4
DVBS1.SW2114.src.2.7-3	92.06.16	HEJ	RTP Source #3:4
DVBS1.SW2114.src.2.7-4	92.06.10	HEJ	RTP Source #4:4
DVBS1.SW2104.rel.2.6	92.01.31	HHA	Release 2.6 overdraget fra HHA.
DVBS1.SW2114.rel.2.6	92.01.31	HHA	Overdraget.
DVBS1.SW2114.src.2.6-1	92.01.30	HHA	RTP Source #1:3 På RC950
DVBS1.SW2114.src.2.6-2	92.01.30	HHA	RTP Source #2:3
DVBS1.SW2114.src.2.6-3	92.01.30	HHA	RTP Source #3:3
DVBS1.SW2114.src.2.6-4	92.02.03	HEJ	RTP Source #1:3 På Partner
DVBS1.SW2114.src.2.6-5	92.02.03	HEJ	RTP Source #2:3
DVBS1.SW2114.src.2.6-6	92.02.03	HEJ	RTP Source #3:3
DVBS1.SW2114.src.2.6-7	89.02.10	JABA	RTP Manual PN: 99110141
DVBS1.SW2114.src.2.6-8	89.12.21	BB	RTP Ref. Manual PN: 99001174
DVBS1.SW2114.src.2.6-9	92.05.06	BB	BOBS Sourcer (RC8000)

DVBS1.SW2114.rel.2.23-2

Real Time Pascal Compiler

SW2114
Release 2.23, 1994.10.21
DANOSI

Contents

- 1 diskette marked "Real Time Pascal Compiler, Rel. 2.23"
- 1 Reference Manual for The Programming Language Real Time Pascal, PN: 99110141
- 1 Real-Time Pascal Compiler Reference Manual, PN: 99001464
- 1 Package Description (this document)

Purpose

The package contains the Real Time Pascal Compiler for the RC5000 Network Switch, the RC5000 MegaSwitch, and the Intel x86 equipped controllers.
The compiler is used to make executable software for the above mentioned systems.

Reason for Release

This release corrects a number of errors found in previous releases.

- Succ/pred on a subrange, which limits are given as process parameters now works correct for RC3502 too.

- Exception 'pointer nil' removed from new in situations with not enough memory (for RC3502 only).

- Use of a structured constant as array limit in an environment now results in an error.

- Use of an outputfile in the compiler call now results in an error 'Illegal use of ='.

Prerequisites

SW2114 requires:
- MS-DOS 3.3 (SW954001) rel. 1.0 or later

or
- Concurrent DOS vers. 6.0 or later

The system may run under UNIX VP/ix too.

Identification of Files

DISK: SW2114_2.23

README21.14	
INST.BAT	1182
RTP. EXE	68000
RTP. OVR	415843
RTPPAR.TAB	31472
RTPERR .TXT	16155
RTPSTD35.ENV	31169
RTPSTD35.N2B	17422
RTPSTD35.A2B	40960

RTPSTD35.M22	6393
RTPOPE35.LIB	1722
RTPSTD50.ENV	14919
RTPSTD50.N5B	14350
RTPSTD50.A5B	32768
RTPSTD50.M50	5401
RTPOPE50.LIB	1363
RTPSTD86.ENV	13054
RTPSTD86.N8B	14350
RTPSTD86.A8B	32768
RTPSTD86.M86	5962
RTPOPE86.LIB	1679
RTPSTDO.ENV	9532
RTPSTDO.N8B	13326
RTPSTDO.A8B	28672
RTPSTDO.M86	4872
RTPOPEO.LIB	1316
SYS35	<DIR>

\SYS35

RTPNEW35.ENV	31337
RTPNEW35.N2B	21518
RTPNEW35.A2B	65536
RTPNEW35.M22	9735

Documentation

- Reference Manual for the Programming Language Real-Time Pascal.

Abstract:
This manual contains the third revised definition of the programming language Real-Time Pascal. The definition is is implementation independent. The Real-Time Pascal programming language is a high level Pascal-like language, designed to express algorithms and their implementation as parallel cooperating processes, executing on a network of processing components.

