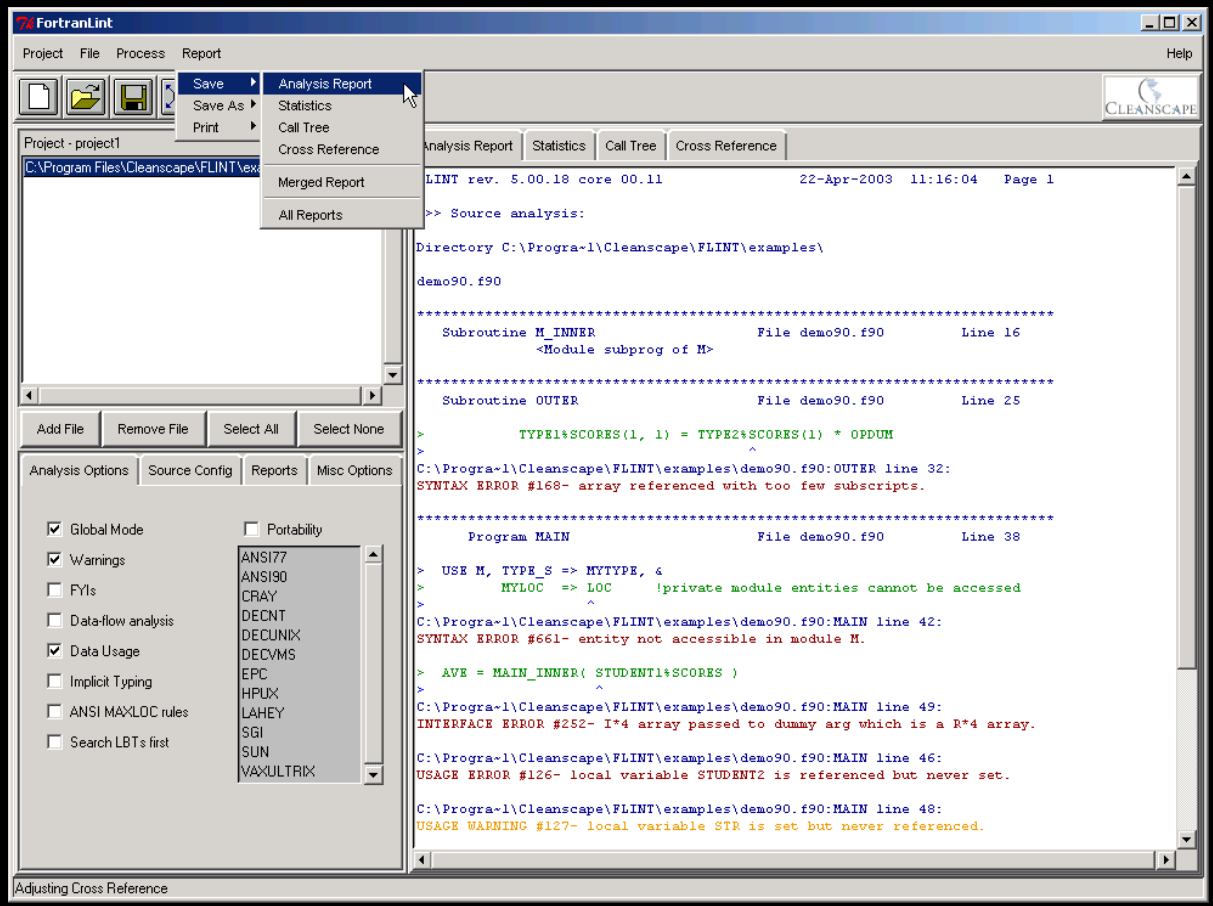
How to stop Fortran programming problems at the source

Cleanscape FortranLint Source Analyzer for Fortran

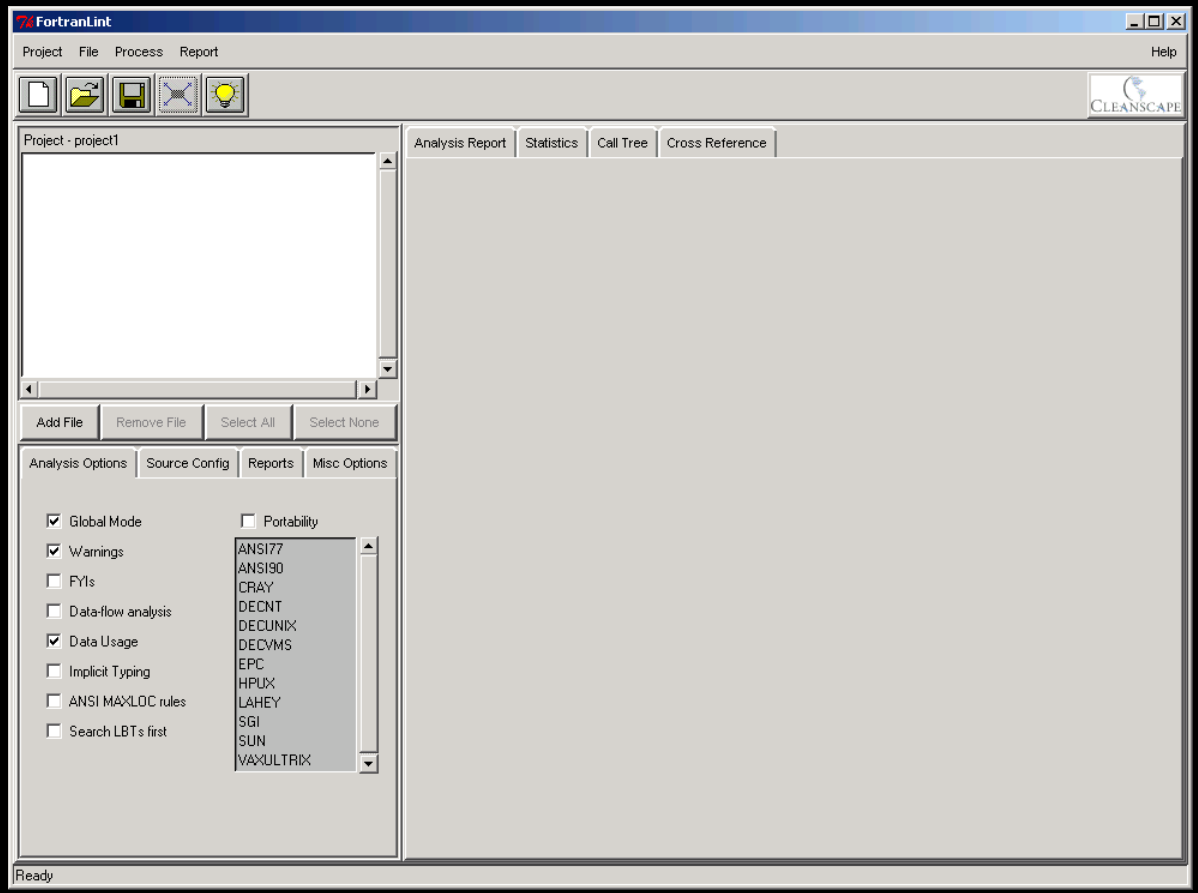
Tutorial and Demonstration

Keywords: software programming tools, Fortran, static source code analyzers, c language, Fortran lint, Fortran source code analysis, Fortran language, software development automation



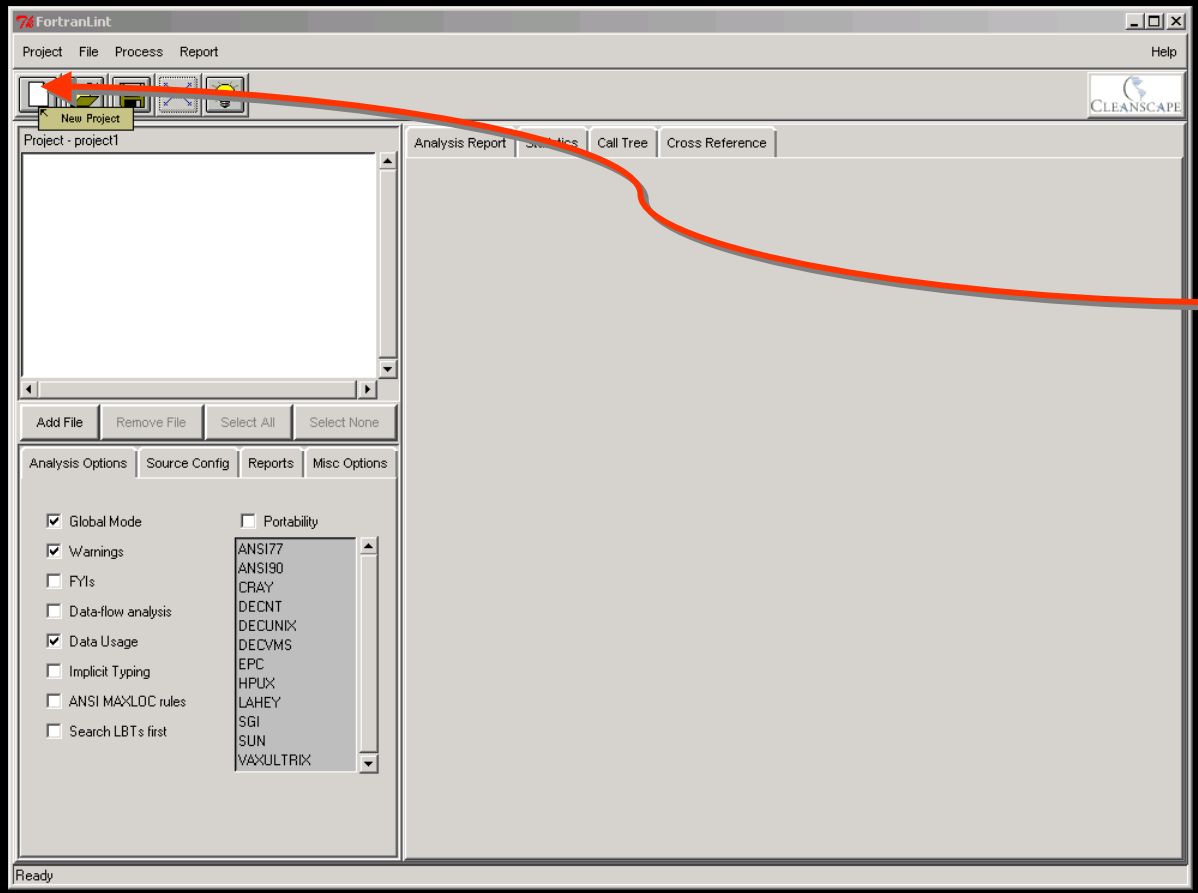
Introduction

- Detect Fortran bugs and other problems that a compiler can't catch
- Conduct thorough assessment with global call interface checking, local dataflow analysis, and best practices information
- Conduct portability checks between multiple host environments an the ANSI F77/F90 standards
- Rapidly understand Fortran sources via call trees and cross references



