

AdaCore DIGEST

JUNE 2023



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NEWSLETTER

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23.2 Release

The GNAT Pro 23.2 will be released on July 3rd. This upcoming release includes GNAT Pro for Ada, C and C++, as well as SPARK Pro, the GNAT Static Analysis Suite, and the GNAT Dynamic Analysis Suite. Release notes for the 23 branch are available [here for GNATstudio](#), [here for SPARK](#), and [here for the rest of the GNAT technology](#).

New Version of the GNAT Tracker Customer Portal

We are pleased to announce the launch of a new version of our GNAT Tracker customer portal.

To implement this new version, we have decided to leverage the ServiceNow platform, a leading Customer Service Management solution. This platform will allow us to keep implementing the best-in-class security practices now and in the future. It is also a powerful framework, which will allow us, going forwards, to scale up and continue enhancing your experience of AdaCore's frontline customer support.

If you have an account within the existing customer portal, you should have now received an email from "support@adacore.com" containing this text:

"A password reset was requested for your user account on <https://support.adacore.com>."

After receiving this, you will need to login once, and accept the terms of use and privacy policy options, before you can use the web portal.

You can view the online documentation for the new portal [here](#). Should you encounter any issue, please contact us on support@adacore.com.

(If you find that you cannot access the portal after the transition, you can always contact us on support@adacore.com, specifying your customer account number in the subject, for instance "#9000").

Pro Ada Training

Training course dates for 2024 now available!

Our Pro Ada Training courses provide you and your teams a fast track to attaining an intermediate level of Ada software engineering proficiency that is suitable for many projects.

Learn how to use the Ada programming language for both sequential and concurrent applications, through a combination of live lectures from expert instructors and hands-on workshops using AdaCore's latest GNAT technology. No previous experience with Ada is required.

This course is suitable for individuals or small groups. For larger groups, please visit [this link](#).

[See course details and registration information here >>](#)

Update to the AdaCore Roadmap

We have made a few noteworthy additions to the official [AdaCore roadmap](#) that are worth being aware of:

- A number of entries around the Ada programming language have been added. This includes string interpolation, allowing indefinite arrays and classes of tagged types to have a definite maximum size (and thus allowing them to be used where definite types are required), and the ability to statically embed binary content stored in a file and the possibility of declaring variables outside of declaration regions.
- We are scheduling official LLVM support in GNAT Pro 24 for Windows and Linux natives, and in GNAT Pro 25 for a number of ARM 64 bits targets.
- We're announcing end of life schedules for a number of platforms, and scheduling forthcoming support of VxWorks Helix x86 64 bits.

As usual, feel free to reach out to us and open a ticket on GNAT Tracker if you have any comment, or if you would like early access to any roadmap item!

RecordFlux: Secure Communication Protocols. Automatically Proved

On March 28, we launched [RecordFlux](#). RecordFlux brings sanity to the often maddening complexity, imprecision and ambiguity of low-level message formats and communication sessions with a unified, easy-to-read, custom syntax for protocol specification. RecordFlux generates code from your specifications that's formally proven to be secure automatically with the push of a button - so you benefit from the full power of SPARK Pro with no additional effort. RecordFlux is ready today to offer unprecedented security for custom communication protocols for your SPARK, Ada, C, C++, or Rust applications. The result is bullet-proof security against cyberattacks for code that you can use anywhere. Check out the related resources below. If you'd like to find out more about the technology or to discuss your specific requirements with a technical expert, use the [contact form on our website](#).

- [RecordFlux User's Guide](#)
- [Blog - The End of Binary Protocol Parser Vulnerabilities](#)
- [Blog - RecordFlux State Machines](#)
- [Technical Paper - NVIDIA: Using RecordFlux and SPARK to Implement SPDM for Secure Computing](#)

Events

On May 31, AdaCore sponsored the [Ada Deutschland](#) in Karlsruhe, Germany. This workshop serves as a forum for an intensive discussion about safer, more reliable processes and systems for artificial intelligence and machine learning.

AdaCore is also a sponsor for the [Ada Europe Conference](#), June 12-14 in Lisbon, Portugal. AdaCore engineers will be giving three talks, including "An Update On the Tasking Profiles in Ada 2022", "Security Hardening Ada Programs through Innovative Fuzz Testing" and "Automatic test value generation for Ada".

On June 21, we will be hosting our annual [GAP Workshop](#). The event, which is exclusively for GNAT Academic Program members, provides a forum for members to share information regarding successful teaching methods and research projects, even student projects. AdaCore engineers also provide updates on Ada, SPARK, related resources, and community efforts.

Check out our [Events page](#) for updates on where we'll be next.

If you have questions about any of the technologies or services mentioned above, please reach out to your Account Manager or email us at info@adacore.com