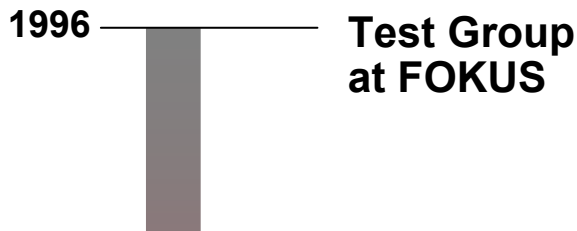# Make TTCN-3 happen!

Introducing TTworkbench as the TTCN-3 environment

Testing Technologies – Facts and Figures
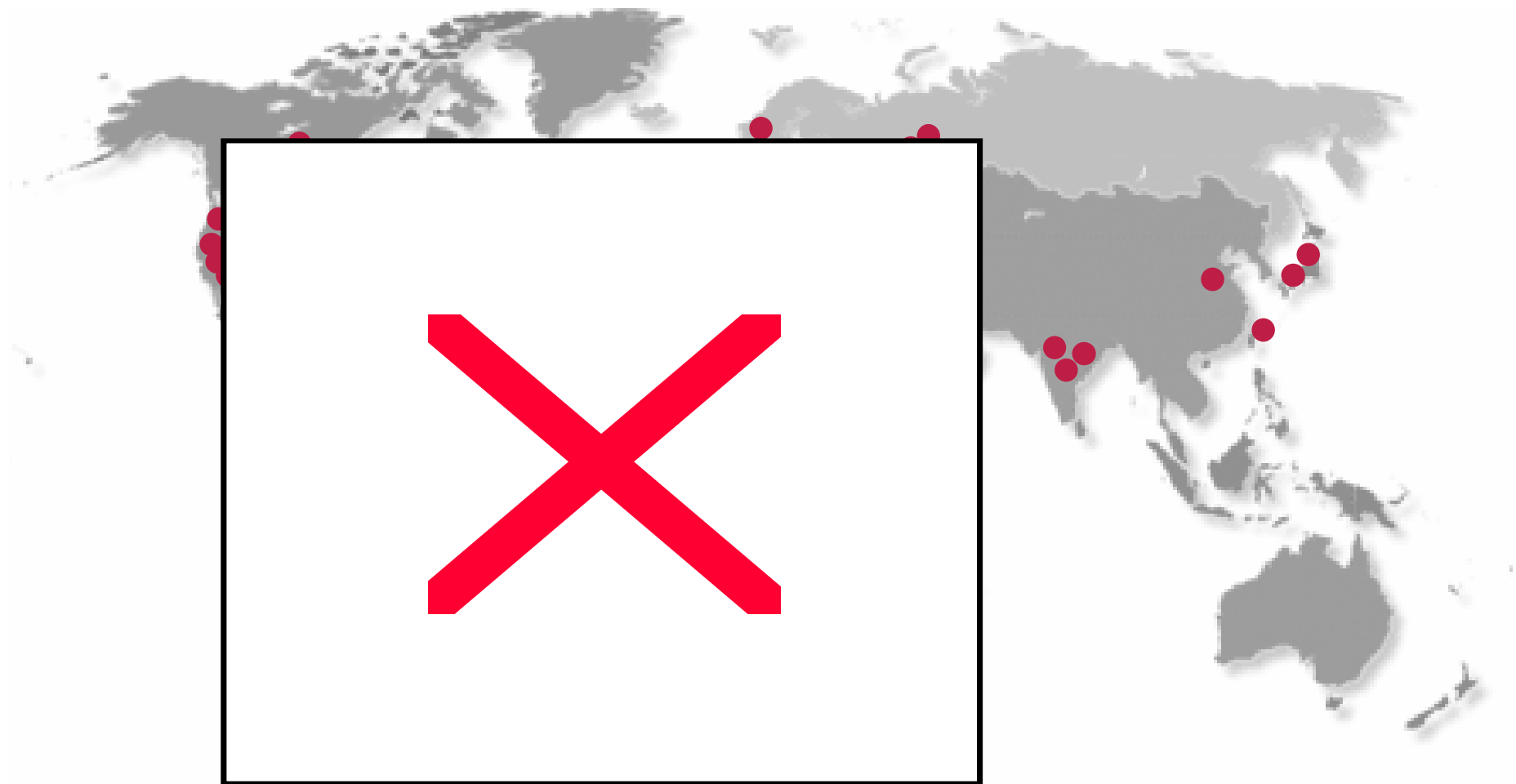
1996 —————— **Test Group at FOKUS**