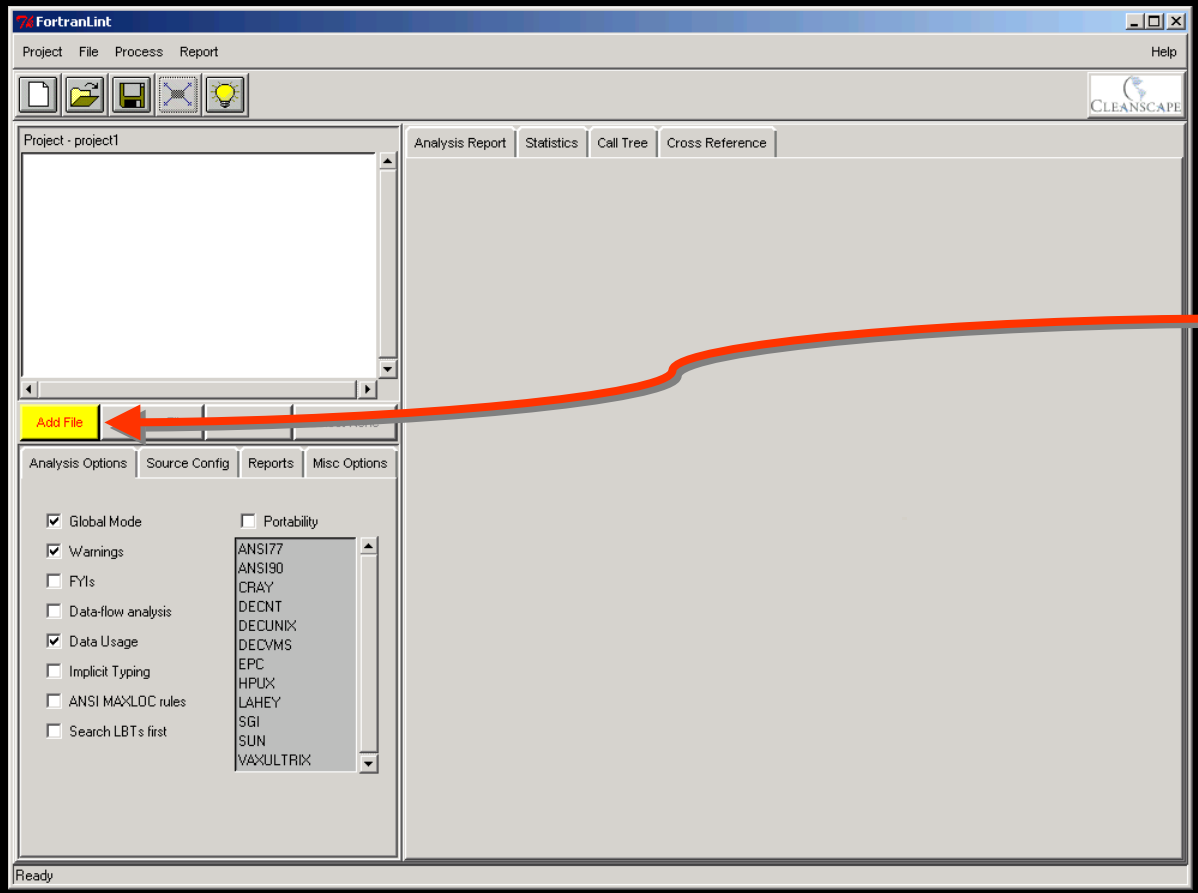
Graphical User Interface

- Just click to access to powerful analysis features
- Simple to use
- No learning curve



