Sun ONE Studio 4 Überblick und Demo

Kurt Greger
Systemberater (presales)
Sun Microsystems GmbH

Sun Open Net Environment
Vision, Architecture, Platform, Expertise

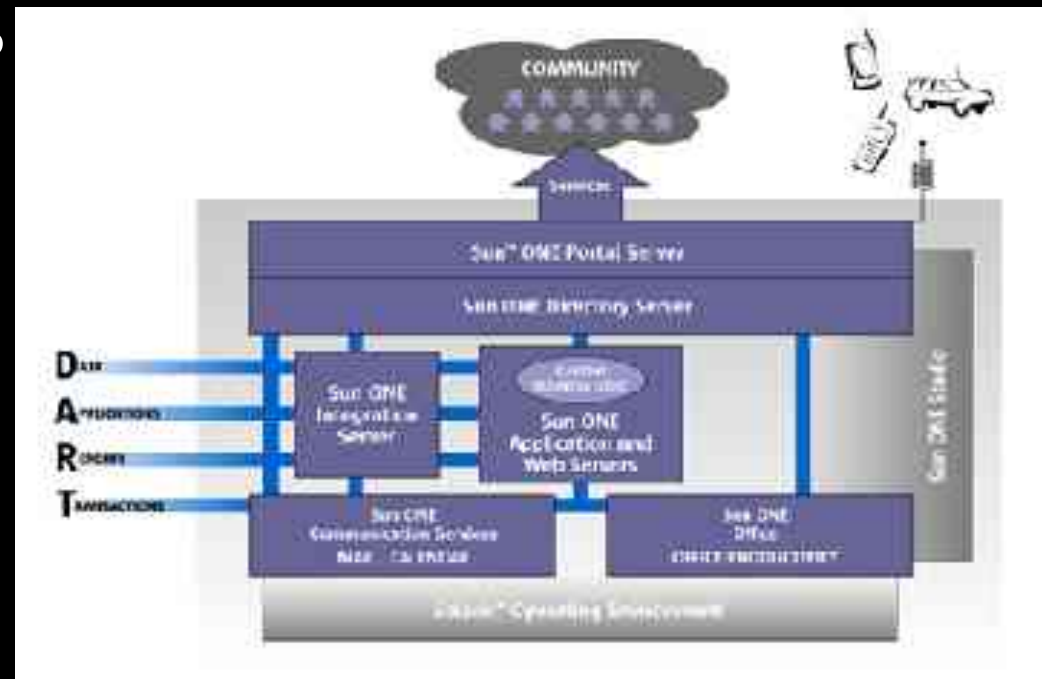- Open, Standards-based Architecture

  - LDAP, XML, Java, SOAP

  - "integratable stack"

- Services on Demand

  - Leverage information

  - Web applications

  - Web services

- Integrated Platform

  - Sun ONE Infrastructure Software

  - Solaris Operating Environment

  - Sun ONE Studio

Sun ONE Studio today

JavaWorld
Fueling Innovation ™
April 2002

SOFTWARE Development online
4/5 Stars

PC MAGAZINE
4/5 Stars

CROSS ROADS · **A-LIST AWARDS 2001**
March 2001

- Over 1,977,000 downloads
- Over 4.1 million distributions
- Rave reviews and awards (JavaWorld, PC Magazine, Software Development Online, InfoWorld)

