

DPCL Overview

Ted Hoover

Team Lead - Application Development Tools

SP Development - IBM Poughkeepsie

hoov@us.ibm.com

Motivation

- Problems to Solve
 - ▶ Too Many Requirements, Too Few Resources
 - ▶ Need a Better Solution
- Solution
 - ▶ Dynamic Probe Class Library (DPCL)

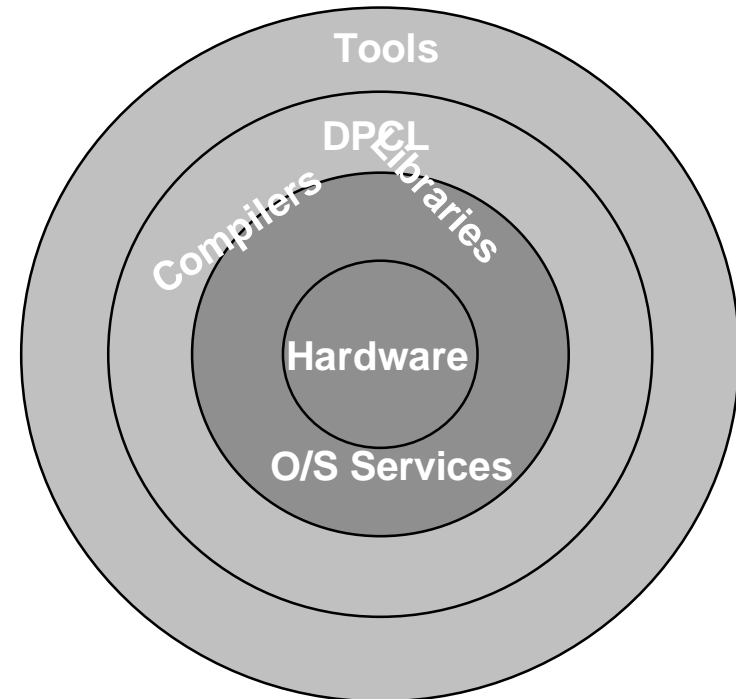
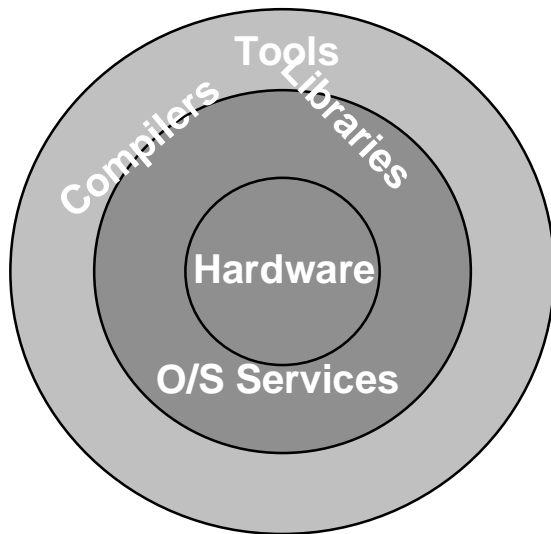
DPCL - Features

- **Dynamic Instrumentation - Software Probes**
- **C++ Based Class Library**
- **Language/Programming Model Independent**
- **Scaleable**
- **Built In Security**
- **A Platform to Enable Tools Developers To Build Tools With Less Time And Effort**