Start new project

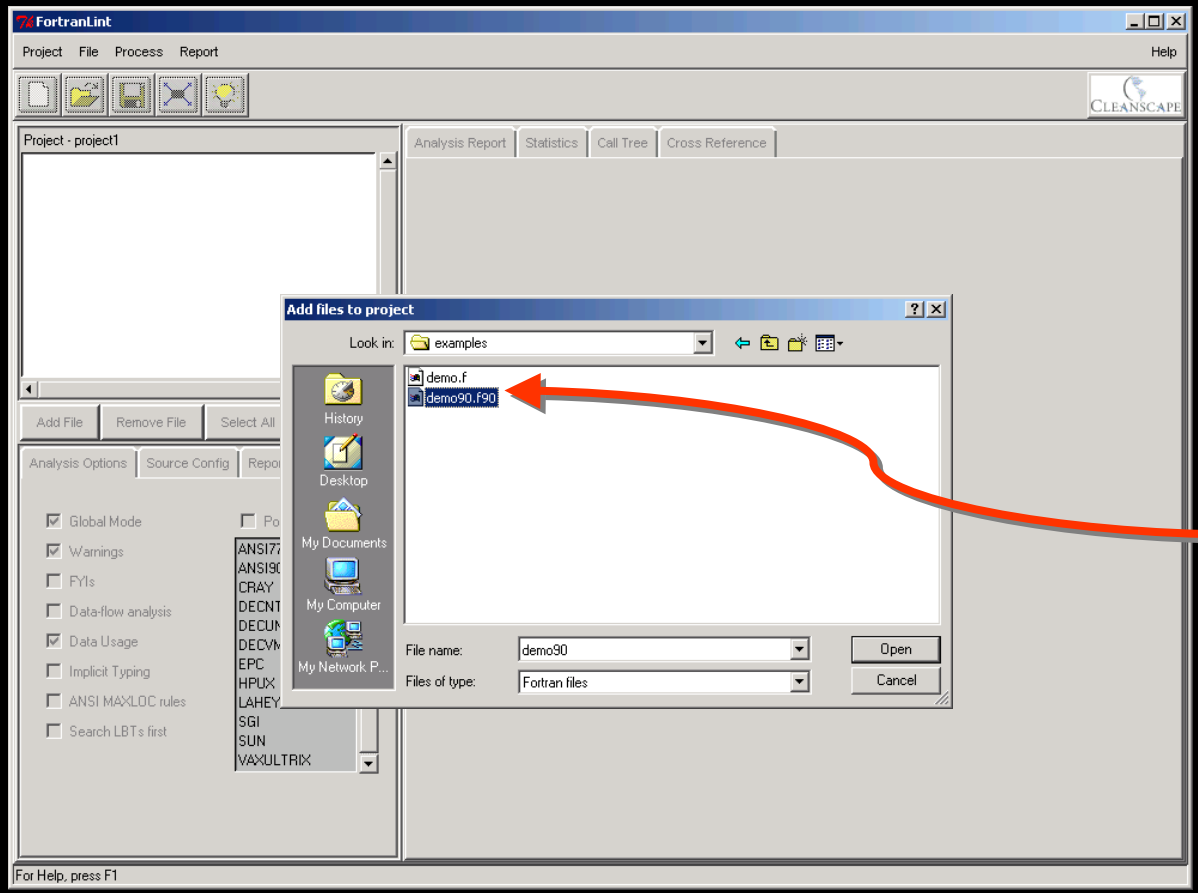
- Select Project > New



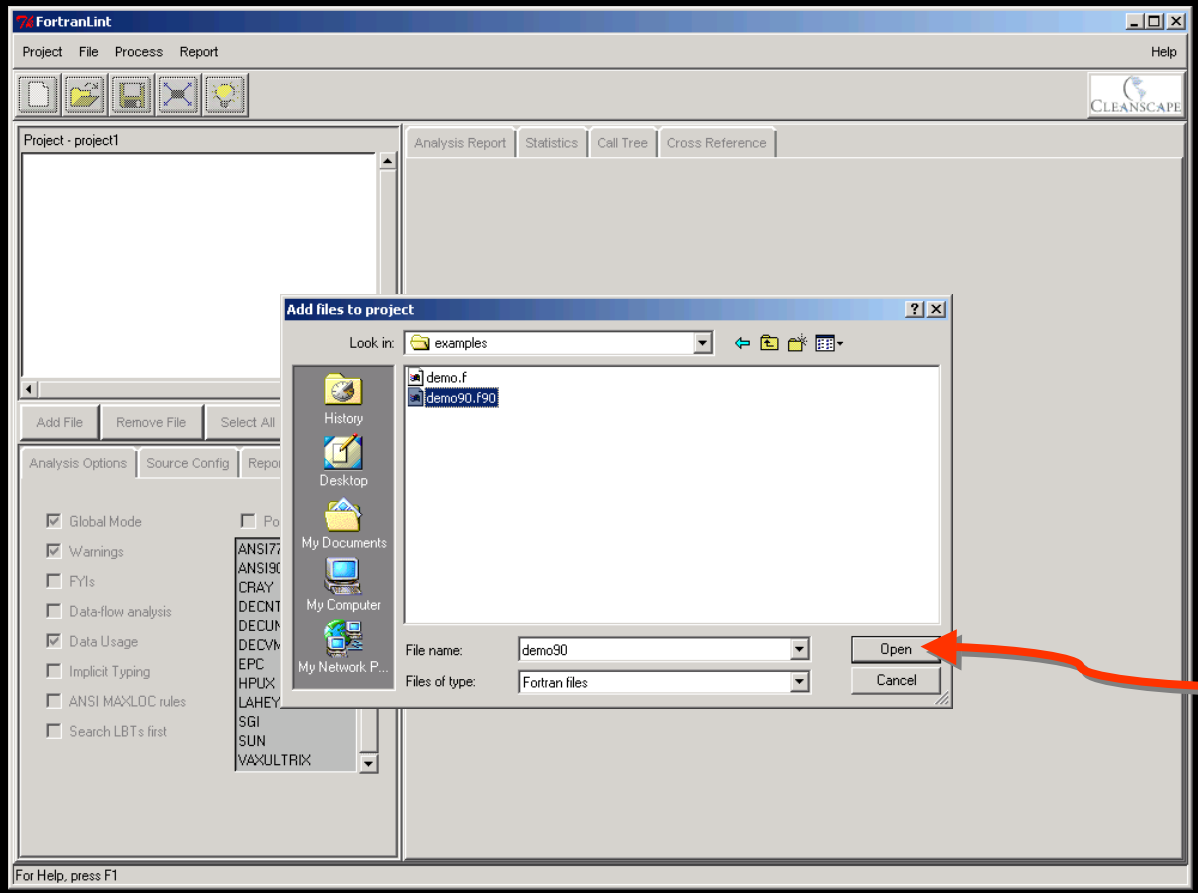
Add File to Project 1/4

- **Press "Add File"**
  - Or select:
    File > Add file

Add File to Project 2/4

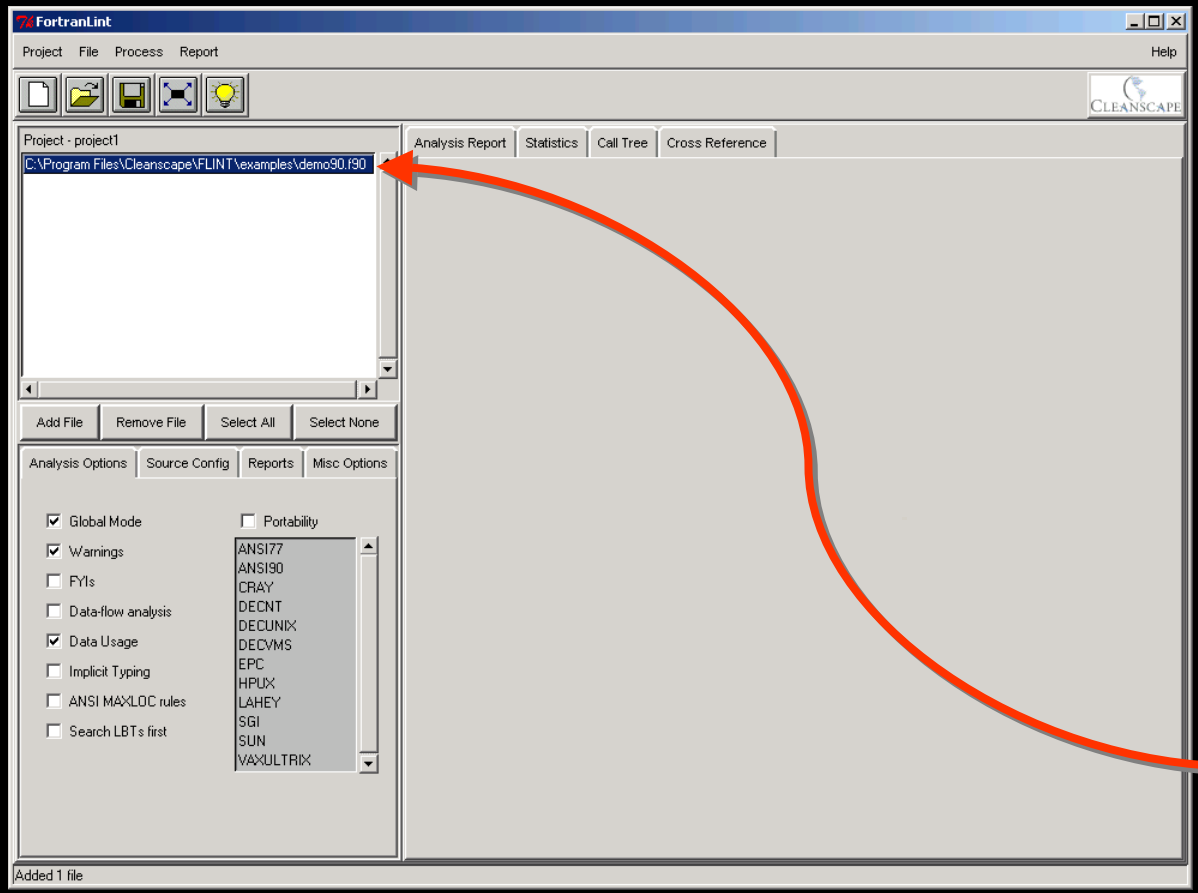


- Press "Add File"
  - Or select: File > Add file
- **Select file(s) to be analyzed**



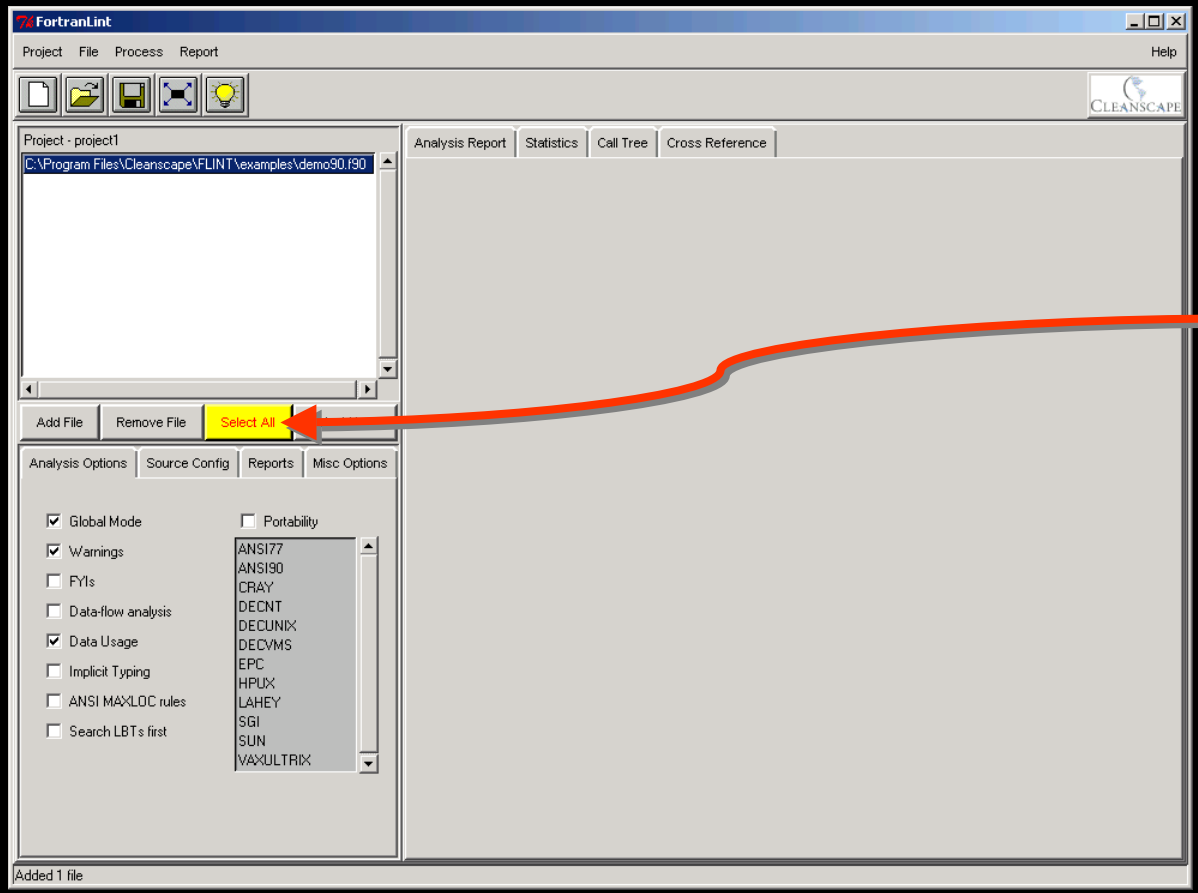
Add File to Project 3/4

- Press "Add File"
  - Or select: File > Add file
- Select file(s) to be analyzed
- Click "Open"