- "We evaluated every Java IDE available and none offered the flexibility and freedom of the Forte for Java product."
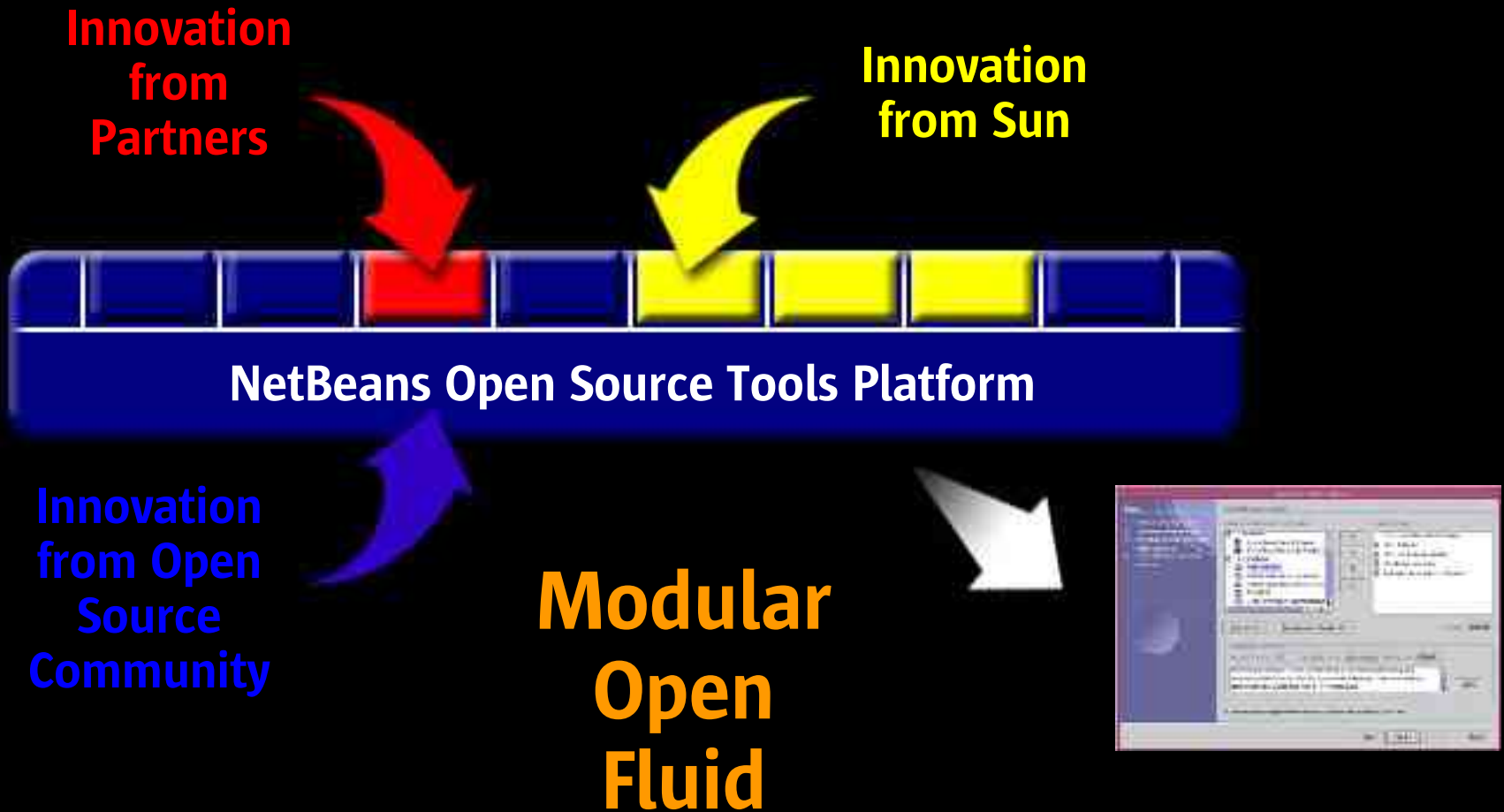 Tim Ferrell, IT Director McGee Corporation

INFO WORLD .COM
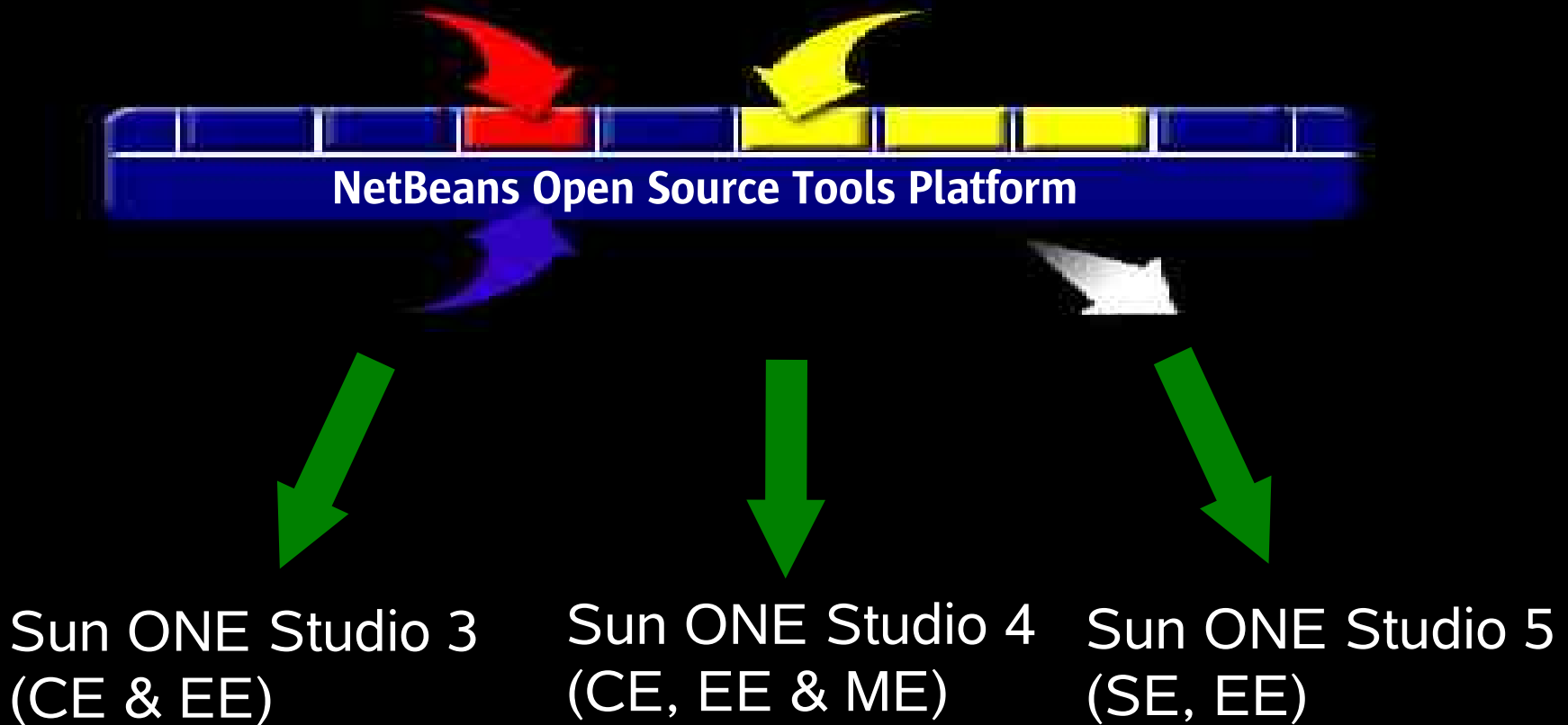Forte for Java
Oracle JDeveloper
InfoWorld Review, April 2001