DPCL - Tools Platform

**Traditional
Tools
Structure**

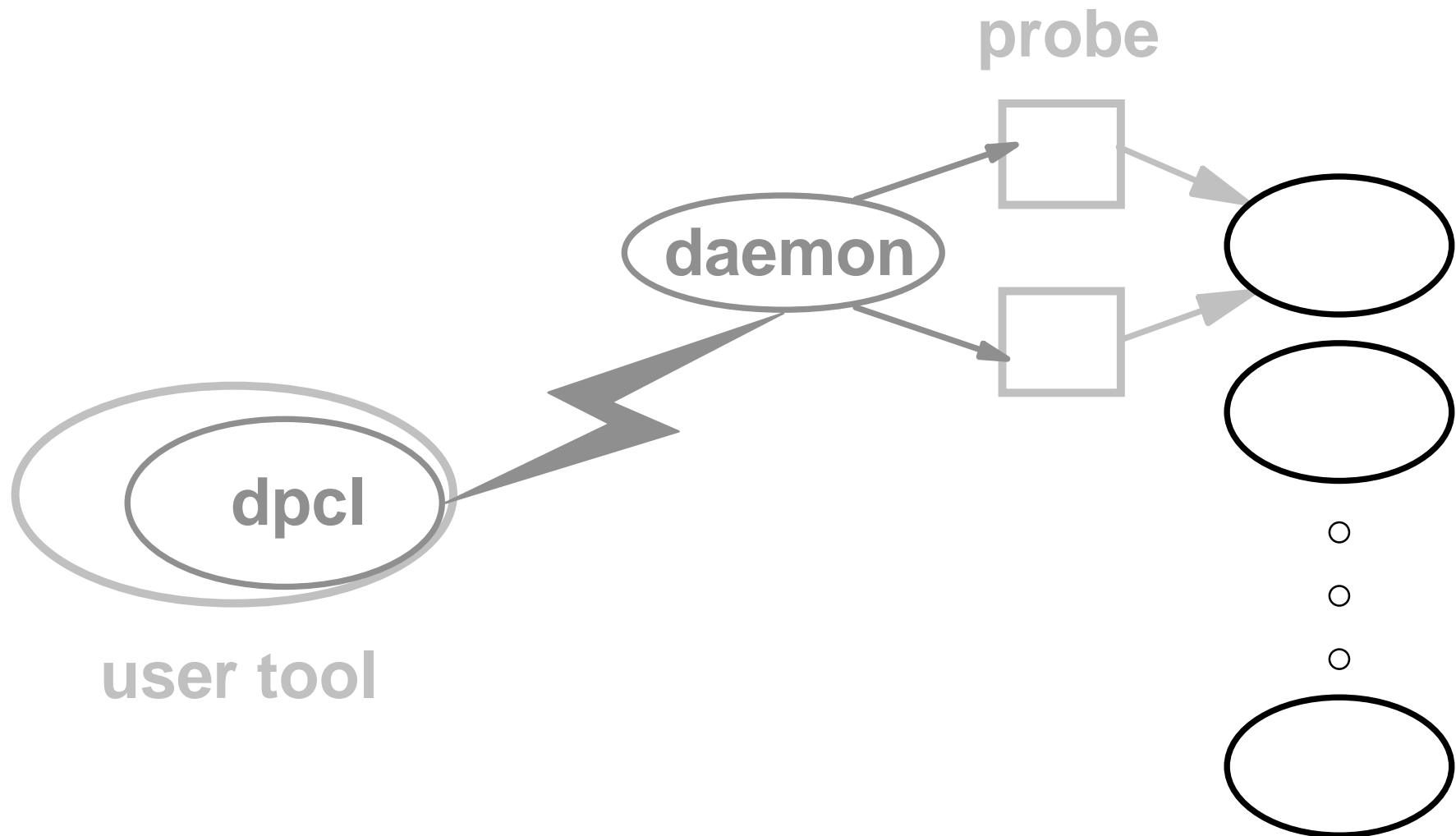
**Tools with
DPCL**



DPCL - Classes

- Application
 - ▶ PoeAppl
- Process
- SourceObj
 - ▶ Program, Modules, Functions, Data, Blocks
- InstPoint
- ProbeExp
- ProbeModules
- Phases

DPCL- Structure



DPCL / DynInst Library

- Used By DPCL Daemon
- IBM Implementation in Progress
- Platform Independence
- Portability

DPCL - Status

- **Beta Version Released June 1998**
- **Beta 2 Jan. 1999**
- **PTools Project**
- **Promote as a Cross Platform Standard**
 - ▶ **Joint Project Agreement (JPA)**
- **Platform For Future Tools Development**