- Real-Time Pascal Compiler Reference Manual

Abstract:
This manual describes the usage of the MS-DOS implementation of the Real-Time Pascal Compiler for the RC5000 Network Switch, the RC5000 MegaSwitch, and the Intel x86 equipped controllers.

Corrections and Enhancements

The extension of the objectfile is changed from .T35 to .T22

Corrections since release 2.19

- Exception pointer nil removed from new in situations with not enough memory (for RC3502 only).

- 'Not compatible family' exception when the formal parameter to a routine is a bound type, is removed.

- Rangecheck at subrange + 1 is activated.

- Succ/pred on a subrange, which limits are given as process parameters now works correct for RC3502 too.

- Attempt to use an output file as for RTP35 is rejected with a RTP-CALL ERROR.

- Use of a structured constant as array limit in an environment now results in an error.

Enhancements for the MegaSwitch:

```
Type
  int64 = RECORD
    lsp : integer;
    msp : integer;
  END;
  double = RECORD
    b1, b2, b3, b4 : byte;
  END;

FUNCTION swap ( n: int16): int16;

PROCEDURE swop ( VAR a: int16);

PROCEDURE swop ( VAR a: integer);

FUNCTION max ( a, b: integer):
integer;

FUNCTION min ( a, b: integer):
integer;

FUNCTION madd ( a, b: itype):
int64;
```

(here itype may be integer or int64)

The double routines as described in the Compiler Reference Manual.

Limitations and Recommendations

Bound string type:
When a formal value parameter is of a bound string type (e.g. alfa), the actual parameter has to be string of the same length, because the actual parameter is not converted to a string of the same length as the formal parameter.

RC5000 MegaSwitch as target computer

- Structured values of type packed array and packed record are not implemented.
- packed3502 is only implemented for types where the components are either not crossing a byte boundary or are of type INT16

Intel x86 as target computer

- packed3502 is only implemented for types where the components are either not crossing a byte boundary or are of type integer

RC5000 Network Switch (RC3502) as target computer

- Structured values are not implemented
- Use of RC3502 interrupt handling is not supported (i.e. CHANNEL statements)
- Structured constant as array limits is not implemented correct.
- LOCKDATA of dynamic types with packed array of bit are not packed.
- Pointer type to the type itself is not allowed.

Memory Requirements for RTP

Code	143	K bytes
Data	31	-
Stack	10	-
Heap	60	-
Total	244	K bytes

Above figures are fixed except the heapsize, which depends on the

program compiled.

The heap used for the internal name and symbol table is not included in the above figures. Per default the name and symbol table will occupy all available heap (except the above 60 Kbytes) if needed. Note it is possible for the user to specify the maximum amount of heap the name and symbol table may occupy.

Installation

The installation of SW2114 is performed by inserting the diskette in a drive, selecting that drive and typing:-

```
INST
```

This batch job will provide a guide to installation of the files on the disc onto a specific drive.

The compiler will be installed in a directory called RTP.

To be able to call the compiler from all directories the path RTP must be included in the searchpath of the operating system. This may be done by adding RTP as parameter to the PATH command in the AUTOEXEC.-BAT file (for CDOS: the STARTxyy.-BAT file).

DVBS1.SW2114.rel.2.22-2

DANOSI

Package Description

Real Time Pascal Compiler

SW2114
Release 2.22, 1993.09.27
DANOSI

Contents

- 1 diskette marked "Real Time Pascal Compiler, Rel. 2.22"
- 1 Reference Manual for The Programming Language Real Time Pascal, PN: 99110141
- 1 Real-Time Pascal Compiler Reference Manual, PN: 99001464
- 1 Package Description (this document)

Purpose

The package contains the Real Time Pascal Compiler for the RC5000 Network Switch, the RC5000 MegaSwitch, and the Intel x86 equipped controllers.
The compiler is used to make executable software for the above mentioned systems.

Reason for Release

This release corrects a number of errors found in previous releases.

Prerequisites

SW2114 requires:

- MS-DOS 3.3 (SW954001) rel. 1.0 or later

or

- Concurrent DOS vers. 6.0 or later

The system may run under UNIX VP/ix too.

