

Software Name	Version	Module Name	Module Description ("module whatis" command in Linux)
ADIOS	1.12.0	adios/1.12.0	The Adaptable IO System (ADIOS).
Autoconf (part of autotools)	2.69	autoconf-2.69-gcc-7.2.0-sayraxx	Autoconf -- system configuration part of autotools
Automake (part of autotools)	1.15.1	automake-1.15.1-gcc-7.2.0-kyu5v74	Automake -- make file builder part of autotools
Bison	3.0.4	bison-3.0.4-gcc-7.2.0-nl7vmez	Bison is a general-purpose parser generator that converts an annotated context-free grammar into a deterministic LR or generalized LR (GLR) parser employing LALR(1) parser tables.
Blast	2.7.1	NA	Compares DNA sequences to NCBI database. /opt/ohpc/pub/apps/ncbi-blast-2.7.1+/bin/blastn
Boost	1.66.0	boost-1.66.0-gcc-7.2.0-lh7j247	Boost provides free peer-reviewed portable C++ source libraries, emphasizing libraries that work well with the C++ Standard Library.
BOOST	1.65.1	boost/1.65.1	Boost free peer-reviewed portable C++ source libraries.
Bzip2	1.0.6	bzip2-1.0.6-gcc-7.2.0-57yzgp6	bzip2 is a freely available, patent free high-quality data compressor. It typically compresses files to within 10% to 15% of the best available techniques (the PPM family of statistical compressors), whilst being around twice as fast at compression and six times faster at decompression.
Cairo	1.14.12	cairo-1.14.12-gcc-7.2.0-nf3rapy	Cairo is a 2D graphics library with support for multiple output devices.
Clustershell	1.8	clustershell/1.8	VIM files for ClusterShell
CMake	3.10	cmake-3.10.2-gcc-7.2.0-ortsenj	A cross-platform, open-source build system. CMake is a family of tools designed to build, test and package software.
cmake	3.9.2	cmake/3.9.2	CMake is an open-source, cross-platform family of tools designed to build, test and package software.
Easybuild	3.4.1	EasyBuild/3.4.1	Build and installation framework
Eigenvalue solvers for Petaflop-Applications (ELPA)	201605004	elpa-2016.05.004-gcc-7.2.0-yqlptj	Eigenvalue solvers for Petaflop-Applications (ELPA)
FFTW	3.3.7, 3.3.6	fftw-3.3.7-gcc-7.2.0-3eb6pod	FFTW is a C subroutine library for computing the discrete Fourier transform (DFT) in one or more dimensions, of arbitrary input size, and of both real and complex data (as well as of even/odd data, i.e. the discrete cosine/sine transforms or DCT/DST). We believe that FFTW, which is free software, should become the FFT library of choice for most applications.
fftw	3.3.6	fftw/3.3.6	A Fast Fourier Transform library
Flex	2.6.4	flex-2.6.4-gcc-7.2.0-4zedkql	Flex is a tool for generating scanners.
Fontconfig	2.12.3	fontconfig-2.12.3-gcc-7.2.0-prjpbft	Fontconfig is a library for configuring/customizing font access
FreeType	2.7.1	freetype-2.7.1-gcc-7.2.0-c2mn55j	FreeType is a freely available software library to render fonts. It is written in C, designed to be small, efficient, highly customizable, and portable while capable of producing high-quality output (glyph images) of most vector and bitmap font formats.
GDAL	2.1.2	NA	Geography graphics library. /opt/ohpc/pub/apps/gdal-2.1.2
Gener	0.13.5	libpciaccess-0.13.5-gcc-7.2.0-cnpql72	Generic PCI access library.
Glib	2.56.0	glib-2.56.0-gcc-7.2.0-v65xogd	Glib provides the core application building blocks for libraries and applications written in C.
GNU Autotools	1.0	autotools	Developer utilities

GNU Compiler Collection	7.2.0	gnu7/7.2.0	GNU Compiler Family (C/C++/Fortran for x86_64)
GNU dbm (GDBM)	1.14.1	gdbm-1.14.1-gcc-7.2.0-3d6sfvn	GNU dbm (or GDBM, for short) is a library of database functions that use extensible hashing and work similar to the standard UNIX dbm. These routines are provided to a programmer needing to create and manipulate a hashed database.
