

Goanna

Got bugs? We've got a Goanna

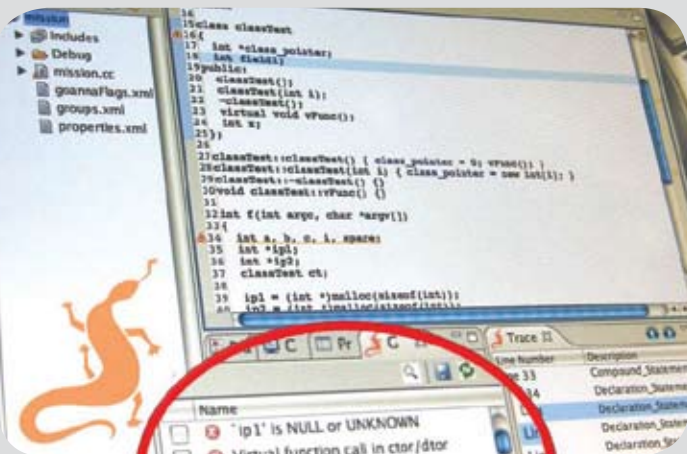


At a Glance

Goanna is a fast, scalable and precise software solution that detects bugs and other software vulnerabilities automatically at development time, saving money and keeping product launch timetables on track.

Working much like a sophisticated spell-checker for software, Goanna detects issues that are otherwise hard to find by traditional testing methods, such as crashes, memory leaks or security vulnerabilities. Being the result of four years scientific research and implementation work at NICTA's NRL Research Laboratory, Goanna is the first static code analysis solution based on model checking technology that detects bugs during software development.

It is particularly suited to embedded systems industries such as consumer electronics, automotive, aerospace, telecoms/networks and defence.



The NICTA Approach

What's unique is Goanna is the first static code analysis software quality tool based upon model checking technology. The Goanna solution scans source code fast and automatically within the IDE (Integrated Development Environment) at software development time. It significantly enhances validation and verification of the software development process by detecting bugs, security flaws and potential crashes earlier. Therefore, it can reduce software testing effort by up to 30% while still complementing downstream traditional software testing processes.

The Features

- Unlike other testing tools, Goanna runs directly within the software developer's Integrated Development Environment (IDE)
- Goanna displays results including trace navigation in the development environment and is low in false-positives
- As well as using standard out-of-the-box checks, the high-level check description language used by Goanna will allow users to easily add their own.

The Benefits

- Bugs are found earlier and faster, shortening development times
- Goanna can be used before code is run, further speeding up the testing process and reducing costs
- Easy-to-use interface allows developers to quickly put it to work, streamlining their testing processes
- Goanna ensures analysis time is focused on high-value checks. The tool is adapted to project specific requirements
- Goanna is available to individual software developers now.

The Future

- Goanna's Static Code Analysis tool is available now!
- Interested in being a customer or funding partner?
- Visit us at www.redlizards.com

From imagination to impact



ATP Research Laboratory and Corporate Head Office

Level 5, 13 Garden Street
 Australian Technology Park
 Eveleigh NSW 2015
 Locked Bag 9013
 Alexandria NSW 1435
 Tel: +61 2 9376 2000
 Fax: +61 2 9376 2300

CRL - Canberra Research Laboratory

Tower A, 7 London Circuit
 Canberra City ACT 2601
 Tel: +61 2 6267 6200

VRL - Victoria Research Laboratory

Lvl 2 / Bldg 193 (Dept. of Electrical and Electronic Engineering)
 The University of Melbourne
 VIC 3010
 Tel: +61 3 8344 4489

NRL - Neville Roach Laboratory

Level 4, 223 Anzac Parade
 Kensington NSW 2052
 Tel: +61 2 8306 0400

University of Sydney Facility (USyd)

School of IT Building, J12
 1 Cleveland Street
 University of Sydney NSW 2006
 Tel: +61 2 8374 5509

QRL - Queensland Research Laboratory

Level 5, Axon Building (47)
 Staff House Road
 St Lucia QLD 4072
 Tel: +61 7 3300 8400

AF - Adelaide Facility

Innovation House
 First Avenue
 Mawson Lakes SA 5095
 Tel: +61 8 8343 8710

NICTA

NICTA is Australia's Information and Communications Technology (ICT) Research Centre of Excellence and the largest organisation in Australia dedicated to ICT research. NICTA drives innovation through high-quality research, research training and technology transfer.

Our researchers are located in five laboratories located in four cities around Australia: Melbourne, Sydney, Canberra and Brisbane. Working in specialised teams, they are focused on a series of specific research themes and business areas.

Our work as a world-class research institute and Centre of Excellence in science and innovation brings together many of Australia's and the world's top ICT researchers. NICTA provides them with the facilities and support they require, making our vision a reality.

NICTA's unique approach fosters and develops ICT research. We work closely with both industry and other research institutions to solve problems and make breakthroughs in ICT with real impact.

NICTA's focus on use-inspired research means our projects have direct relevance to the challenges faced by business, government and individuals around the world. The result is breakthrough technologies that provide commercial opportunities and have a positive impact on Australia's export earnings.

Our Research Themes:

- Embedded Systems
- Networked Systems
- Making Sense of Data
- Managing Complexity

Our Business Areas:

- Biomedical and Life Sciences
- Environmental Management
- Intelligent Transport Systems
- Mobile Systems and Services
- Safety and Security
- Software Infrastructure



For more information about Goanna:

Contact Details Technical

Ralf Huuck
 Neville Roach Laboratory, Kensington
 Tel: +61 2 8306 0493
 Email: ralf.huuck@nicta.com.au
 ralf.huuck@redlizards.com

Contact Details Business Development

James Campbell
 Neville Roach Laboratory, Kensington
 Tel: +61 419 727 779
 Email: james.campbell@nicta.com.au
 james.campbell@redlizards.com



Australian Government
 Department of Broadband, Communications and the Digital Economy
 Australian Research Council

NICTA Members



Department of State and Regional Development



NICTA Partners