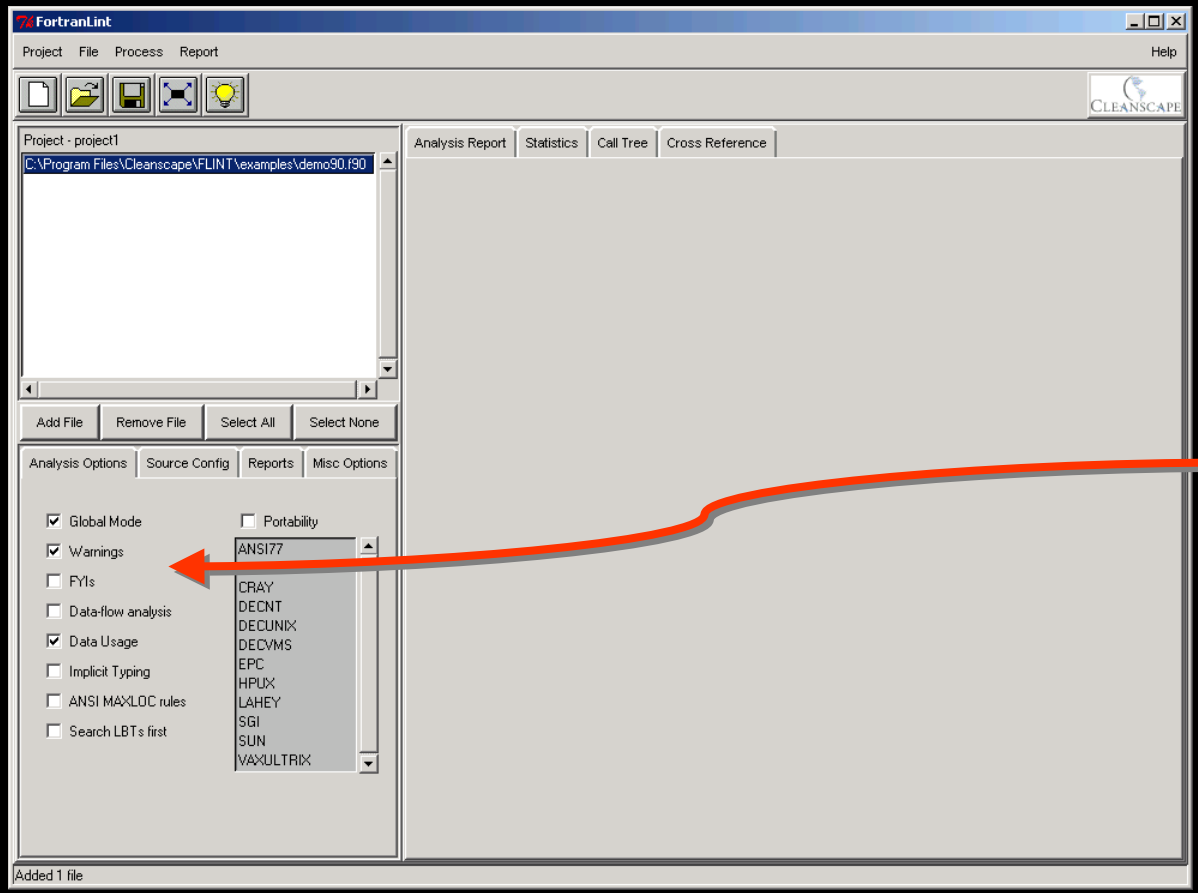
Add File to Project 4/4

- Press "Add File"
  - Or select:
    File > Add file
- Select file(s) to be analyzed
- Click "Open"
- View the project files in Project window



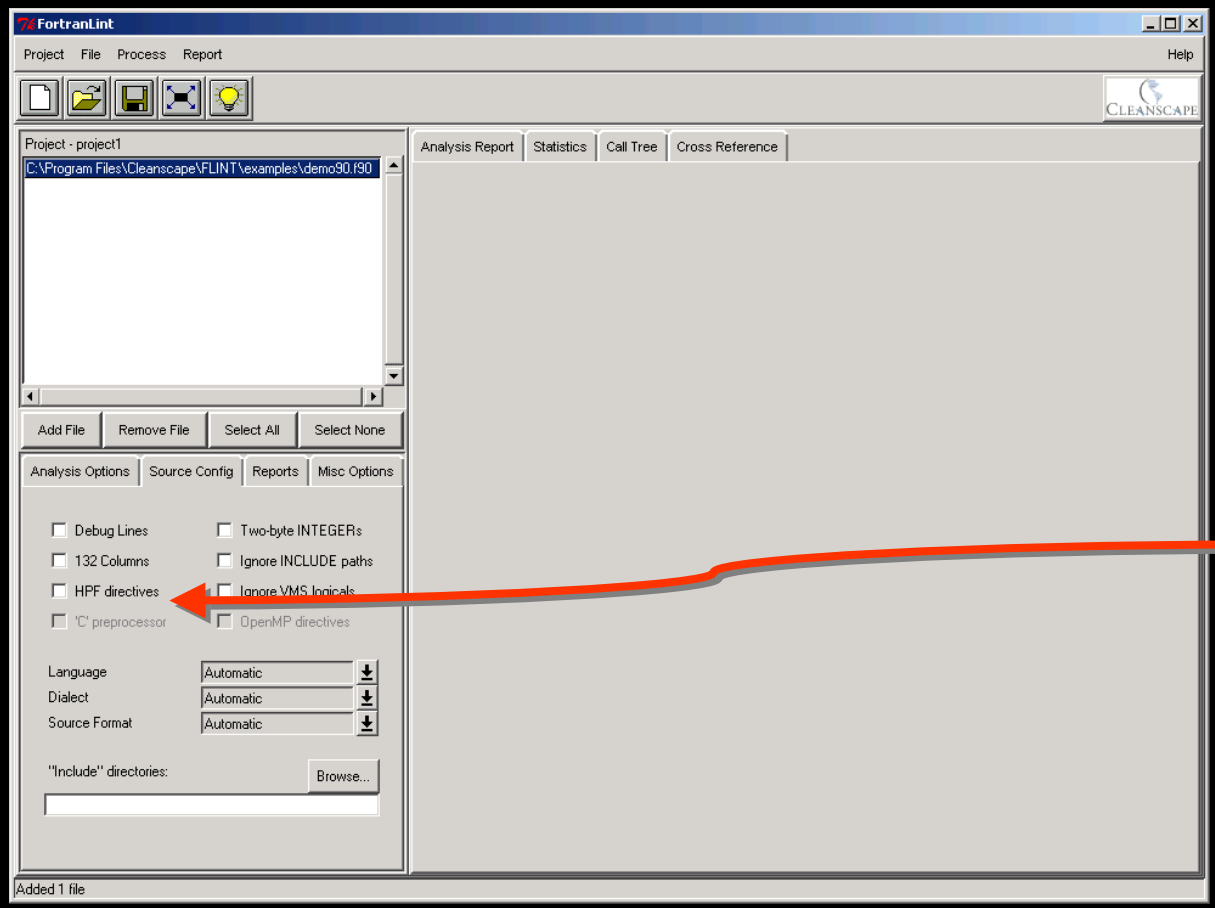
Analyze your source file(s) 1/5

- Select source file(s) to be analyzed



Analyze your source file(s) 2/5

- Select source file(s) to be analyzed
- **Select Test Options**



Analyze your source file(s) 3/5

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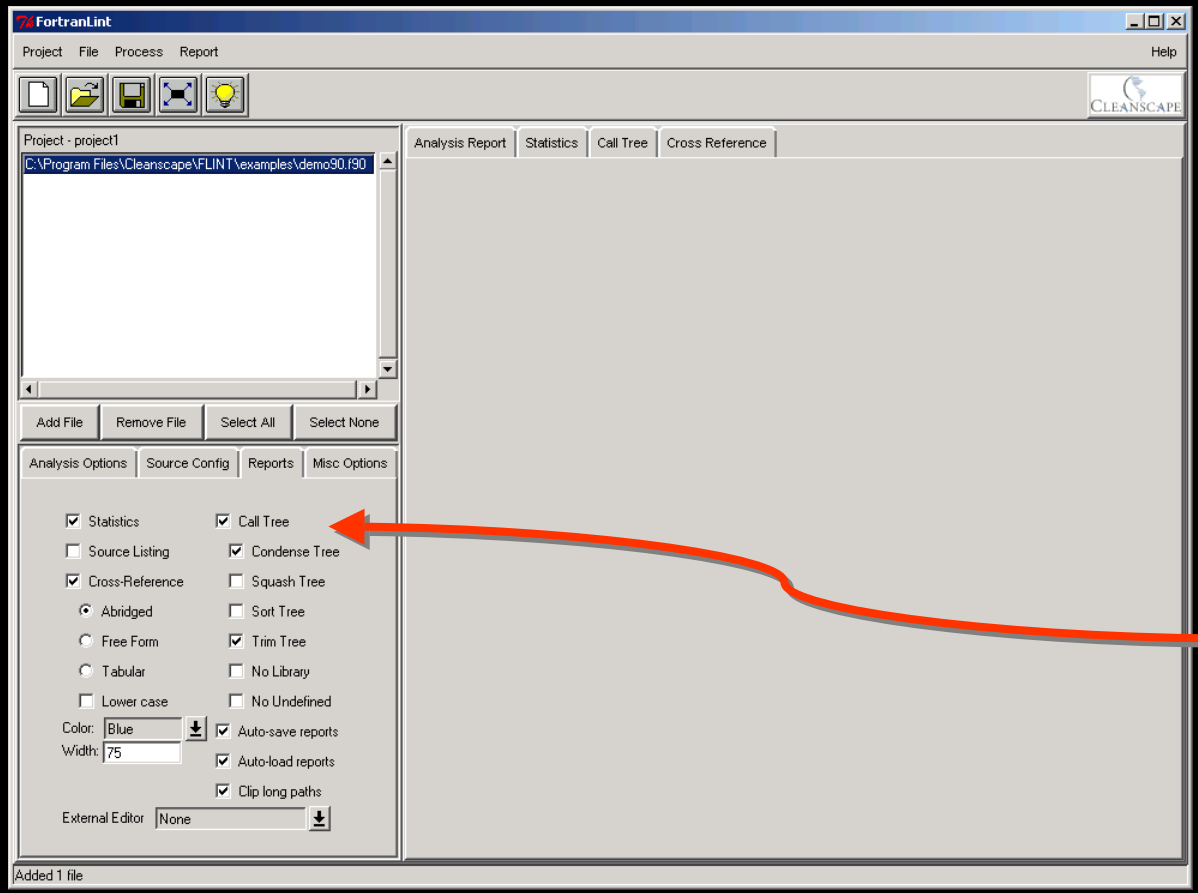
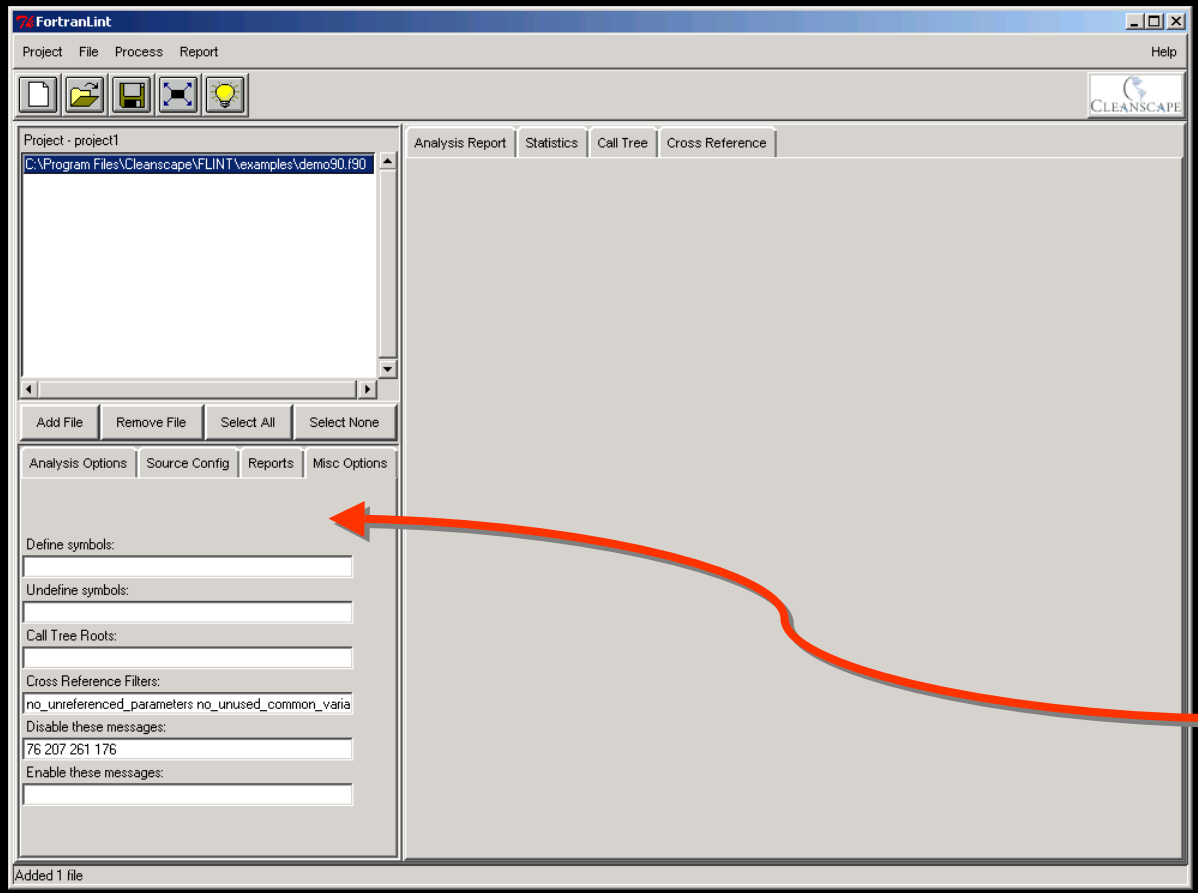
- Select Test Options
- **Select Source Options**