- Research Group Fraunhofer FOKUS

- Founded in 2000

- Headquarters located in Berlin, Germany

- 2000:

  First commercial TTCN-3 environment →TTthree

  - Compiler and Run-Time Environment

- 2005:

  First full TTCN-3 IDE → TTworkbench

  - Editing, Compiling, Executing

- 2007: Stable and world-wide deployed installation base

Testing Technologies

- Vision
  - Efficient and systematic testing
  - Test automation along the development life cycle

- Mission
  - To reduce your testing costs with ready-to-run test solutions
  - Test automation across technologies, development phases and types of testing
    - Increase your test quality by 100%
    - Reduce re-test costs up to 50%
    - Find errors first and locate their causes

- Task
  - Extended TTCN-3 development tool-set
  - Most advanced test suites and services

Customer Distribution

TTCN-3 in European Projects

Why Testing Technologies?

- We live test automation with TTCN-3
  - We have been the first mover
  - We are continuously expanding our expertise in TTCN-3

- We make test automation work
  - Profit from our expertise
  - Find it captured in
    - The most productive test automation platform
    - Our powerful test solutions

- We are TTCN-3
  - Driving standards in the past and the future

TTworkbench – An Impression of TTCN-3 Tooling

Developers Perspective for Modification

Test Execution

Test Campaign Designer (Test Automation)

Test Parametrization

Result Analyzer

Test Report

Online Logging, Filter, Reporting

Scaling with the Needs

TTworkbench Releases

Development	Execution	Plugins
GFT	TTdebug	TTmex
CL T3doc	TTman	ASN.1
TTthree	TTruntime	IDL CORBA
		WSDL SOAP
		MOST FCat
TTworkbench Core		

■ Express   ■■ Basic   ■■■ Professional
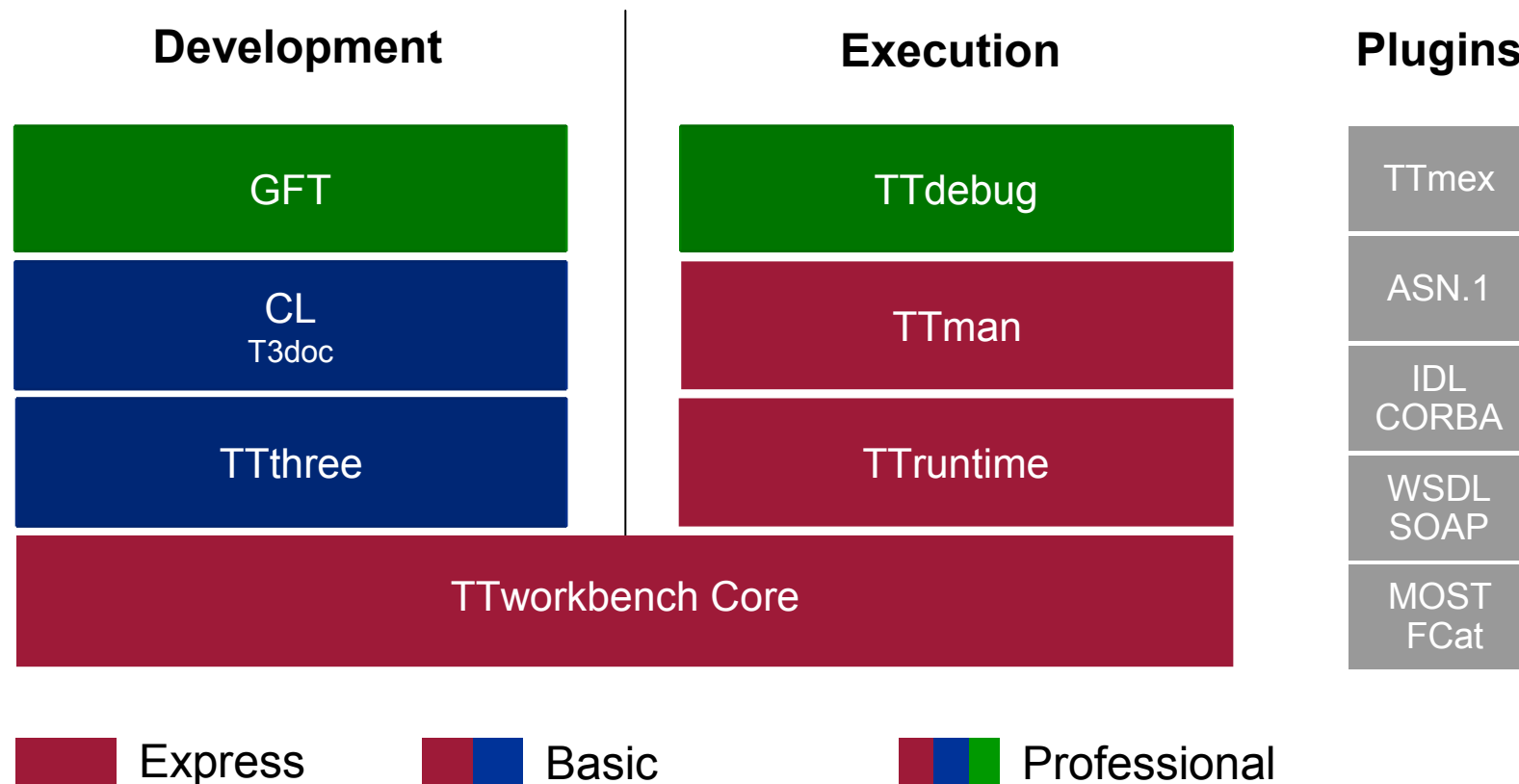
The TTplugin Concept