ADT mag.com
2001 Innovator Award

Will you be the millionth developer to download Forte™ for Java™ ?
April 2001

Sun ONE Studio Approach

Innovation from Partners

Innovation from Sun

NetBeans Open Source Tools Platform

Innovation from Open Source Community

Modular Open Fluid

NetBeans & Sun ONE Studio

NetBeans Open Source Tools Platform

Sun ONE Studio 3
(CE & EE)

Sun ONE Studio 4
(CE, EE & ME)

Sun ONE Studio 5
(SE, EE)

Sun ONE Studio – based on an Open Tools Platform

- Sun ONE Studio based on the NetBeans framework

  – can be extended by the developer community

- Open source ensures APIs are not controlled by any one vendor

- The IDE is a platform:

  – Provides feature rich functionality

  – ISV partners provide value added plug-ins that easily integrate into the IDE

  – ISVs can use NetBeans to develop own tools and solutions

Sun ONE Studio Partners

Modular Architecture

App Servers
- BEA
- Oracle
- IONA
...and more

Wireless
- Nokia
- Siemens
- Lutris
...and more

Modeling
- Rational
- Embarcadero
- Gentleware
...and more

Persistence/OR Mapping
- Thought Inc.
- HYWY Software
- Persistence
...and more
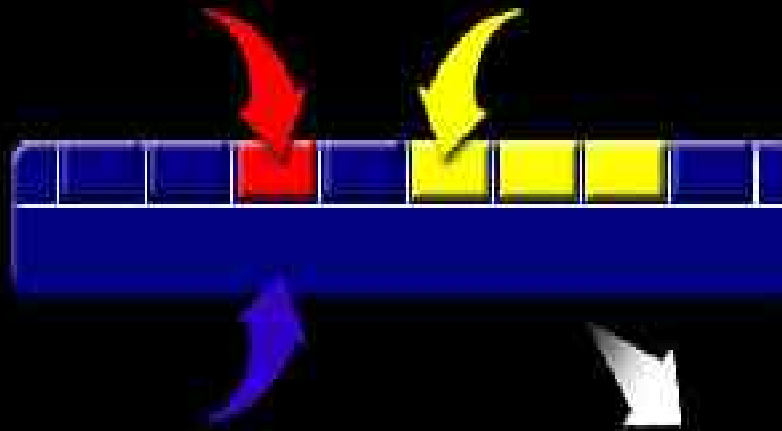
Testing/versioning
- Sitraka
- Rational
- Compuware