Analyze your source file(s) 4/5

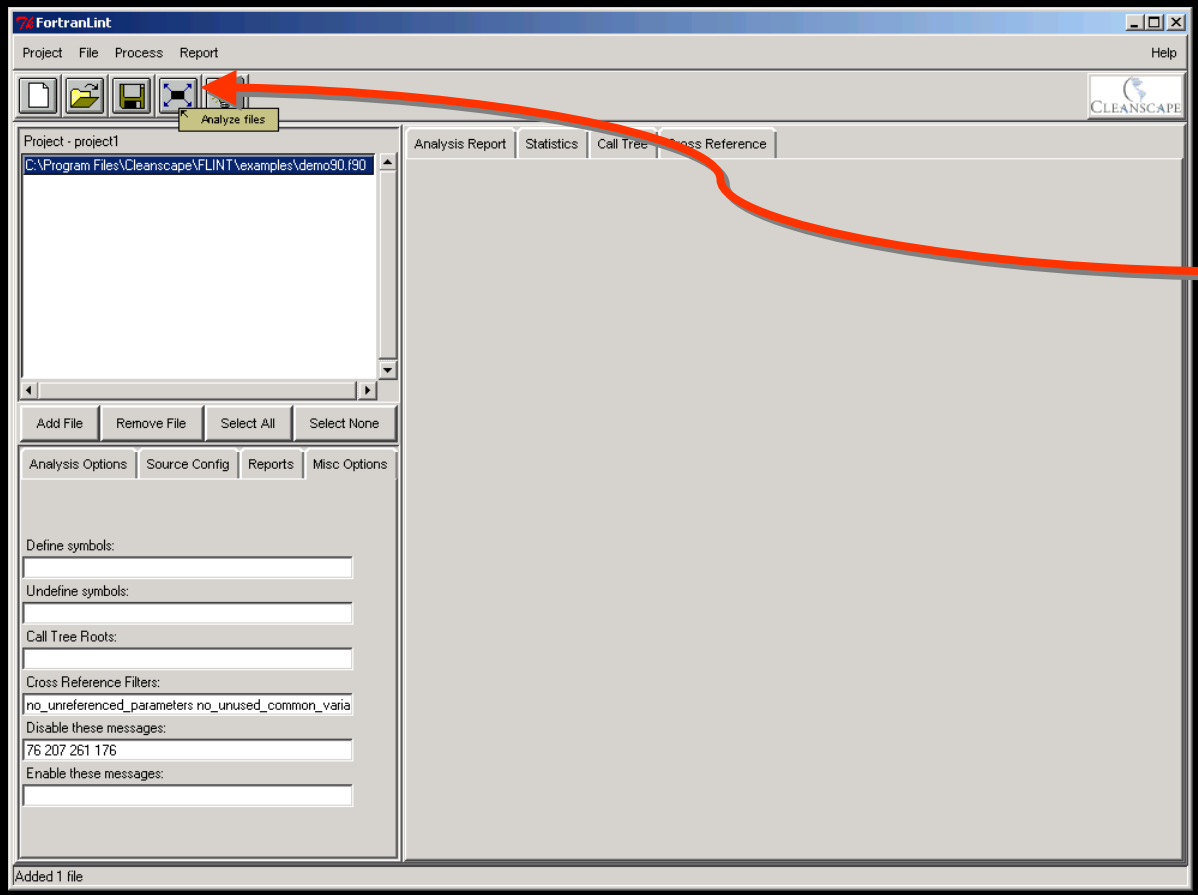
- Select source file(s) to be analyzed
- Select Test Options
- Select Source Options
- **Select Report Options**



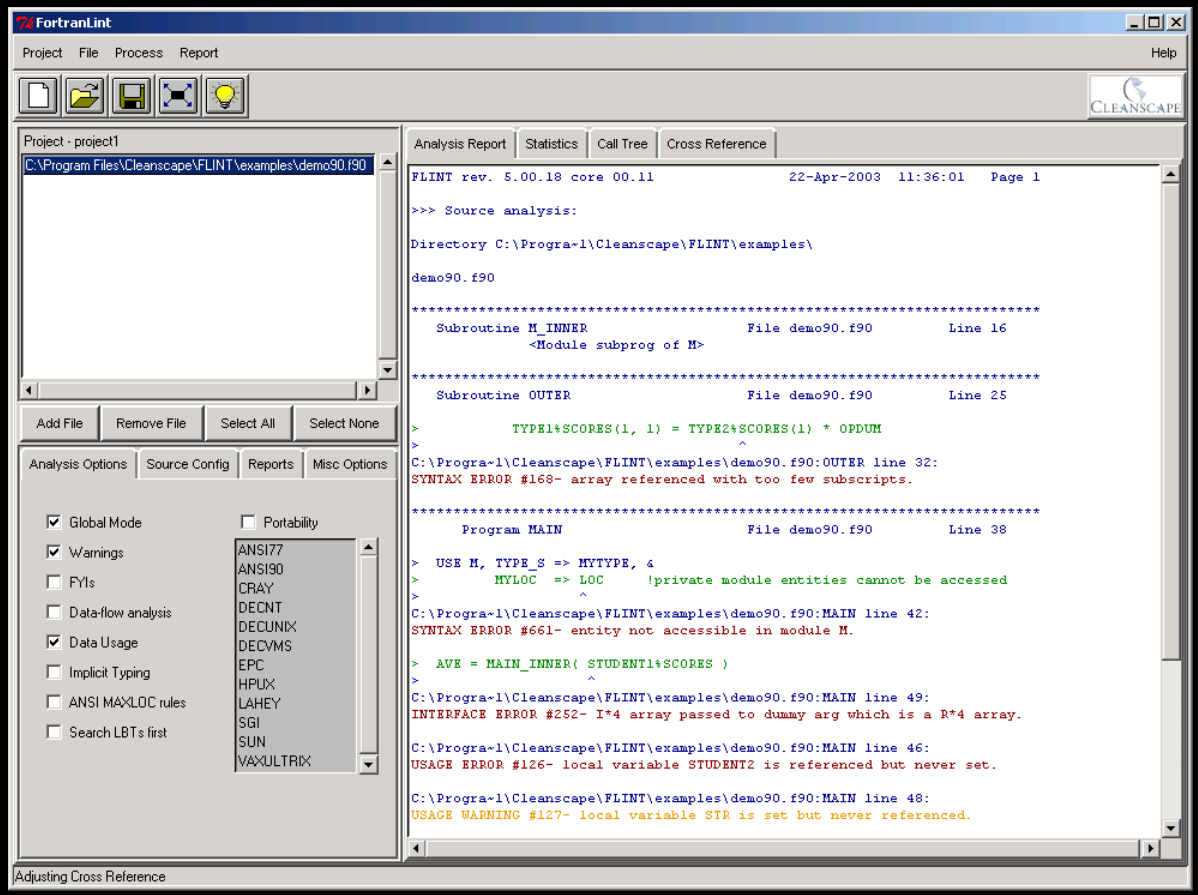
Analyze your source file(s) 5/5

- Select source file(s) to be analyzed
- Select Test Options
- Select Source Options
- Select Report Options
- **Select Miscellaneous Options**

