Thoughts on Libre Software
The GNAT Ada 95 Experience

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ACT Europe

Overview

- **From Ada 83 to Ada 95**

- **The GNAT Project**

- **ACT-Europe & Ada Core Technologies**

From Ada 83 to Ada 95

The GNAT Project

ACT-Europe & Ada Core Technologies

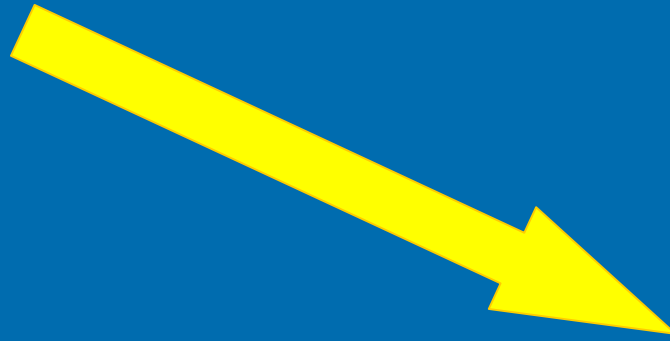# Ada: 1983-1986

✔ **Excitement:**
- Industry
- Universities

Ada: 1988 - 1994

Ada: 1988-1994

✔ **Very proprietary solutions:**
- **products**
- **environments**

✔ **High cost of entry**

✔ **Newcomers cut off**
- **Students, academics, …**
- **new industrial apps**

Ada 95

Ada standard revised every 10 years

✔ **OOP**

✔ **Mixed language programming**

✔ **Improved Systems/Real-time support**

✔ **Distributed Systems**

✔ **Information Systems**

✔ **Numerics**

✔ **Safety & Security**

✔ **...**

From Ada 83 to Ada 95

The GNAT Project

ACT-Europe & Ada Core Technologies

The GNAT Project

✔ **Started at NYU in 1991**

✔ **Over 3 M$ funding for 3 years**

✔ **Commitment to use the GPL License**

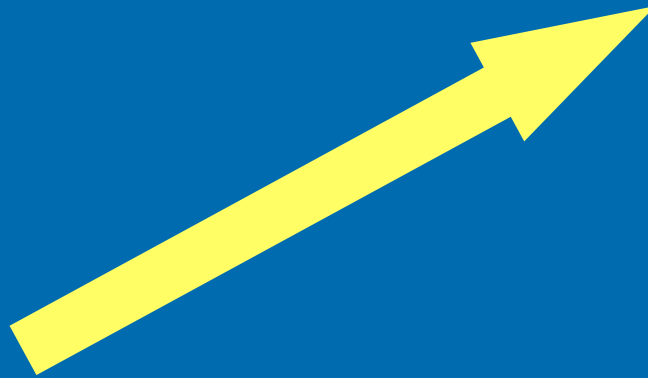✔ **Copyright assigned to the FSF**

✔ **Commitment to use Ada**

Why GNAT was Funded ?

✔ **Have at least 1 high-quality Ada 95 technology**

✔ **Open Ada 95 to everyone**

✔ **Generate excitement in the Ada community**

✔ **Make sure vendors would adopt Ada 95**

Ada: 1995 - 2000

Ada Today

✔ **GNAT jump started Ada 95 market**

✔ **Anyone has access to high quality Ada 95 solution**

✔ **Not a captive market**

✔ **Zero cost of entry for Libre SW developers, academics, students, hobbysts**

 From Ada 83 to Ada 95

 The GNAT Project

 ACT-Europe & Ada Core Technologies

1996

1994

ACT EUROPE
THE EUROPEAN GNAT COMPANY

Ada Core
TECHNOLOGIES.INC

GNAT Professional

✔ **The first Ada 95 technology**

– **The only complete Ada 95 technology**

✔ **Available for a large number of platforms**

✔ **Shares common GCC back-end with other GCC languages (C, C++, …)**

✔ **Interoperable with other languages**

✔ **Over 75% of code has been added by ACT**

100% Committed to Principles of Open-Source

✔ **We make a public release of GNAT for**

- **Libre-Software community**

- **Academic community**

- **Research community**

✔ **Derived from professional release**

✔ **Tens of thousands of GNAT users world-wide**

✔ **Allows people to try Ada 95**

✔ **Has created many babies**

GVD (GNOME)