GNU gperf	3.0.4	gperf-3.0.4-gcc-7.2.0-qeav62t	GNU gperf is a perfect hash function generator. For a given list of strings, it produces a hash function and hash table, in form of C or C++ code, for looking up a value depending on the input string. The hash function is perfect, which means that the hash table has no collisions, and the hash table lookup needs a single string comparison only.
GNU internationalization (i18n) and localization (l10n)	0.19.8.1	gettext-0.19.8.1-gcc-7.2.0-ahi2ixo	GNU internationalization (i18n) and localization (l10n) library.
GNU libiconv	1.15	libiconv-1.15-gcc-7.2.0-7d3im4i	GNU libiconv provides an implementation of the iconv() function and the iconv program for character set conversion.
GNU libsigsegv	2.11	libsigsegv-2.11-gcc-7.2.0-ez6lzsh	GNU libsigsegv is a library for handling page faults in user mode.
GNU M4	1.4.18	m4-1.4.18-gcc-7.2.0-wc64qfj	GNU M4 is an implementation of the traditional Unix macro processor.
GNU Readline Library	7.0	readline-7.0-gcc-7.2.0-sapfejx	The GNU Readline library provides a set of functions for use by applications that allow users to edit command lines as they are typed in. Both Emacs and vi editing modes are available. The Readline library includes additional functions to maintain a list of previously-entered command lines, to recall and perhaps reedit those lines, and perform csh-like history expansion on previous commands.
GNU Tar	1.29	tar-1.29-gcc-7.2.0-x7qvlwr	GNU Tar provides the ability to create tar archives, as well as various other kinds of manipulation.
Gnuplot	5.2.0	gnuplot-5.2.0-gcc-7.2.0-7gdoncd	Gnuplot is a portable command-line driven graphing utility for Linux, OS/2, MS Windows, OSX, VMS, and many other platforms. The source code is copyrighted but freely distributed (i.e., you don't have to pay for it). It was originally created to allow scientists and students to visualize mathematical functions and data interactively, but has grown to support many non-interactive uses such as web scripting. It is also used as a plotting engine by third-party applications like Octave. Gnuplot has been supported and under active development since 1986
Gobject Introspection	1.49.2	gobject-introspection-1.49.2-gcc-7.2.0-vfmnmw2	The GObject Introspection is used to describe the program APIs and collect them in a uniform, machine readable format. Cairo is a 2D graphics library with support for multiple output
GSL	2.4	gsl/2.4	GNU Scientific Library (GSL)
Hardware Locality (hwloc)	1.11.9	hwloc-1.11.9-gcc-7.2.0-ecepoga	The Hardware Locality (hwloc) software project.
Harfbuzz	1.4.6	harfbuzz-1.4.6-gcc-7.2.0-z4bmg65	The Harfbuzz package contains an OpenType text shaping engine.
Hdf5	1.10.1	hdf5/1.10.1	A general purpose library and file format for storing scientific data
HDF5	1.10.1	hdf5/1.10.1	A general purpose library and file format for storing scientific data
Help2man	1.47.4	help2man-1.47.4-gcc-7.2.0-aenlgsh	help2man produces simple manual pages from the '--help' and '--version' output of other commands.

Hwloc	1.11.8	hwloc/1.11.8	Portable Hardware Locality
Hypr	2.11.2	hypr/2.11.2	Scalable algorithms for solving linear systems of equations
ICU	60.1	icu4c-60.1-gcc-7.2.0-3zgs7km	ICU is a mature, widely used set of C/C++ and Java libraries providing Unicode and Globalization support for software applications. ICU4C is the C/C++ interface.
Imb	2018.0	imb/2018.0	Intel MPI Benchmarks (IMB)
LAMMPS	20180222	lammeps-20180222-gcc-7.2.0-dllhtvw	LAMMPS stands for Large-scale Atomic/Molecular Massively Parallel Simulator. This package uses patch releases, not stable release. See https://github.com/spack/spack/pull/5342 for a detailed discussion.