Identification of Files

DISK: SW2114_2.22

README21.14	
INST.BAT	1182
RTP. EXE	68000
RTP. OVR	415812
RTPPAR.TAB	31472
RTPERR .TXT	15852
RTPSTD35.ENV	31169
RTPSTD35.N2B	17422
RTPSTD35.A2B	40960
RTPSTD35.M22	6393
RTPOPE35.LIB	1722
RTPSTD50.ENV	14919
RTPSTD50.N5B	14350
RTPSTD50.A5B	32768
RTPSTD50.M50	5401
RTPOPE50.LIB	1363
RTPSTD86.ENV	13054
RTPSTD86.N8B	14350
RTPSTD86.A8B	32768
RTPSTD86.M86	5962
RTPOPE86.LIB	1679
SYS35	<DIR>

\SYS35

RTPNEW35.ENV	31169
RTPNEW35.N2B	21518
RTPNEW35.A2B	65536
RTPNEW35.M22	9735

Documentation

- Reference Manual for the Programming Language Real-Time Pascal.

Abstract:
This manual contains the third revised definition of the programming language Real-Time Pascal. The definition is is implementation independent. The Real-Time Pascal programming language is a high level Pascal-like language, designed to express algorithms and their implementation as parallel cooperating processes, executing on a network of processing components.

- Real-Time Pascal Compiler Reference Manual

Abstract:
This manual describes the usage of the MS-DOS implementation of the Real-Time Pascal Compiler for the RC5000 Network Switch, the RC5000 MegaSwitch, and the Intel x86 equipped controllers.

Corrections and Enhancements

The extension of the objectfile is changed from .T35 to .T22

Corrections since release 2.19

- Exception pointer nil removed from new in situations with not enough memory.

- 'Not compatible family' exception when the formal parameter to a routine is a bound type, is removed.

- Rangecheck at subrange + 1 is activated.

- Attempt to use an output file as for RTP35 is rejected with a RTP-CALL ERROR

Enhancements for the MegaSwitch:

```
Type
  int64 = RECORD
    lsp : integer;
    msp : integer;
  END;
  double = RECORD
    b1, b2, b3, b4 : byte;
  END;

FUNCTION swap ( n: int16): int16;

PROCEDURE swop ( VAR a: int16);

PROCEDURE swop ( VAR a: integer);

FUNCTION max ( a, b: integer):
integer;

FUNCTION min ( a, b: integer):
integer;

FUNCTION madd ( a, b: itype):
int64;
(here itype may be integer or int64)
```

The double routines as described in the Compiler Reference Manual.

Limitations and Recommendations

Bound string type:
When a formal value parameter is of a bound string type (e.g. alfa), the actual parameter has to be string of the same length, because the actual parameter is not converted to a string of the same length as the formal parameter.

RC5000 MegaSwitch as target computer
- Structured values of type packed array and packed record are not implemented.
- packed3502 is only implemented for types where the components are either not crossing a byte boundary or are of type INT16

Intel x86 as target computer
- packed3502 is only implemented for types where the components are either not crossing a byte boundary or are of type integer

RC5000 Network Switch (RC3502) as target computer
- Structured values are not implemented
- Use of RC3502 interrupt handling is not supported (i.e. CHANNEL statements)
- Structured constant as array limits is not implemented correct.
- Succ on a subrange, which limits are given as process parameters does not work correct.
- LOCKDATA of dynamic types with packed array of bit are not packed.
- Pointer type to the type itself is not allowed.

Memory Requirements for RTP

Code	143	K bytes
Data	31	-
Stack	10	-
Heap	60	-
Total	244	K bytes

Above figures are fixed except the heapsize, which depends on the program compiled.

The heap used for the internal name and symbol table is not included in the above figures. Per default the name and symbol table will occupy all available heap (except the above 60 Kbytes) if needed. Note it is possible for the user to specify the maximum amount of heap the name and symbol table may occupy.

Installation

The installation of SW2114 is performed by inserting the diskette in a drive, selecting that drive and typing:-

```
INST
```

This batch job will provide a guide to installation of the files on the disc onto a specific drive.

The compiler will be installed in a directory called RTP.

To be able to call the compiler from all directories the path RTP must be included in the searchpath of the operating system. This may be done by adding RTP as parameter to the PATH command in the AUTOEXEC.-BAT file (for CDOS: the STARTxyy.-BAT file).