Execute test 1/2

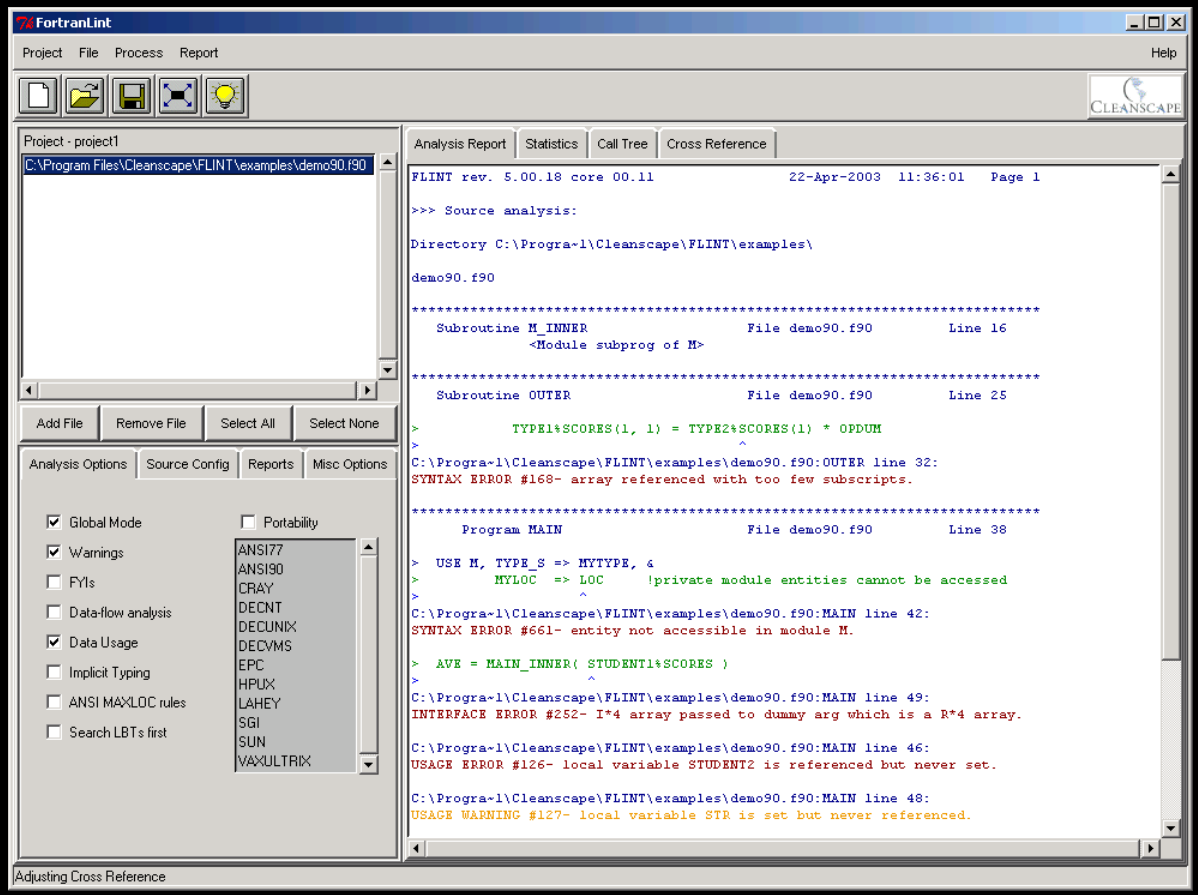


- Push Execute Test button



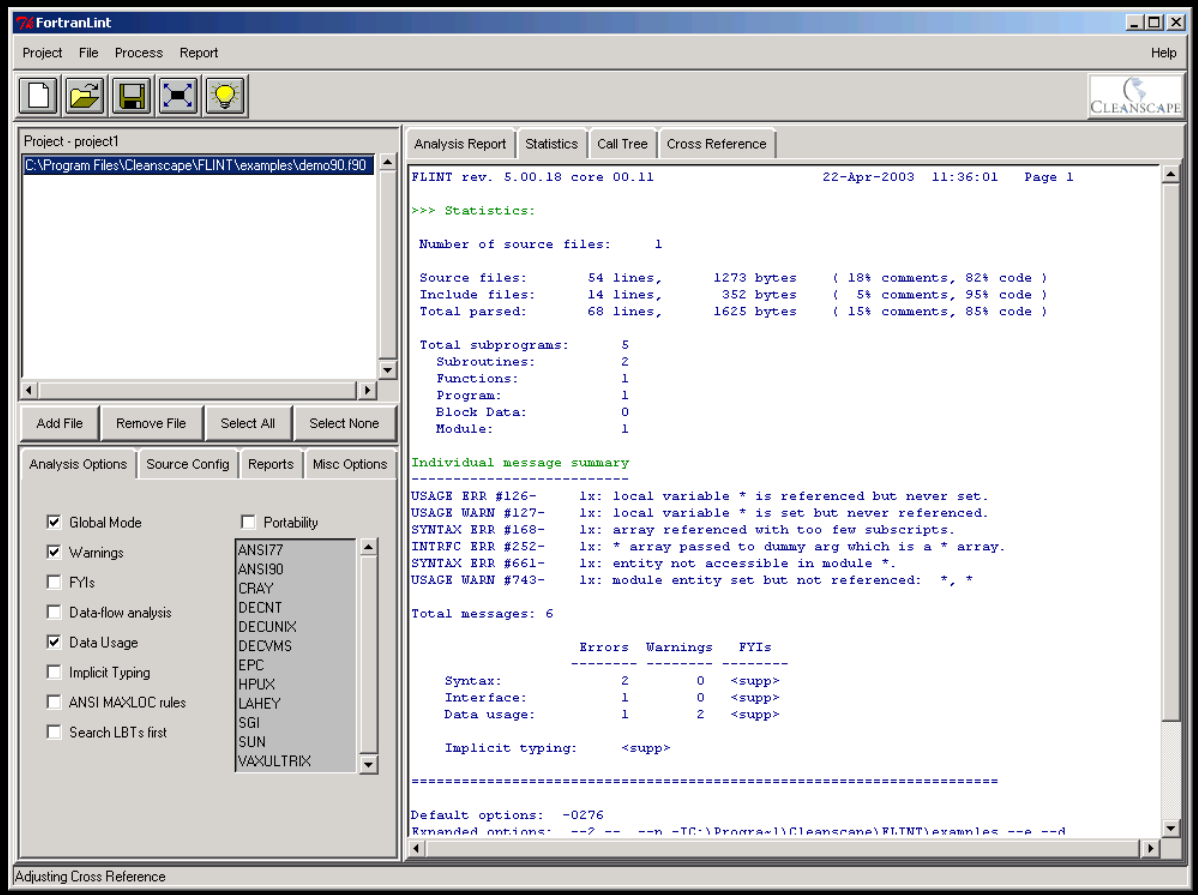
Execute test 2/2

- Push Execute Test button
- **Don't blink!**
  - Almost instantaneous processing for 100,000 lines of code
  - A few seconds for 1 million lines of code



View Reports 1/4

- **Analysis Report**
- **Statistics Report**
- **Call Tree Report**
- **Cross Reference Report**



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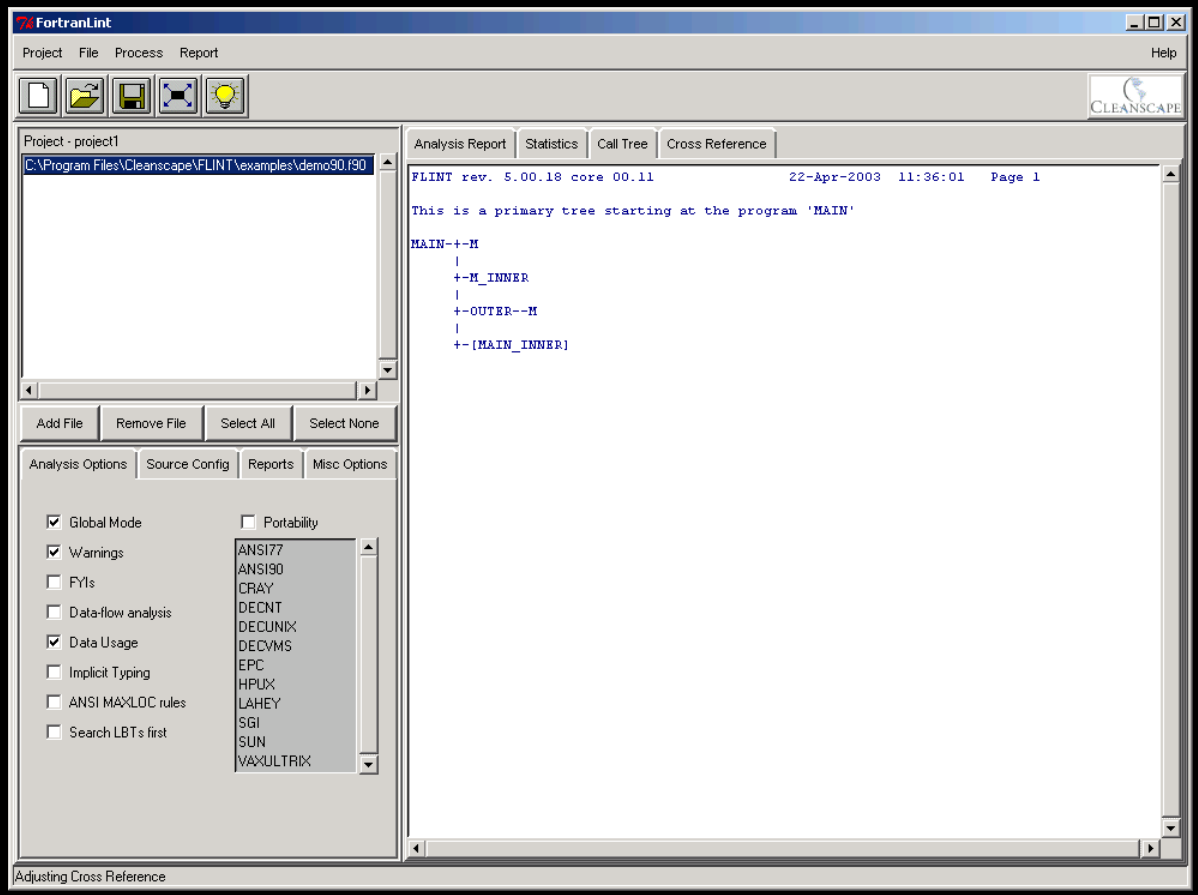