Web Services
- ebyz
- systinet
- Iopsis
- Killdara
...and more

XML/EAI
- WebMethods
- Vitria
- BDI Systems
...and more
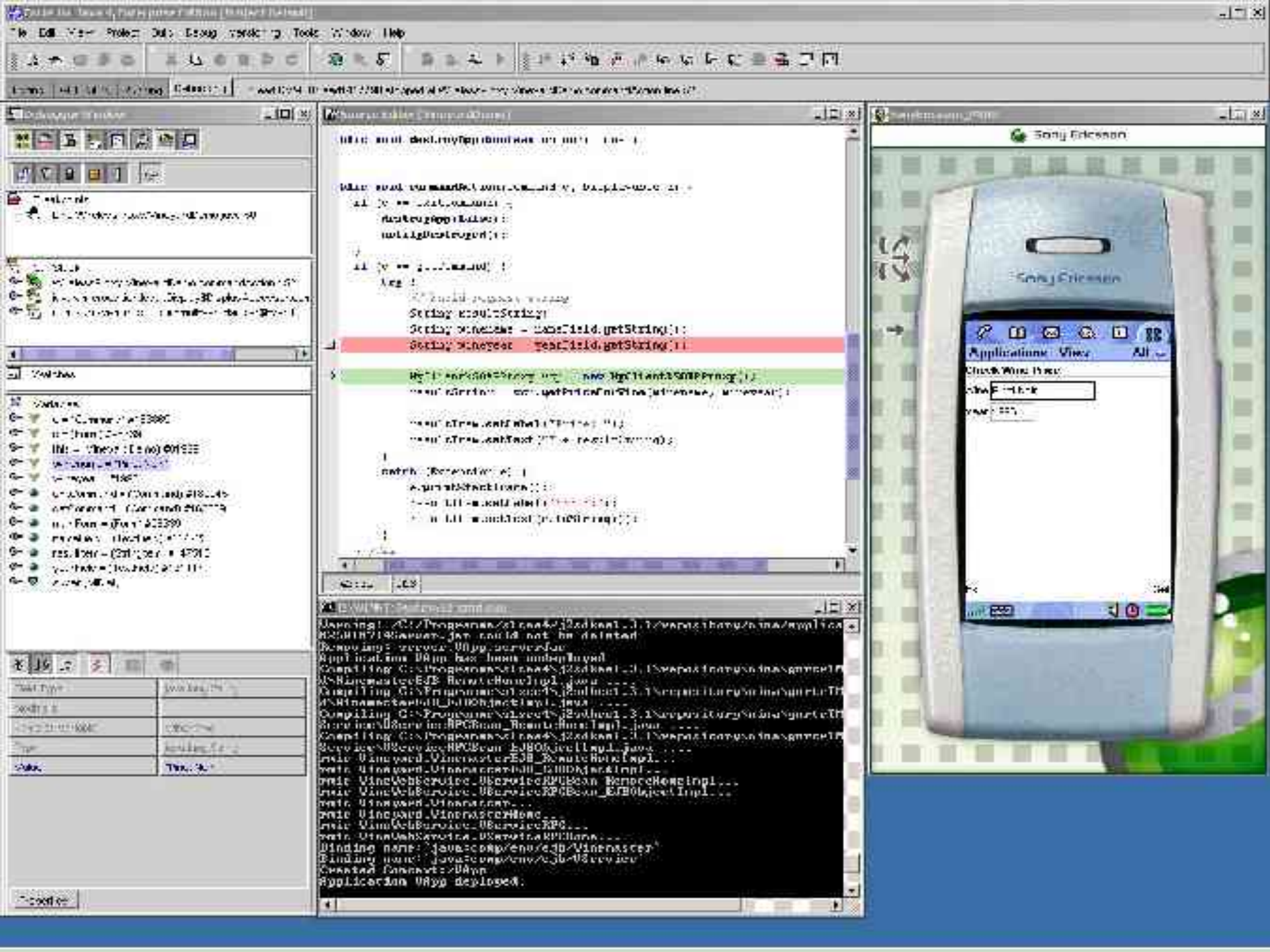
Sun ONE Studio
Partner Modules

- ## Embarcadero Describe

  - UML Modeling Tool
  - Accelerate Learning
  - 2 way Editing in the code or model