Libcerf	1.3	libcerf-1.3-gcc-7.2.0-3v6nkg2	A self-contained C library providing complex error functions, based on Faddeeva's plasma dispersion function $w(z)$. Also provides Dawson's integral and Voigt's convolution of a Gaussian and a Lorentzian
Libffi Library	3.2.1	libffi-3.2.1-gcc-7.2.0-v7toemj	The libffi library provides a portable, high level programming interface to various calling conventions. This allows a programmer to call any function specified by a call interface description at run time.
LibGD	2.2.4	libgd-2.2.4-gcc-7.2.0-dkpfetv	GD is an open source code library for the dynamic creation of images by programmers. GD is written in C, and 'wrappers' are available for Perl, PHP and other languages. GD creates PNG, JPEG, GIF, WebP, XPM, BMP images, among other formats. GD is commonly used to generate charts, graphics, thumbnails, and most anything else, on the fly. While not restricted to use on the web, the most common applications of GD involve website development.
Libjpeg-turbo	1.5.3	libjpeg-turbo-1.5.3-gcc-7.2.0-ne5cbim	libjpeg-turbo is a fork of the original IJG libjpeg which uses SIMD to accelerate baseline JPEG compression and decompression. libjpeg is a library that implements JPEG image encoding, decoding and transcoding.
Libpng	1.6.34	libpng-1.6.34-gcc-7.2.0-aiz5qo7	libpng is the official PNG reference library.
Libpthread-stubs	0.4	libpthread-stubs-0.4-gcc-7.2.0-5qusfmw	The libpthread-stubs package provides weak aliases for pthread functions not provided in libc or otherwise available by default.
Libtiff	4.0.8	libtiff-4.0.8-gcc-7.2.0-3zaxkpf	libtiff graphics format library
Libtool (part of autotools)	2.4.6	libtool-2.4.6-gcc-7.2.0-fg67fjw	libtool -- library building part of autotools.
LibX11	1.6.5	libx11-1.6.5-gcc-7.2.0-snp2mdp	libX11 - Core X11 protocol client library.
LibXau	1.0.8	libxau-1.0.8-gcc-7.2.0-jgl3ayl	The libXau package contains a library implementing the X11 Authorization Protocol. This is useful for restricting client access to the display.
LibXdmcp	1.1.2	libxdmcp-1.1.2-gcc-7.2.0-vna7k5v	libXdmcp - X Display Manager Control Protocol library.
Libxml2	2.9.4	libxml2-2.9.4-gcc-7.2.0-mym5tcv	Libxml2 is the XML C parser and toolkit developed for the Gnome project (but usable outside of the Gnome platform), it is free software available under the MIT License.
MaSuRCA	3.2.3	masurca-3.2.3-gcc-7.2.0-b5z6wxf	MaSuRCA is whole genome assembly software. It combines the efficiency of the de Bruijn graph and Overlap-Layout-Consensus (OLC) approaches.

MaSuRCA	3.2.6	masurca-3.2.6-gcc-7.2.0-7lacois	MaSuRCA is whole genome assembly software. It combines the efficiency of the de Bruijn graph and Overlap-Layout-Consensus (OLC) approaches.
METIS	5.1.0	metis/5.1.0	Metis development files
Mpi4py	2.0.0	mpi4py/2.0.0	Python bindings for the Message Passing Interface (MPI) standard. mpi4py/2.0.0
Mpich	3.2	mpich/3.2	MPICH MPI implementation
MpiP	3.4.1	mpiP/3.4.1	A lightweight profiling library for MPI applications.
Mumps	5.1.1	mumps/5.1.1	A MULTifrontal Massively Parallel Sparse direct Solver
Mvapich2	2.2	mvapich2/2.2	OSU MVAPICH2 MPI implementation
NASM	2.13.03	nasm-2.13.03-gcc-7.2.0-kf5jm2f	NASM (Netwide Assembler) is an 80x86 assembler designed for portability and modularity. It includes a disassembler as well.
Ncurses	6.0	ncurses-6.0-gcc-7.2.0-bub4545	The ncurses (new curses) library is a free software emulation of curses in System V Release 4.0, and more. It uses terminfo format, supports pads and color and multiple highlights and forms characters and function-key mapping, and has all the other SYSV-curses enhancements over BSD curses.