DVBS1.SW2114.rd. 2.22

DANOSI

Releasestyringsdokument		side 1/2
SW-pakke identifikation	SW2114, Real Time Pascal Compiler	
Release 2.22	Ansvarlig HEJ	Dato 1993.09.27

Backup identifikation

"SW2114 Real Time Pascal Source, Release 2.22, 93.09.27"

Genereringsudstyr

- RC950 UNIX-maskine ('basis1') leveret af ICL DATA.
- SW95705I.3 386/ix (R) Multi-user, Release 2.2 leveret af ICL DATA. (indeholder et UNIX System V/386 Release 3.2 fra INTERACTIVE UNIX).
- SW95707I VP/ix Multi-user, Release 1.2 leveret af ICL DATA.
- SW95728I.1 UNIX Transport/Networking, Release 1.0 leveret af ICL DATA.
- Turbo Pascal, Version 5.0 fra Borland
- SW2114 Real Time Pascal Compiler, Release 2.22 leveret af DANOSI.

Kildetekstversioner

(Hvor ikke andet er angivet er filer placeret på basis1 under /usr2/sw2114)
Versionsoversigt er placeret i job/release/versions.log.

Specifikationsdokumenter

Reference Manual for the Programming Language Teal Time Pascal, PN 991 10 141
Real Time Pascal Compiler, Reference Manual, PN: 990 01 464

Vedligeholdelsesdokumenter

Filen adm/readme indeholder en vejledning til pakkevedligeholdelse.
Notater om compileren er samlet i 10 ringbind.
Nogle dokumenter og pakkejournal er i h:\common\swpakker\sw2114.

Backup beskrivelse

DANOSI

Backupbåndet indeholder følgende kataloger (med subkataloger):

/usr2/sw2114
/usr2/swutil

Backupbåndet er lavet med jobbet 'job/backupjob', der anvender cpio til skrivningen af af båndet.

Backupbåndet kan indlæses igen med programmet cpio, f.ex
cpio -itv </dev/tape (indholdsliste)
cpio -icvBduml [filepattern] </dev/tape

Testværktøjer

Jobbet 'test/comp.bat' bruges til oversættelse af en samling test programmer, der er navngivet *.rtp.

Pakkegenerering

Pakkebeskrivelse skrives med 'Word Perfect' i
'h:\common\swvedl\pakkebsk\software\sw2114.222'
og en ascii kopi flyttes til release/fut/readme21.14.
Pakken dvs. masterdisketten, genereres ved at bruge 'make' i job/release.

DANOSI

Real Time Pascal Compiler

SW2114
Release 2.19, 1993.02.23
DANOSI

Contents

- 1 diskette marked "Real Time Pascal Compiler, Rel. 2.19"
- 1 Reference Manual for The Programming Language Real Time Pascal, PN: 99110141
- 1 Real-Time Pascal Compiler Reference Manual, PN: 99001333/2
- 1 Package Description (this document)

Purpose

The package contains the Real Time Pascal Compiler for the RC5000 NetworkSwitch and the RC5000 MegaSwitch systems.
The compiler is used to make executable software for the above mentioned systems.

Reason for Release

This release corrects some errors found in previous releases of the compiler.

Prerequisites

SW2114 requires:

- MS-DOS 3.3 (SW954001) rel. 1.0 or later

or

- Concurrent DOS vers. 6.0 or later

The system may run under UNIX VP/ix too.

Identification of Files

DISK: SW2114_2.19

README21.14	
INST.BAT	1230
RTP. EXE	67888
RTP. OVR	412850
RTPPAR.TAB	33500
RTPERR .TXT	16309
RTPSTD35.ENV	32631
RTPSTD35.N2B	17422
RTPSTD35.A2B	40960
RTPSTD35.M22	6393
RTPOPE35.LIB	1722
RTPSTD50.ENV	13902
RTPSTD50.N5B	14350
RTPSTD50.A5B	32768
RTPSTD50.M50	5148
RTPOPE50.LIB	1125
RTPSTD86.ENV	13642
RTPSTD86.N8B	14350
RTPSTD86.A8B	32768
RTPSTD86.M86	5962
RTPOPE86.LIB	1679
SYS35	<DIR>

\SYS35

RTPNEW35.ENV	32579
RTPNEW35.N2B	21518
RTPNEW35.A2B	65536
RTPNEW35.M22	9735

Documentation

- Reference Manual for the Programming Language Real-Time Pascal.

