

Produce quality code

XD Ada cross-compiler for OpenVMS systems

Produce excellent code quality while providing communications and debugging tools for Motorola microprocessors.

Insights

- XD Ada provides multiprocessor communications and debugging.
- XD Ada is the standard Ada development cross-compiler for the four-nation Fighter Aircraft Replacement program through the Eurofighter consortia.

Long-term support

XD Ada supports multiprocessor communications and debugging of the Motorola M68000 Family — including MC683×x microcontrollers — and MIL-STD-1750A microprocessor architecture, and for Emulator and Simulator support. Hosted on OpenVMS Systems, it is fully integrated with the OpenVMS Debugger and HPE DECset CASE tools and provides a unique and comprehensive software development environment. XD Ada is available on OpenVMS VAX, Alpha and Integrity Servers.

It produces excellent code quality using powerful global optimization techniques and delivers outstanding performance on real-time projects against proven, industry-accepted benchmarks.

XD Ada users benefit from comprehensive, long-term support on current or specific versions of the tools.

Features

The main features of the XD Ada M68000 family and XD Ada MIL-STD-1750A at Version 4.0 include the following:

- Extends user control of code generation by enabling users to specify that the code should be the same as that produced by versions 1.2 onward. This supports users who want to move to the new Integrity Server platform or from VAX to the Alpha platform, but need to retain the same code generation as the XD Ada version they currently use.
- Documentation in HTML and PDF formats, supplied on CD.
- XD Ada M68000 Family supports MC68000, MC68020, MC68030 MC68040, MC68060 and CPU32 processors, together with product extensions, all under one license. This lets you selectively install your required M68000 Family targets. Rationalization of the licensing enables all processors and targets to be available under a common concurrent use license. Similarly, a concurrent use multiprocessing loading and debugging (MLD) license enables debugging of all targets with Ethernet support. (See the licensing example on the following page.) It also has a graphical user interface based on an extension of the HPE Language Sensitive Editor (LSE).

Licensing example

Concurrent use

The XD Ada M68000 Family product license enables concurrent use of any XD Ada commands, including those that use the serial and single Ethernet target links, across all target systems. For example, a three-concurrent use license would enable three users — one using a MC68020 system, one a MC68040 and the third a MC68060 — to simultaneously execute one XD Ada command. Alternatively, one user could simultaneously execute three XD Ada commands with any combination of target systems.

The XD Ada M68000 Family MLD license enables concurrent use of XD Ada commands that access a target using the TCP/IP link, across all target systems that have Ethernet support. When using the TCP/IP link, the MLD license will be used instead of the base product license. For example, if a two-concurrent use MLD license were added to the license in the previous example, then in addition to the above use, one user could access two target boards or two users could access one target board each.

Options

XD Ada M68000 Family for OpenVMS Version 4.0 product options:

- XD Ada M68000 Family semaphore and message passing option (SMP)
- XD Ada M68000 Family emulator support option (ESO)
- XD Ada M68000 Family MLD option (MLD)

XD Ada MIL-STD-1750A for OpenVMS Version 4.0 product options:

- XD Ada MIL-STD-1750A SMP
- XD Ada MIL-STD-1750A ESO
- XD Ada MIL-STD-1750A SIMULATOR Version 4.0 for OpenVMS Alpha and Integrity Servers
- XD Ada MIL-STD-1750A/SIM50A Version 4.0 for OpenVMS Alpha Systems

We also support the XD Ada M680×0 range of products at Version 2.1 on OpenVMS for VAX and the CHARON-VAX Emulator environment.

For additional information

Software product specifications for the XD ADA M68000 Family and MIL-STD-1750A for OpenVMS Alpha and Integrity Servers Version 4.0 are available on request from SWEP.

Learn more at
www.dxc.technology/SWEP