NETCDF	4.4.1.1	netcdf/4.4.1.1	NETCDF built with gnu7 toolchain. C Libraries for the Unidata network Common Data Form.
NETCDF_CXX	4.3.0	netcdf-cxx/4.3.0	C++ Libraries for the Unidata network Common Data Form
NETCDF_FORTRAN	4.4.4	netcdf-fortran/4.4.4	Fortran Libraries for the Unidata network Common Data Form
NUMA	2.0.11	numactl-2.0.11-gcc-7.2.0-offl5wk	NUMA support for Linux
Numpy	1.13.1	numpy/1.13.1	NumPy array processing for numbers, strings, records and objects
OCR	1.0.1	ocr/1.0.1	Open Community Runtime (OCR) for shared memory
Open MPI	3.0.0	openmpi-3.0.0-gcc-7.2.0-pvrtpog	An open source Message Passing Interface implementation.
OpenBLAS	0.2.20	openblas-0.2.20-gcc-7.2.0-rnb5trk	OpenBLAS
OPENBLAS	0.2.20	openblas/0.2.20	An optimized BLAS library based on GotoBLAS2
Openmpi3	3.0.0	openmpi3/3.0.0	A powerful implementation of MPI
OpenSSL	1.0.2n	openssl-1.0.2n-gcc-7.2.0-irvgz5p	OpenSSL is an open source project that provides a robust, commercial-grade, and full-featured toolkit for the Transport Layer Security (TLS) and Secure Sockets Layer (SSL) protocols. It is also a general-purpose cryptography library.
Pango	1.41.0	pango-1.41.0-gcc-7.2.0-emdhrrl	Pango is a library for laying out and rendering of text, with an emphasis on internationalization. It can be used anywhere that text layout is needed, though most of the work on Pango so far has been done in the context of the GTK+ widget toolkit.
Papi	5.5.1	papi/5.5.1	Performance Application Programming Interface
PCRE	8.41	pcre-8.41-gcc-7.2.0-255zlhv	The PCRE package contains Perl Compatible Regular Expression libraries. These are useful for implementing regular expression pattern matching using the same syntax and semantics as Perl 5.
Pdtoolkit	3.24	pdtoolkit/3.24	PDT is a framework for analyzing source code
Perl 5	5.24.1	perl-5.24.1-gcc-7.2.0-wvd4h2x	Perl 5 is a highly capable, feature-rich programming language with over 27 years of development.
Petsc	3.7.6	petsc/3.7.6	Portable Extensible Toolkit for Scientific Computation.

Pixman	0.34.0	pixman-0.34.0-gcc-7.2.0-x2mr4lz	The Pixman package contains a library that provides low-level pixel manipulation features such as image compositing and trapezoid rasterization.
Pkgconf	1.4.0	pkgconf-1.4.0-gcc-7.2.0-wnrooin	pkgconf is a program which helps to configure compiler and linker flags for development frameworks. It is similar to pkg-config from freedesktop.org, providing additional functionality while also maintaining compatibility.
Plasma	2.8.0	plasma/2.8.0	Parallel Linear Algebra Software for Multicore Architectures
Pmix	1.2.3	pmix/1.2.3	
Pnetcdf	1.8.1	pnetcdf/1.8.1	A Parallel NetCDF library (PnetCDF)
Prun	1.2	prun/1.2	job launch utility for multiple MPI families
Ptscotch	6.0.4	ptscotch/6.0.4	Graph, mesh and hypergraph partitioning library using MPI
Python	2.7.14	python-2.7.14-gcc-7.2.0-sxs4oid	The Python programming language.
Quantum-ESPRESSO	6.1.0	espresso-6.1.0-gcc-7.2.0-y7cipdj	Quantum-ESPRESSO is an integrated suite of Open-Source computer codes for electronic-structure calculations and materials modeling at the nanoscale. It is based on density-functional theory, plane waves, and pseudopotentials.
R	3.4.2	R/3.4.2	R is a language and environment for statistical computing and graphics (S-Plus like).
