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Open Pascal
Retargetable translator that reads OpenVMS Pascal

Open Pascal reads OpenVMS Pascal and generates portable C source code. Open Pascal automates the migration of OpenVMS Pascal applications to open systems

Open Pascal is a source code translator for programs written in the OpenVMS Pascal language. It is both a translator and a converter designed for:

- Porting OpenVMS Pascal applications from OpenVMS to Unix-based platforms
- Converting OpenVMS Pascal programs into C programs. Open Pascal reads OpenVMS Pascal code and generates consistent and maintainable C code. Open Pascal includes its own runtime system.

Open Pascal automatically creates the proper linkage to our VMS-runtime library product, Open LIBR8.

All device and file names are mapped, so no changes are required in the OpenVMS Pascal source.

Open LIBR8 includes support for RMS, SMG, Sort/Merge and the majority of SYS$ and LIB$ system services.

Features

- All OpenVMS Pascal reserved identifiers and predeclared routines supported
- Supports nested procedures
- Preserves comments; produces understandable and concise C code
- Extensive user configuration options

Benefits

- Translates 99% of all OpenVMS Pascal extensions
- Preserves investments in software and personnel
- Fully consistent and portable C code
- Supports VMS runtime routines including RMS, QIO, SMG, logical name handling and indexed files

"We developed our applications in-house to handle the unique needs of our diverse client base. However, further scalability was not going to be possible without a change of platform.

Migration with Advanced offered us a fast, cost-effective and low-risk solution."

Rob Hussey >
Head of Solutions Delivery >
Mercer Outsourcing

Open Pascal

Pre-declared routines

DD_INTERLOCKED
ADDRESS
ARGUMENT
ARGUMENT_LIST_LENGTH
BITNEXT
BYTE_OFFSET
CLEAR_INTERLOCKED
CLOCK
CREATE_DICTIONARY
DATE
DEC
DELETE_FILE
ESTABLISH
EXPO
FIND_FIRST_BIT_CLEAR
FIND_FIRST_BIT_SET
FIND_MEMBER
FIND_NONMEMBER
HEX
IADDRESS
INT
LOWER
MAX
MIN
OCT
PAD
QUAD
READV
README_FILE
REVERT_TIME
SET_INTERLOCKED
SIZE
SINGL
UAND
UDEC
UNOT
UOR
UPPER
UROUND
UTRUNC
UXOR
WRITEEV
XOR

Symbols & Labels

Open Pascal supports identifiers up to 256 characters long. Decimal, hexadecimal and control characters. Open Pascal allows numeric and string labels.

Program Structure

Open Pascal supports the use of VARS, CONSTS, TYPES, LABELS, PROCEDURES & FUNCTIONS in any order. Forward declarations are supported. Nested procedures and functions are decomposed with symbol scope automatically resolved. Statements Open Pascal supports the full range of OpenVMS Pascal.

Statements

Assignments, procedure and function calls, goto, compound, if, case, repeat, while and for, and with.

Attribute Syntax

All OpenVMS Pascal attributes are recognised and translated, if appropriate, to equivalent attributes in C. Open Pascal does allow these attributes to be recognised but not translated, thereby eliminating OpenVMS-specific code.

ALIGNED
ASYNCHRONOUS
AT NOG_FLOATING
AUTOMATIC
BIT
BYTE
CHECK
CLASS_AP
CLASS_NCA
CLASS_S
COMMON
ENVIRONMENT
G_FLOATING
GLOBAL
HIDDEN
IDENT
IMMEDIATE
INHERIT
INITIALIZE
KEY
LIST
LOCAL
LONG
NOOPTIMIZE
OCTA
OVERLAID
POS
PSECT
QUAD
READONLY
REFERENCE
STATIC
TRUNCATE
UNALIGNED
UNBOUND
UNSAFE
VALUE
VOLATILE
WEAK_EXTRNL
WEAK_GLBL
WORD
WRITEONLY

"We chose Advanced for this complex and demanding migration as it had both the technical expertise to convert our OpenVMS applications to Windows, and also its well established migration methodology."

Martin Heaton > Control Systems Development Manager > Springfields Fuels

More information

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