Abstract:
This manual contains the third revised definition of the programming language Real-Time Pascal. The definition is is implementation independent. The Real-Time Pascal programming language is a high level Pascal-like language, designed to express algorithms and their implementation as parallel cooperating processes, executing on a network of processing components.

- Real-Time Pascal Compiler Reference Manual

Abstract:
This manual describes the usage of the MS-DOS implementation of the Real-Time Pascal Compiler for the RC5000 NetworkSwitch, the RC5000 MegaSwitch, and the Intel x86 equipped controllers.

Corrections and Enhancements

The extension of the objectfile is changed from .T35 to .T22

Corrections since release 2.14

- Test of exceptioncode in exception is changed to 'ult' 48.
- Implementation of option 'createsize' corrected.
- Parameter sequence of (ref, mailbox) changed for oldpi3.

Changes and corrections since release 2.6

- Error in connection with index into a string, rule066a.
- Error in code when loading address of a field of a type set.
- Error in code in assign when no rangecheck (TA).
- Error in get_argument.
- Error in connection with dynamic records with types of length 0.
- Error in connection with IN.
- Error in megaload when adding offset to addr when size = 2, 3 for arrays (3502).
- Error when using pred and succ.
- Error when initialize array of array with dynamic size.

Changes since release 2.5

The predefined switches: compiler, RC5000, and PI3 have been replaced by: language, TA, and I86.

The following bugs have been corrected since release 2.4:

- Error in connection with local reference in a forward declared routine
- Error in the object code in connection with empty case statement
- Error in the object code when using packed fields as value parameters

Limitations and Recommendations

Wrong code when using routines with formal value parameter of a bound string type.

Bound string type:
When a formal value parameter is of a bound string type (e.g. alfa), the actual parameter has to be string of the same length, because the actual parameter is not converted to a string of the same length as the formal parameter.

RC5000 MegaSwitch as target computer
- Structured values of type packed array and packed record are not implemented.
- packed3502 is only implemented for types where the components are either not crossing a byte boundary or are of type INT16

Intel x86 as target computer
- packed3502 is only implemented for types where the components are either not crossing a byte boundary or are of type integer

RC5000 Network Switch (RC3502) as target computer
- Structured values are not implemented
- Use of RC3502 interrupt handling is not supported (i.e. CHANNEL statements)
- Structured constant as array limits is not implemented correct.
- Succ on a subrange, which limits are given as process parameters does not work correct.
- LOCKDATA of dynamic types with packed array of bit are not packed.
- There is no cleanup when exiting routines with local declared references and external specifications.
- Rangecheck is not performed at v:= v + 1; when v is a subrange.
- Pointer type to the type itself is not allowed.
- Procedure new gets an exception 'pointer nil' if it runs out of memory and the wanted type contains a pointer.

Memory Requirements for RTP

Code	143	K bytes
Data	31	-
Stack	10	-
Heap	60	-
Total	244	K bytes

Above figures are fixed except the heapsize, which depends on the program compiled.

The heap used for the internal name and symbol table is not included in the above figures. Per default the name and symbol table will occupy all available heap (except the above 60 Kbytes) if needed. Note it is possible for the user to specify the maximum amount of heap the name and symbol table may occupy.

Installation

The installation of SW2114 is performed by inserting the diskette in a drive, selecting that drive and typing:-

INST

This batch job will provide a guide to installation of the files on the disc onto a specific drive.

The compiler will be installed in a directory called RTP.

To be able to call the compiler from all directories the path RTP must be included in the searchpath of the operating system. This may be done by adding RTP as parameter to the PATH command in the AUTOEXEC.-BAT file (for CDOS: the STARTxyy.-BAT file).