- TTworkbench plugins
    - For a particular access technology (port)
    - For a particular protocol (codec)
    - To perfom partial external tasks (Ext Funct)
    - To import additional languages
- Test suites can use these plugins

Test Cases			
Port Plugins	Codec Plugins	Ext. Func Plugins	Language Plugins

TTworkbench
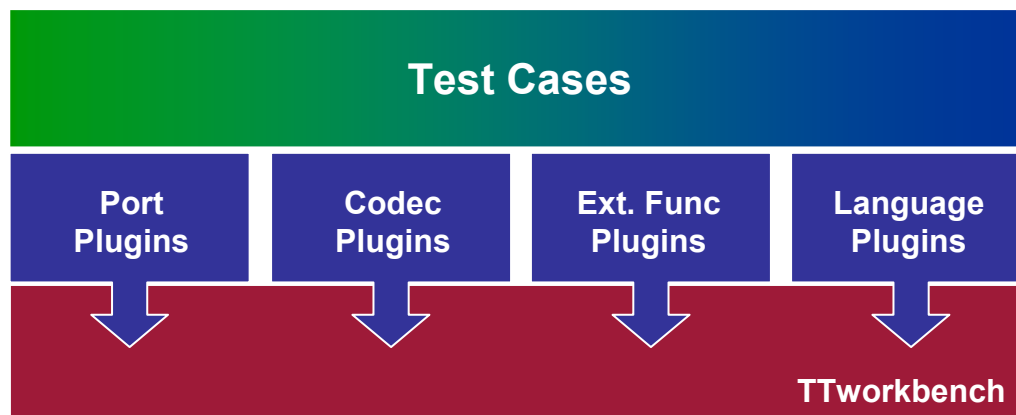
TTCN-3 Reference Implementation Architecture