ScaLAPACK	2.0.2	netlib-scalapack-2.0.2-gcc-7.2.0-vgj3vt6	ScaLAPACK is a library of high-performance linear algebra routines for parallel distributed memory machines
Scalapack	2.0.2	scalapack/2.0.2	A subset of LAPACK routines redesigned for heterogenous computing.
Scalasca	2.3.1	scalasca/2.3.1	Toolset for performance analysis of large-scale parallel applications
Scipy	0.19.1	scipy/0.19.1	Scientific Tools for Python
Scorep	3.1	scorep/3.1	Scalable Performance Measurement Infrastructure for Parallel Codes
Scotch	6.0.4	scotch/6.0.4	Graph, mesh and hypergraph partitioning library
Singularity	2.4	singularity/2.4	Application and environment virtualization
Sionlib	1.7.1	sionlib/1.7.1	Scalable I/O Library for Parallel Access to Task-Local Files
Slepc	3.7.4	slepc/3.7.4	A library for solving large scale sparse eigenvalue problems.
SQLite3	3.22.0	sqlite-3.22.0-gcc-7.2.0-qbf76iw	SQLite3 is an SQL database engine in a C library. Programs that link the SQLite3 library can have SQL database access without running a separate RDBMS process.
Superlu	5.2.1	superlu/5.2.1	A general purpose library for the direct solution of linear equations
SuperLU_DIST	4.2	superlu_dist/4.2	A general purpose library for the direct solution of linear equations superlu_dist/4.2
Tau	2.26.1	tau/2.26.1	Tuning and Analysis Utilities Profiling Package
TauDEM		NA	/opt/ohpc/pub/apps/TauDEM
Trilinos	12.10.1	trilinos/12.10.1	A collection of libraries of numerical algorithms
Util-macros (autoconf macros)	1.19.1	util-macros-1.19.1-gcc-7.2.0-xztluvf	This is a set of autoconf macros used by the configure.ac scripts in other Xorg modular packages, and is needed to generate new versions of their configure scripts with autoconf.
Valgrind Memory Debugger	3.13.0	valgrind/3.13.0	Memory debugging utilities
X Input Extension	2.3.2	inputproto-2.3.2-gcc-7.2.0-qdvtz4d	X Input Extension.
X Keyboard Extension	1.0.7	kbproto-1.0.7-gcc-7.2.0-ugjncua	X Keyboard Extension.

X Pixmap	3.5.12	libxpm-3.5.12-gcc-7.2.0-26lgfjk	libXpm - X Pixmap (XPM) image file format library.
X protocol C-language Binding (XCB)	1.12	libxcb-1.12-gcc-7.2.0-hzekihl	The X protocol C-language Binding (XCB) is a replacement for Xlib featuring a small footprint, latency hiding, direct access to the protocol, improved threading support, and extensibility.
X Protocol Extensions	7.3.0	xextproto-7.3.0-gcc-7.2.0-g7gt42f	X Protocol Extensions.
X Window System Core Protocol	7.0.31	xproto-7.0.31-gcc-7.2.0-dgxpc2c	X Window System Core Protocol.
X.Org	1.3.1	font-util-1.3.1-gcc-7.2.0-6kve7li	X.Org font package creation/installation utilities.
Xcb-proto	1.12	xcb-proto-1.12-gcc-7.2.0-l4cdsmc	xcb-proto provides the XML-XCB protocol descriptions that libxcb uses to generate the majority of its code and API.
Xtrans	1.3.5	xtrans-1.3.5-gcc-7.2.0-7oedxb2	xtrans is a library of code that is shared among various X packages to handle network protocol transport in a modular fashion, allowing a single place to add new transport types. It is used by the X server, libX11, libICE, the X font server, and related components.
XZ Utils	5.2.3	xz-5.2.3-gcc-7.2.0-hw2lm7z	XZ Utils is free general-purpose data compression software with high compression ratio. XZ Utils were written for POSIX-like systems, but also work on some not-so-POSIX systems. XZ Utils are the successor to LZMA Utils.
Zlib	1.2.11	zlib-1.2.11-gcc-7.2.0-fuwbsyd	A free, general-purpose, legally unencumbered lossless data-compression library.