- ## Aqris RefactorIt

  - Manage Large Code
  - Easily find and rename methods, classes
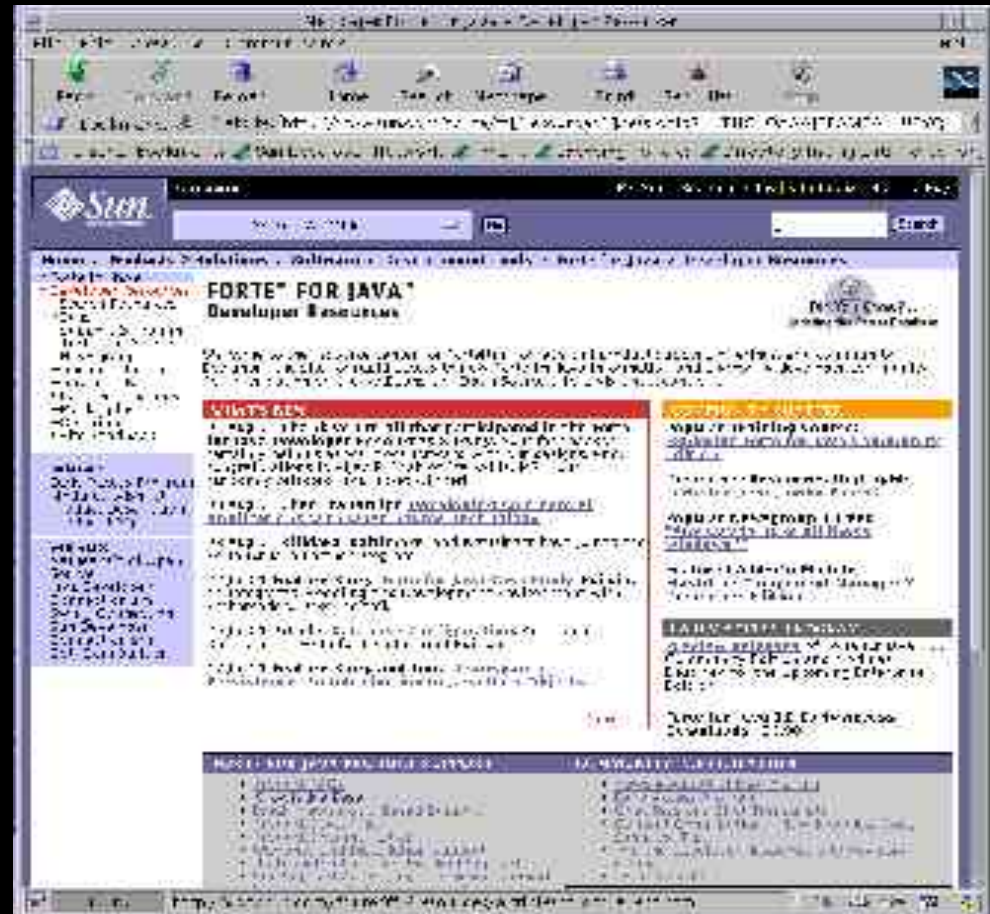 - Check Dependencies

RefactorIT features

- Rename
  - Renames a method, field, type, package or prefix. Updates all references

- Move Class
  - Moves a class or interface into another package

- Encapsulate Field
  - Replaces direct field usage with corresponding accessor methods

- Create Factory Method
  - Replaces Constructor with a Factory Method

- Extract Method
  - Analyzes the selected piece of code and extracts it into a separate method

- Extract Super-class/Interface
  - Extracts selected methods and fields into new superclass or interface

- Minimize Access Rights
  - Determines and changes access modifiers for class fields and methods

- Create Constructor
  - Creates constructor on group of field declarations that initializes these fields

# Developer Ressources Portal

http://forte.sun.com

- Product Support
  - FAQs, Knowledge Base, Newsgroups, Bug Fixes, Docs, Fee Based Support, Web Based Training

- Community Participation
  - Newsgroups, Early Access Program, Chats, Contribute Content, Advisory Council, Newsletter

- Java programming support

- Submit and review bugs

- Download patches and modules

JSP Debugging - HTTP Monitor

Source level debugging
Integrated with Web
Containers (Tomcat/iWS)
HTTP Monitor records /
plays back web requests