ObjectAda

RTEMS Ada

AdaBroker

ORK

**GNAT
babies**
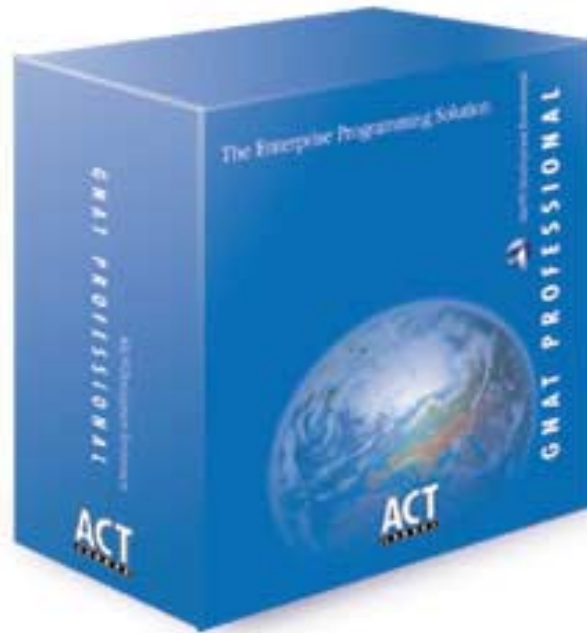
AdaStat

ASIS 95

GtkAda

Florist

Polyspace

ACT

Libre SOftware Advantages

✔ **No turn-over**
  – **Engineer-friendly**

✔ **Allows us to innovate**
  – **Focused on technology not marketing**

✔ **Allows us to foster local pool of know-how**
  – **Can freely work with students & universities**

✔ **Allows clients and users to contribute**
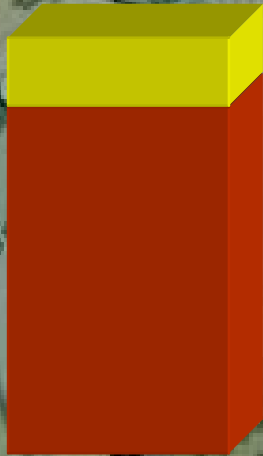
GNAT Professional is a Product

… with an Libre Software License

☺ **have access to the sources**

☺ **redistribution permitted**

☺ **no limit on number of installs**

☺ **no token-license handicap**

☺ **no run time license fees**

☺ **no Easter eggs**

Our Business Model

price of software
price of support

proprietary software

GNAT Professional

Project Support

✔ **Access to product updates**
  - **Via secure Internet access**

✔ **Responsiveness to questions & problems**
  - **Help in Ada 95**
  - **Advice on the best way to use the GNAT tool set**
  - **Help with use of GNAT special features**
  - **Ensuring the technology is used effectively**
  - **Help when interfacing to other languages**
  - **Help when interfacing with libraries**
  - **Help on system issues**
  - **Rapid corrections/workarounds to problems**
  - **Priority consideration of enhancement requests**

✔ **Intermediate releases when necessary**

✔ **On-site project support**

**Emphasis
on
Project Support**

reduces costs
reduces risks
time-to-market

Project Support
and
Cost Reduction

✔**If project support saves 3 min/day per developer the client makes money**

✔**Developers do not need to become "experts" in the use of the toolset**

ACT

Project Support
and
Risk Reduction

✔ **End-to-end control of the technology chain**

✔ **Guaranteed solution to unforeseen problems in the use of the toolset**

Project Support
and
Time-to-Market

✔ **Today's technology landscape is daunting**

✔ **Project Support allows customers to rely on us for core technology know-how**

✔ **Customers can be productive very quickly**

GNAT Professional

The very best of commercial software...

...without the disadvantages of proprietary software

sites:

http://www.act-europe.fr

http://libre.act-europe.fr