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Releasestyringsdokument		side 1/4
SW-pakke identifikation	SW2114, Real Time Pascal Compiler	
Release 2.19	Ansvarlig HEJ	Dato 1993.02.23

Backup identifikation

"SW2114 Real Time Pascal Source, Release 2.19, 93.02.23"

Genereringsudstyr

- RC950 UNIX-maskine ('basis1') leveret af ICL DATA.
- SW95705I.3 386/ix (R) Multi-user, Release 2.2 leveret af ICL DATA.
  (indeholder et UNIX System V/386 Release 3.2 fra INTERACTIVE UNIX).
- SW95707I VP/ix Multi-user, Release 1.2 leveret af ICL DATA.
- SW95728I.1 UNIX Transport/Networking, Release 1.0 leveret af ICL DATA.
- Turbo Pascal, Version 5.0 fra Borland
- SW2114 Real Time Pascal Compiler, Release 2.19 leveret af DANOSI.

Kildetekstversioner

(Hvor ikke andet er angivet er filer placeret på basis1 under /usr2/sw2114)
Versionsoversigt er placeret i job/release/versions.log.

Specifikationsdokumenter

Reference Manual for the Programming Language Teal Time Pascal, PN 991 10 141
Real Time Pascal Compiler, Reference Manual, PN: 990 01 333

Vedligeholdelsesdokumenter

Filen adm/readme indeholder en vejledning til pakkevedligeholdelse.
Notater om compileren er samlet i 10 ringbind.
Nogle dokumenter og pakkejournal er i h:\common\swpakker\sw2114.

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Backup beskrivelse

Backupbåndet indeholder følgende kataloger (med subkataloger):

/usr2/sw2114
/usr2/swutil

Backupbåndet er lavet med jobbet 'job/backupjob', der anvender cpio til skrivningen af af båndet.

Backupbåndet kan indlæses igen med programmet cpio, f.ex

```
cpio -itv </dev/tape            ( indholdsliste )
cpio -icvBduml [ filepattern ] </dev/tape
```

Testværktøjer

Jobbet 'test/comp.bat' bruges til oversættelse af en samling test programmer, der er navngivet *.rtp.

Pakkegenerering

Pakkebeskrivelse skrives med 'Word Perfect' i
'h:\common\swvedl\pakkebsk\software\sw2114.219'
og en ascii kopi flyttes til release/fut/readme21.14.
Pakken dvs. masterdisketten, genereres ved at bruge 'make' i job/release.

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Releasestyringsdokument		side 1/4
SW-pakke identifikation	SW2114, Real Time Pascal Compiler	
Release 2.14	Ansvarlig HEJ	Dato 1992.09.01

Backup identifikation

"SW2114 Real Time Pascal Source, Release 2.14, 92.09.01"

Genereringsudstyr

- MS-DOS, Version 3.30 fra Microsoft Corporation
- Turbo Pascal, Version 5.0 fra Borland

- PC compatibel maskine (RC950 fra ICL DATA)

Kildetekstversioner

Alle kildetekster til compileren er i katalog RTP. Standard environment er i kataloget RTPSTD.
Versionsoversigt er placeret i filen VERSIONS.LOG.

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Vedligeholdelsesdokumenter

Filen README indeholder en vejledning til pakkevedligeholdelse.
Notater om compileren er samlet i 10 ringbind.

Backup beskrivelse

Jobbet SAVE.BAT kopierer filerne fra RTP og RTPSTD over på fire disketter.

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Testværktøjer

Jobbet COMP.BAT bruges til oversættelse af en samling test programmer, der er navngivet *.RTP.

Pakkegenerering

Filen RTP.PAS oversættes med: TPC /L /$V- /B RTP.
Readme21.14 med pakkebeskrivelse skrives.
Jobbet VERSIONS.BAT laver versionsoversigt.
Jobbet NEWVER.BAT kopierer de relevante filer til diskette station A:

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Real Time Pascal Compiler

SW2114
Release 2.14
DANOSI

Package Contents

- 1 diskette marked "Real Time Pascal Compiler, Rel. 2.14"
- 1 Reference Manual for The Programming Language Real Time Pascal
- 1 Real Time Pascal Compiler Reference Manual, PN: 99001333/2
- 1 Package Description (this document)

Requirements

SW2114 requires:

- MS-DOS 3.3 (SW954001) rel. 1.0 or later

or

- Concurrent DOS vers. 6.0 or later

The system may run under UNIX VP/ix too.

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Changes since last release

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Known Problems

Option CREATESIZE puts the createsize in inner programs if any.

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Release Notes

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