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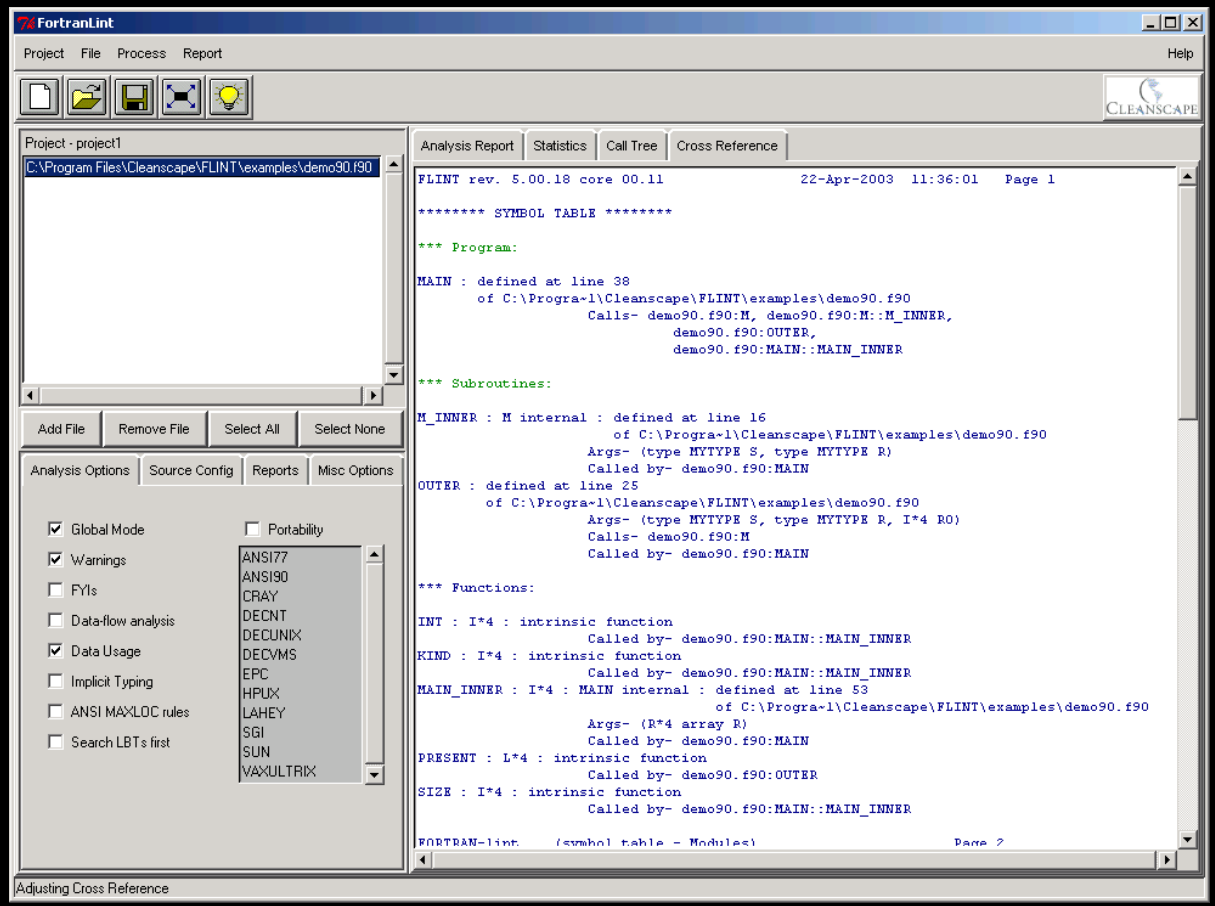

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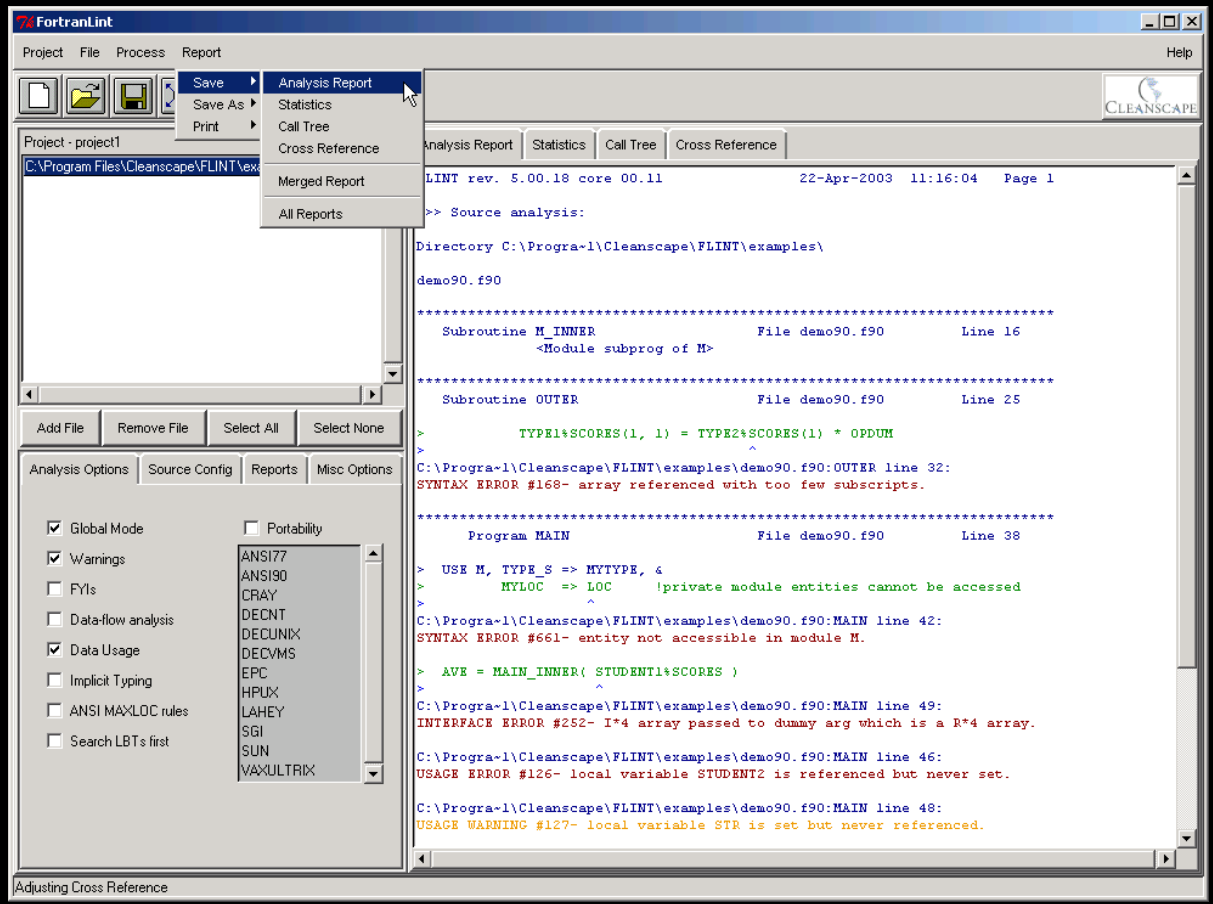
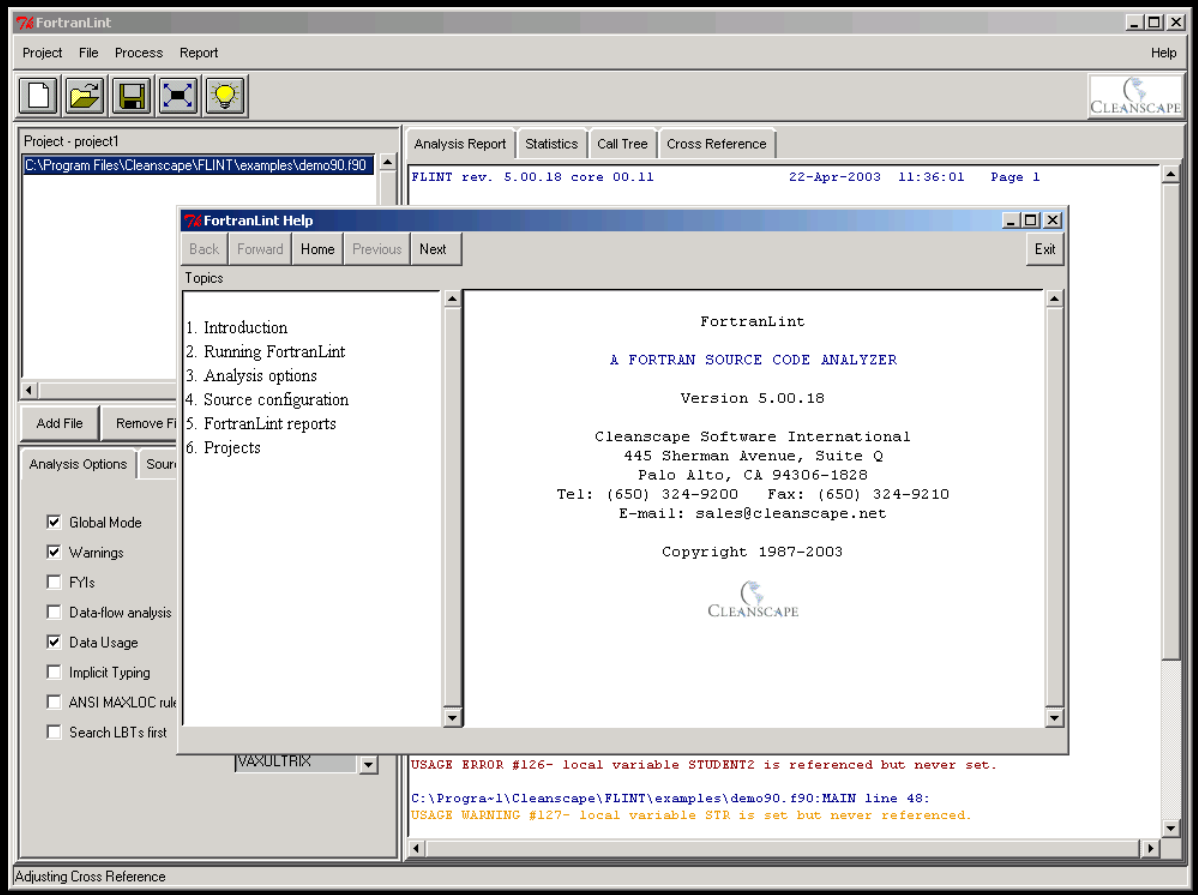