Sun ONE Studio Update Service

- Powerful Web-based Service for Developers

  - Wizard in the IDE

  - Patches

  - Module Updates

  - New Modules
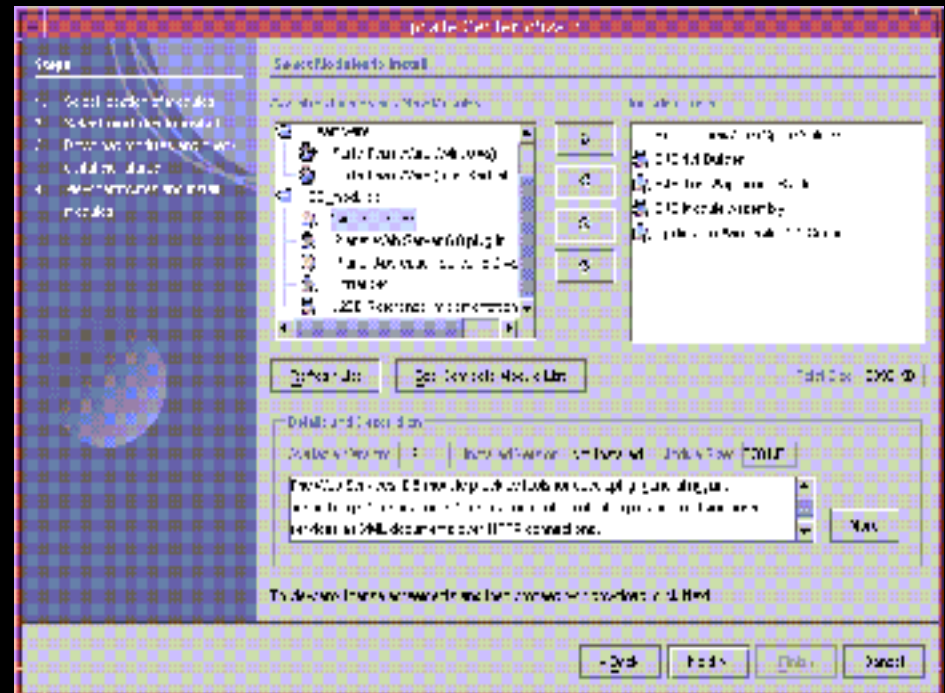
Join the Early Access Program at
http://forte.sun.com/eap/

Sun ONE Studio Product Family

- Java Tools
  - Mobile Edition
    - Free IDE: Development of CLDC/MIDP Applications
  - Community Edition
    - Free IDE: J2SE and Web Tier Development
  - Enterprise Edition
    - J2EE 1.3 and Web Services Development
- Native Solaris Tools
  - Compiler Collection (command-line compilers and debuggers)
  - Enterprise Edition for Solaris
    - Multilanguage IDE for Java, C, C++ and Fortran

Sun ONE Studio 4 Mobile Edition

- Standalone IDE or add CE/EE

- Highly Optimized Environment for J2ME MIDP/CLDC Development

    – MIDlet & MIDlet Suite Templates

    – Compilation, Pre-verification and Execution

    – Source Level Debugging

    – JAD/JAR file generation and J2ME Code Completion

    – UEI allows easy target emulator switching

- Distribution Partners

Sun ONE Studio 4 Community Edition

- Basic Java Application Development
  - JavaBean builders, GUI Form Editor
  - Latest J2SE SDK Support V. 1.3.1, 1.4.0, 1.4.1
- Dynamic Content Web Apps
  - JSP, Servlet, JSTL and JDBC support
  - HTTP Transaction monitor & integrated Tomcat
- Update Center
- Standard Environment Support
  - Ant, CVS and generic VCS

Sun ONE Studio 4 Enterprise Edition

- J2EE 1.3 Compatible IDE
  - EJB2.0 (incl. MDB), JSP 1.2, Servlets 2.3
  - Package and deploy .rar, .jar, .war, .ear files
  - Connector Builder to support JCA resource adapters
  - Portlet Builder, SmartGuides, Database Support
  - Concentrate on Building Business Logic
- Web Services Support
- J2EE 1.3 Application Server Support
- Supports:
  - Windows NT, 2000 and XP,
  - Solaris 8 and 9, RH Linux 7.2

Application Server Integration

Plugging Modules for:

- J2EE Reference Implementation 1.3.1
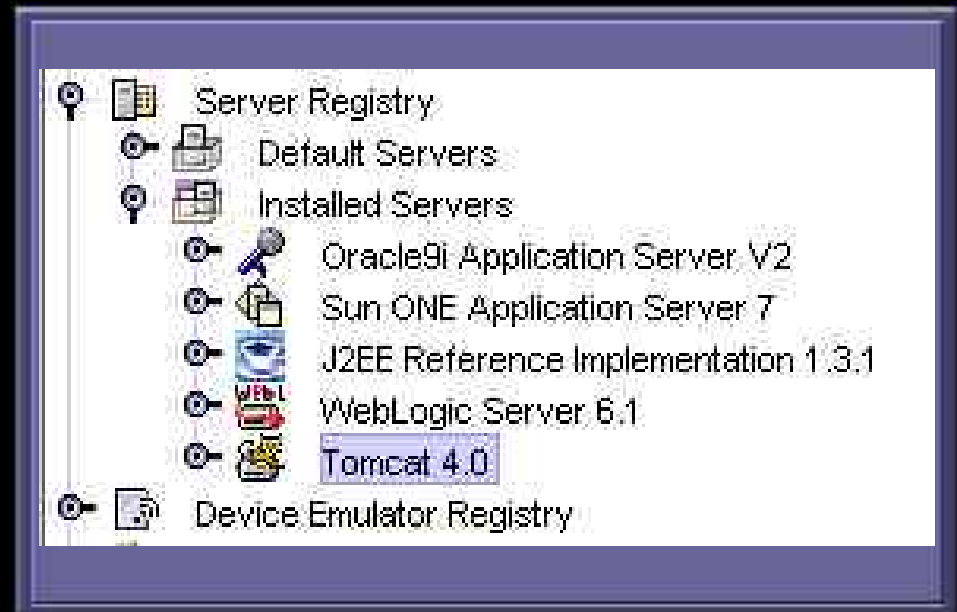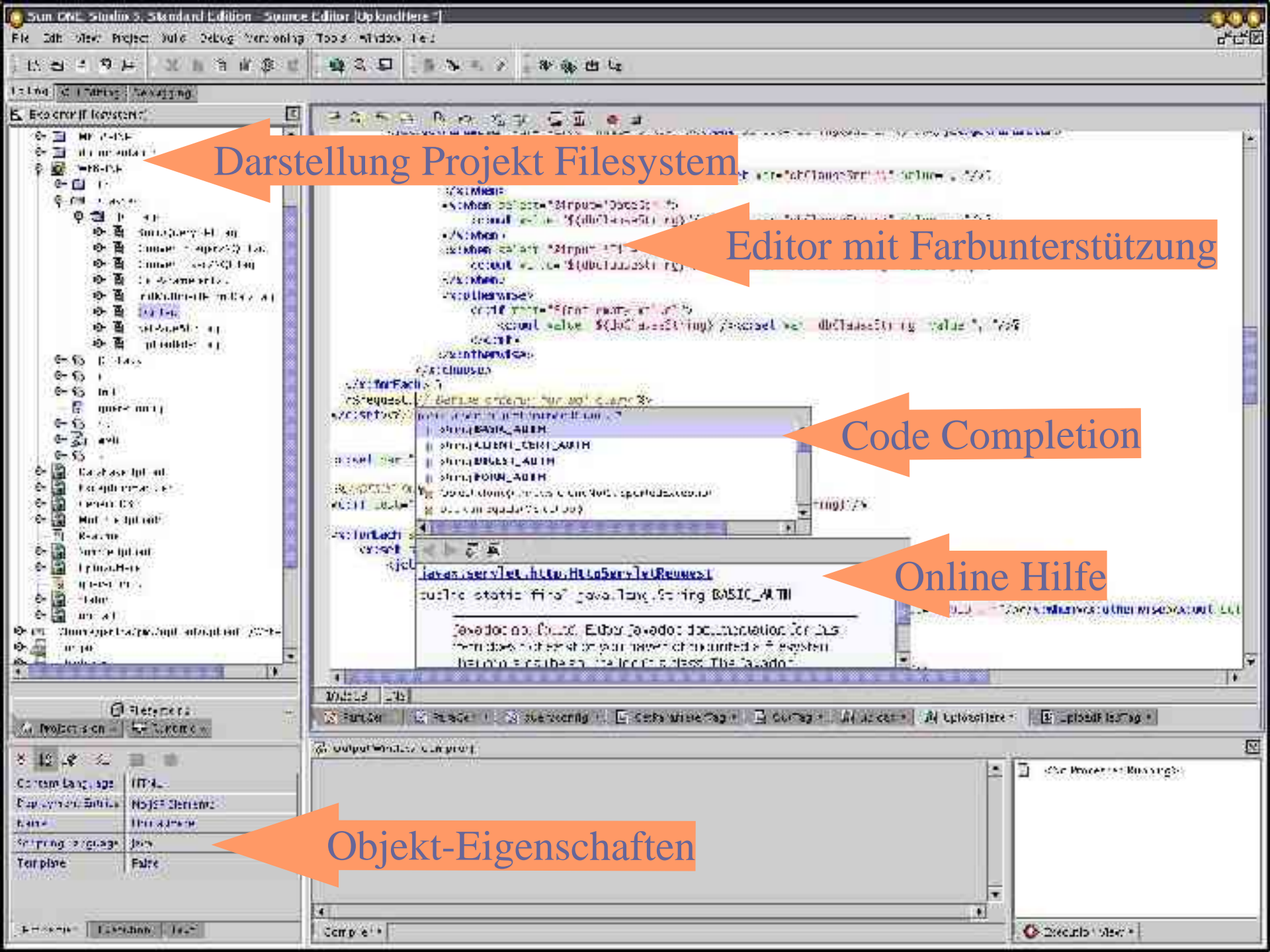- Sun ONE App. Server 7
- Tomcat 4.0
- Oracle 9i App Server
- BEA WebLogic 6.1 & 7
- WebSphere & JBOSS

