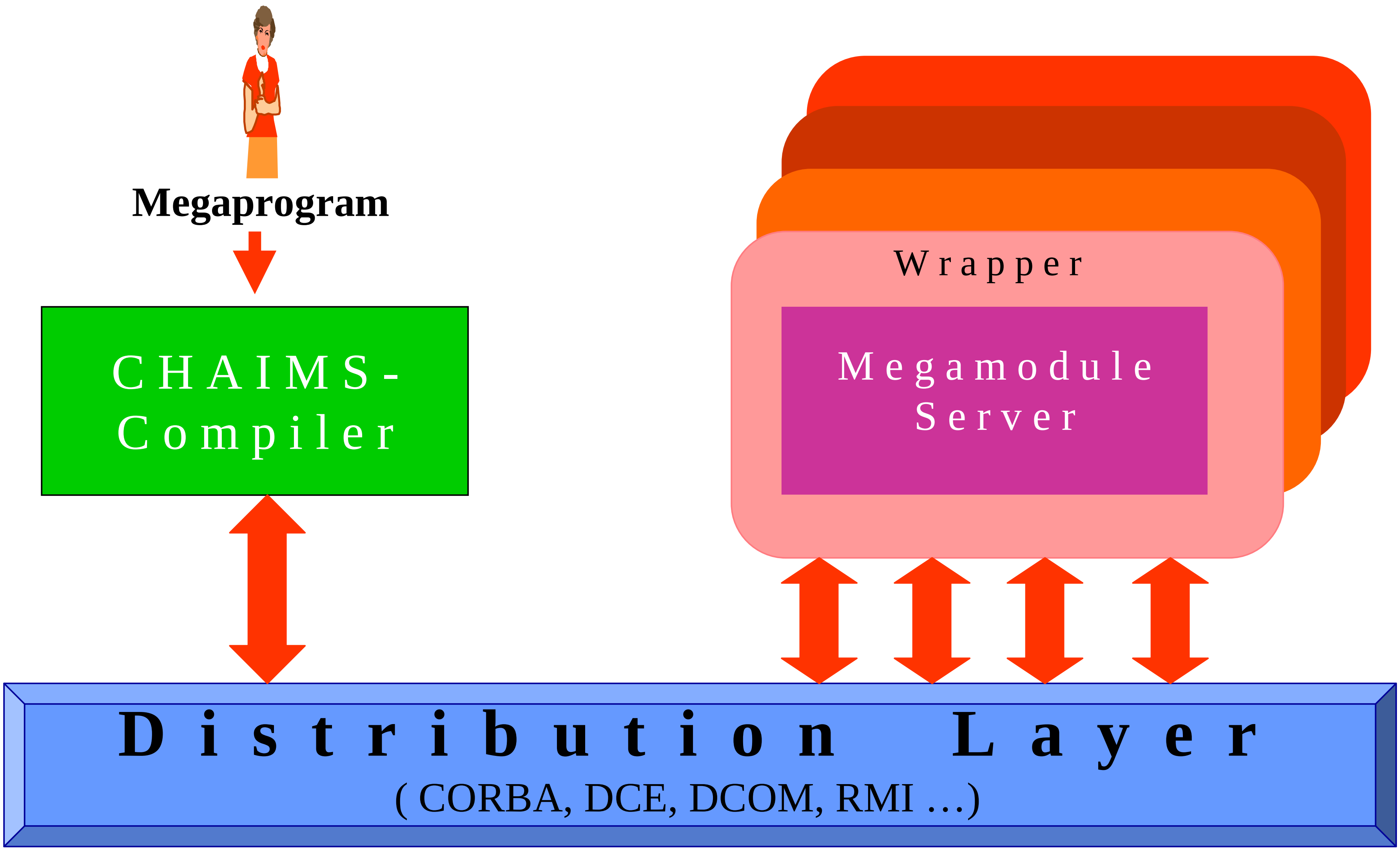
CHAIMS ARCHITECTURE



CHAIMS LANGUAGE

- **Designed for composition.**
- **Simple control operations.**
- **Untyped.**
- **Has following six primitives:**
  - SETUP
  - ESTIMATE
  - INVOKE
  - EXAMINE
  - EXTRACT
  - TERMINATE

CHAIMS-NEW IDEAS

- **Language designed for software composition and reuse.**
- **Simple language decomposes the traditional call statement.**
- **Communication between distributed heterogeneous sources.**
- **Generation of invocation codes for multiple interoperation protocols.**
- **Asynchronous task execution and runtime performance analysis.**

CHAIMS-PROGRESS UPDATE

- **Initial language and architecture defined.**
- **Two application models ready for testing.**
- **Online conceptual demo available.**
- **Paper presented at the fifth SAST97.**
  (IEEE Computer Society, 1997, pages 44-51)
- **CHAIMS megaprogramming language BNF, lexical analyzer and parser ready.**

CHAIMS-NEXT STEPS

(Remainder of FY 1997)

- **Completing the initial CHAIMS compiler.**
- **Development of CHAIMS runtime for CORBA.**
- **Service megamodule being developed to provide easy input and output.**

CHAIMS-LONG TERM PLANS

- **Runtime for DCE and Active-X.**
- **Execute under multiple protocols and platforms.**
- **Optimization of invocation.**
- **Optimization of distributed data flow.**

CHAIMS

Current Project Members

Principal Investigator: Professor Gio Wiederhold, gio@cs.stanford.edu

Catherine Tornabene, catherine@cs.stanford.edu

Kirti Kwatra, kwatra@cs.stanford.edu

Prasanna Ramaswami, pras@cs.stanford.edu

Pankaj Jain, pjain@cs.stanford.edu

Mehul Bastawala, mehul@cs.stanford.edu

Ron Burback, burback@cs.stanford.edu

Contact Information

Web Page: http://www-db.stanford.edu/CHAIMS

Group Mailing List: chaims@db.stanford.edu

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Compiling High-level Access Interfaces for Multi-Site Software

Stanford University, Database Group

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Principal Investigator:	**Gio Wiederhold**	**gio@cs.stanford.edu**
Current Members:	**Kirti Kwatra**	**kwatra@cs.stanford.edu**
	Catherine Tornabene	**catherine@cs.stanford.edu**
	Ron Burback	**burback@cs.stanford.edu**
	Pankaj Jain	**pjain@cs.stanford.edu**
	Mehul Bastawala	**mehul@cs.stanford.edu**