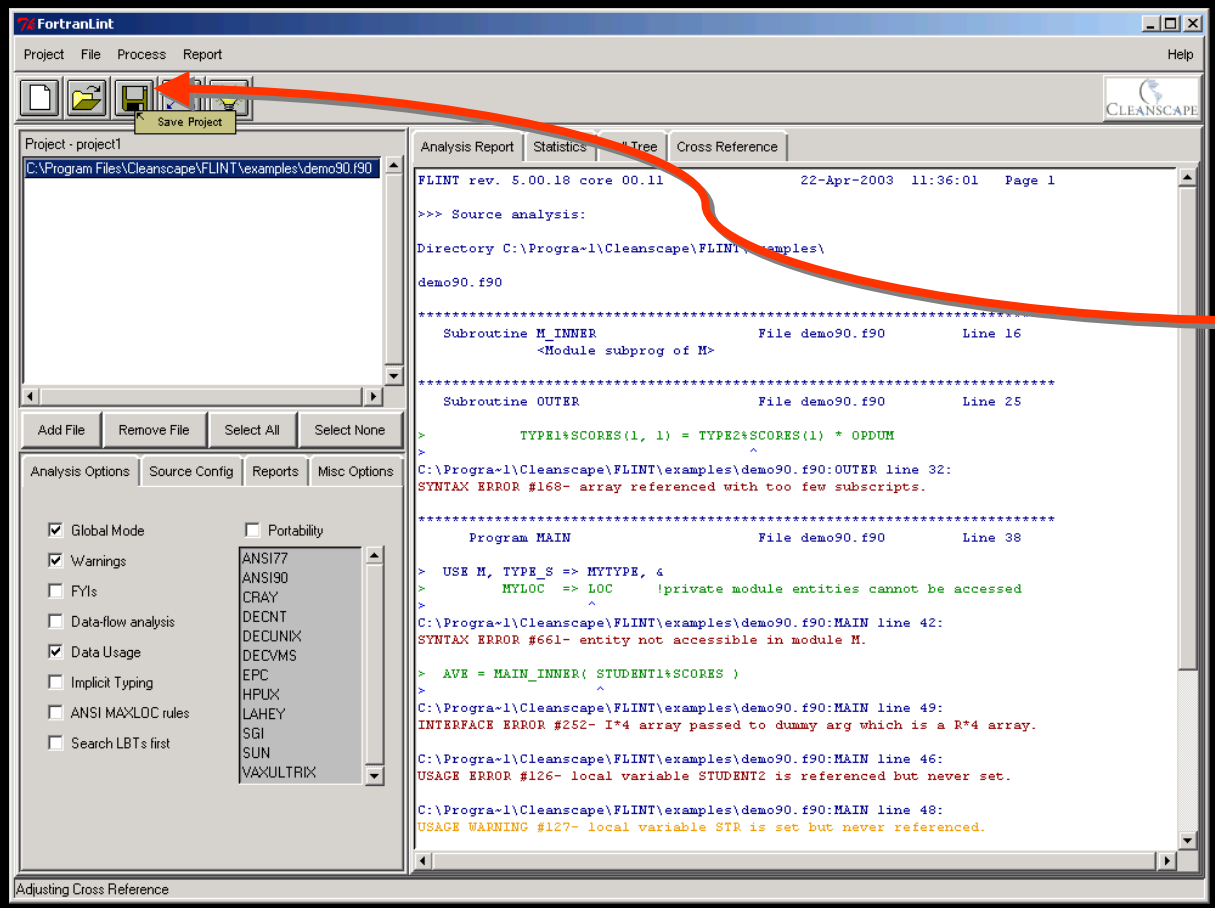
Save & Print Reports

- **Save**
  - Select Report > Save
    - Save each report separately
    - Save merged report
- **Print**
  - Select Report > Print
    - Print each report separately
    - Print all reports



Get help

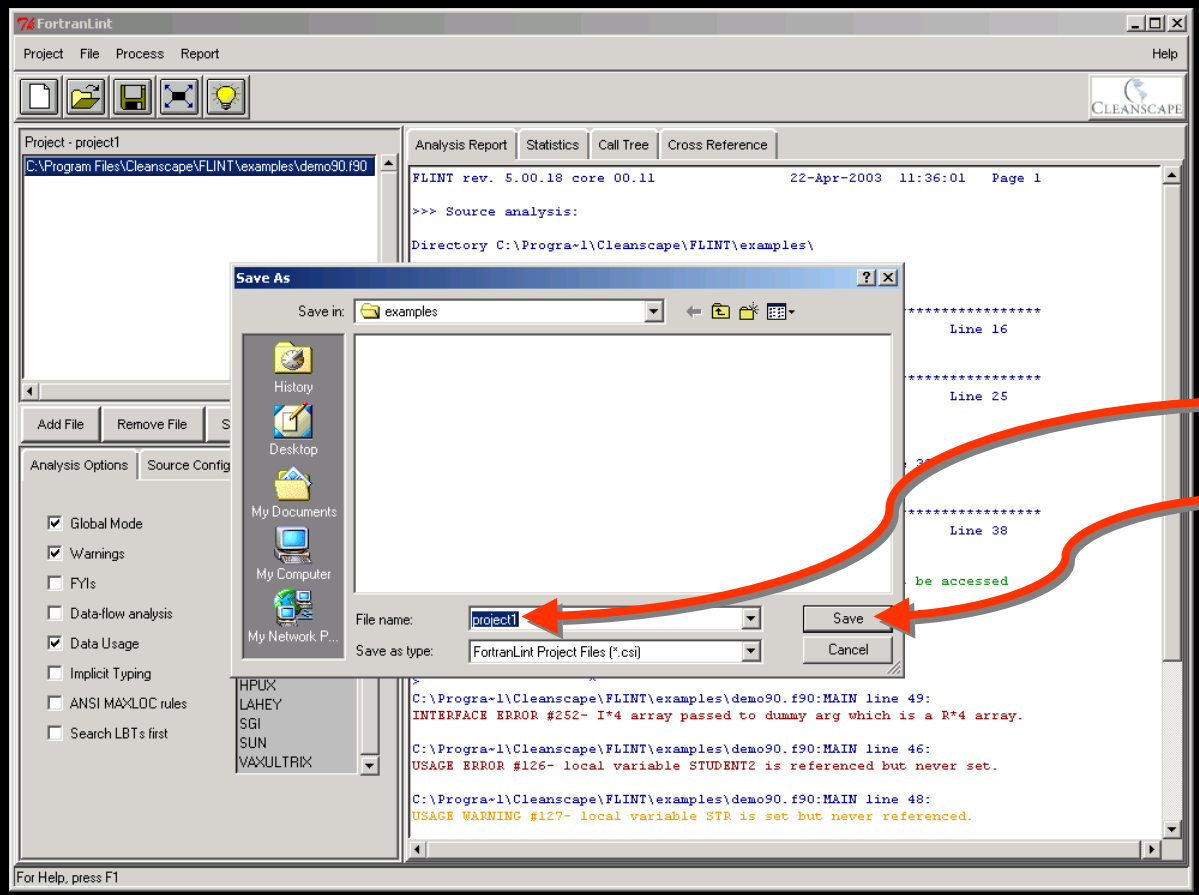
- **Online Help**
  - Push Help button
- **Documentation**
  - Quick Start Guide
  - Users Guide
  - Tutorial
- **Support**
  - http://www.cleanscape.net



Save your project 1/2

- Push Save button
- Type project name
- Push Save

Save your project 2/2



- Push Save button
- Type project name
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Software Development Powerfully Simplified

- Code: Automatically generate code from patterns
- Analyze: Stop problems at the source
- Test: Test and visualize software
- Manage: Automate the software development process

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FortranLint

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