Future-Proof Investments

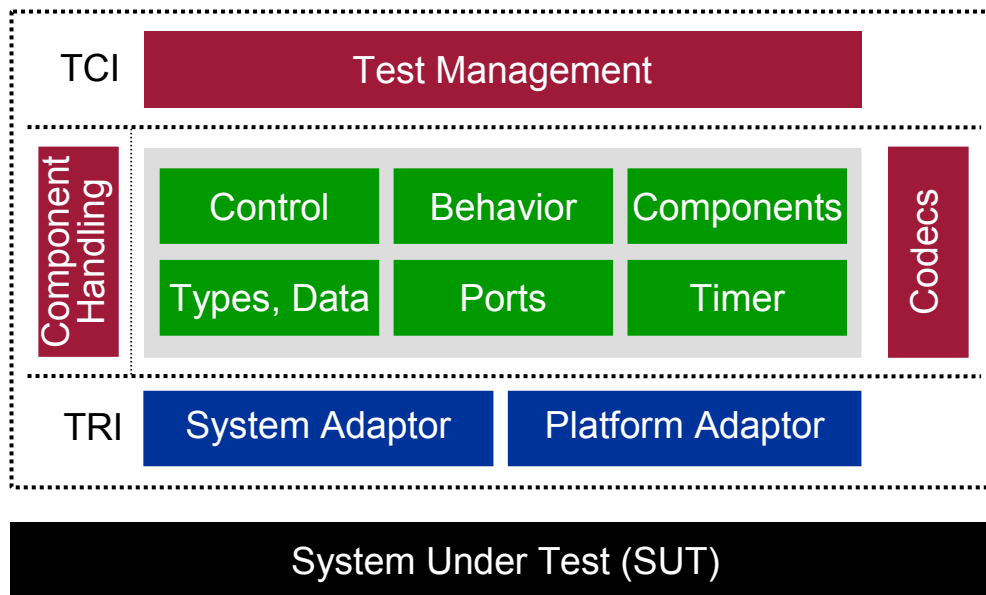| TCI	Test Management			
Component Handling	Control	Behavior	Components	**Codecs**
	Types, Data	Ports	Timer	
TRI	System Adaptor		Platform Adaptor	

System Under Test (SUT)

- ✓ Standardized
- ✓ Adaptable
- ✓ Portable
- ✓ Flexible
- ✓ Scalable

Adaptation to:

- ✓ Test Management and Execution (local/distributed) ⇨ TCI
- ✓ System Under Test ⇨ TRI
- ✓ External Data Representation ⇨ TCI

What's Next ?

- Testing Technologies profits from Open Source projects like
  - Eclipse
  - Apache
  - Etc.

- We are recognizing the relevance of open source projects and have decided to support such OS projects by helping to meet their claim of quality assurance.

The Community Program

- Projects that develop software that is put under an open source license model (e.g. OSI certified licenses)

- Testing Technologies offers TTworkbench
  - Express
  - Basic and/or
  - Professional

- To give OS projects a head-start in the area of test automation

- Apply for partnership at
  - `community@testingtech.com`

Your Path to Partnership

Do you qualify?

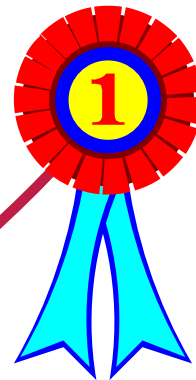Are you an open source project?

Do you want to use test automation?

Are you willing to release your test code?
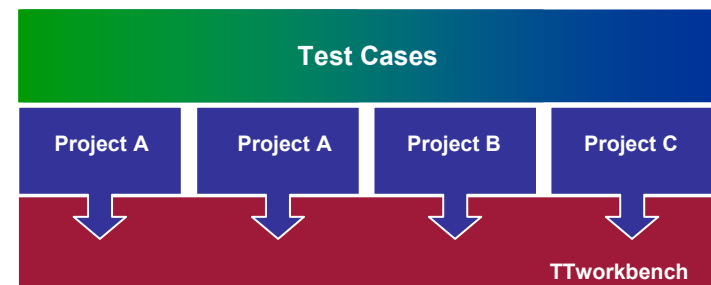
Application Phase

Send an informal application to Testing Tech

- Name and scope of the project
  - Website
  - Contact person
    - etc.

Community Partner

Test Cases

Project A	Project A	Project B	Project C

TTworkbench

The Community

- Codecs and System Adapters are the nuts-and-bolds of every TTCN-3 environment
  - Full support of TRI for System Adapters
  - Full support of TCI for Codecs
- GUI and Command-Line test execution
- Open-Source Plugins for Open-Source Projects!

THANK YOU!

Questions?