



**Hewlett Packard
Enterprise**



HPE Cray Programming Environment Portal

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Concept

Open source in one location to deliver all content related to CPE including:

- Man Pages
- Technical documentation
- Release announcements
- White papers
- Tutorials
- Libraries

Separate versions of documentation



HPE Cray Programming Environment

HPE Cray Programming Environment (CPE) suite offers programmers a comprehensive set of tools for developing, porting, debugging, and tuning applications. The programming environment simplifies the transition to new hardware architectures and configurations by automatically applying optimizations on HPC applications that use existing programming models with a simple recompile.

The environment provides:

- User environment (compiler drivers, hugepages, craype-api)
- Compilers, programming languages, and models
- Scalable communication libraries:
 - MPICH
 - PMI
 - OpenSHMEMX
 - DSMML
- Scientific and math libraries

Available at
<https://cpe.ext.hpe.com/docs>

Cray Compiler Environment

Overview

HPE Cray Compiling Environment (CCE) consists of compilers, libraries, and utilities that perform code analysis during compilation and automatically generate highly optimized code. Compilers support numerous command-line arguments to enable manual control over compiler behavior and optimization. Supported languages include Fortran, C and C++, and UPC (Unified Parallel C).

Implementation

CCE provides Fortran, C, and C++ compilers for HPE Cray EX and HPE Cray supercomputer systems, HPE Apollo 2000 Gen10Plus systems, HPE Apollo 80 systems, and Cray XC and CS systems.

Introduction

HPE Cray's proprietary Fortran compiler that fully supports the Fortran 2018 standard with some exceptions and deferred features as noted in the HPE Cray Compiling Environment Release Overview (S-5212). The HPE Fortran programming

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Cray Compiler Environment

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Compiling and Launching

Introduction Man Pages

UPC Man Pages

IEEE

Math Man Pages

AIO Man Pages

PXF Man Pages

UPC Man Pages

Misc Man Pages

Introduction Man Pages

These man pages introduce and explain various compiler features and concepts.

- [Introduction to Compiler Directives](#)
- [Introduction to asm Intrinsic](#)
- [Introduction to Conversion](#)
- [Introduction to ffo](#)
- [Introduction to IEEE](#)
- [Introduction to intrin](#)
- [Introduction to Intrinsic](#)
- [Introduction to IO](#)
- [Introduction to libm](#)
- [Introduction to OpenACC](#)
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- [Introduction to PGAS](#)
- [Introduction to pxf](#)
- [Introduction to Quad Precision](#)
- [Introduction to Timing](#)

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PXF Man Pages

- [pxfaccess](#)
- [pxfalarm](#)
- [pxfcfgetospeed](#)
- [pxfchdir](#)
- [pxfchmod](#)
- [pxfchown](#)
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 pxfchown

NAME

SYNOPSIS


IMPLEMENTATION

STANDARDS

DESCRIPTION

EXAMPLES

SEE ALSO

 / [pxfchown](#)

pxfchown

Date: 10-20-2011

NAME

PXFCHOWN - Changes the owner and group of a file

SYNOPSIS

```
CHARACTER*n path  
INTEGER ilen, iowner, igroup, ierror  
CALL PXFCHOWN(path, ilen, iowner, igroup, ierror)
```

IMPLEMENTATION

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Environment [View page source](#)

Programming Environment

Environment (CPE) suite offers programmers a comprehensive set of tools for developing, porting, and testing applications. The programming environment simplifies the transition to new hardware architectures by automatically applying optimizations on HPC applications that use existing programming models.

Search docs

- HPE Cray Programming Environment
- HPE Cray user guides
- HPE Cray Compilers
- HPE Cray Message Passing Interface (CMPT)
- HPE Cray Scientific Libraries
- Debugging tools
- Profiling and performance optimization tools

- Open source
- Limited to CPE
- Man pages
- Collaboration
- Tutorials
- User centered
- Controlled by CPE

What's the difference between the CPE portal and the HPE portal

- HPE portal is for all products and services including support, warranty, and case management
- The PointNext (now Technical Services) teams manage and maintain, the support site. They also develop feature improvements and portal roadmaps of the support.hpe@hpe.com site.

HPE portal will continue to support its current services and maintain the currently available documents

Hewlett Packard Enterprise

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CPE

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Content Type

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RELEVANCE	TITLE	DATE
	HPE Cray Programming Environment (x86)	Mar 16, 2023
	The HPE Cray Programming Environment 23.03 release is now available for Apollo 2000 Gen 10 Plus systems (x86) running RedHat for HPCM managed systems using SLURM or PBS Pro. Type: Software Other Latest version: 23.03 + 24 older versions	
	RECOMMENDED	
	HPE Cray Programming Environment Installation Guide CSM on HPE Cray EX	Jun 03, 2021

Questions?