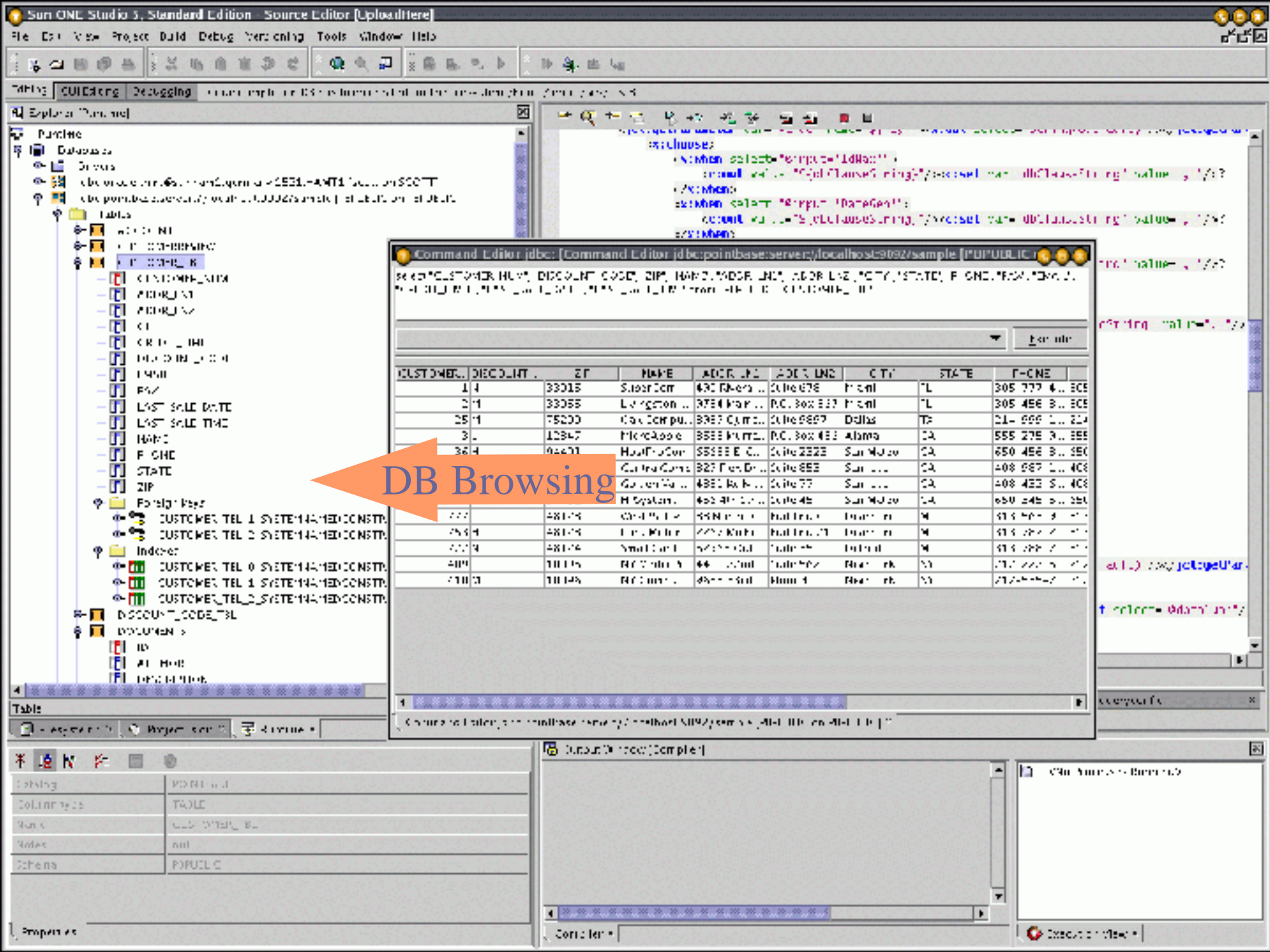Open source Application Server Integration API

Darstellung Projekt Filesystem

Editor mit Farbunterstützung

Code Completion

Online Hilfe

Objekt-Eigenschaften

File Edit View Project Build Debug Versioning Tools Window Help

Editing | GUI Editing | Debugging

Explorer [Runtime]

Runtime
- Databases
  - Servers
  - Tables
    - ACCOUNT
    - CUSTOMER_TBL
      - CUSTOMER_NUM
      - ADDR_LN1
      - ADDR_LN2
      - CITY
      - CREDIT_LINE
      - DISCOUNT_CODE
      - EMAIL
      - FAX
      - LAST_SALE_DATE
      - LAST_SALE_TIME
      - NAME
      - PHONE
      - STATE
      - ZIP
      - Foreign Keys
        - CUSTOMER_TEL_1_SYSTEM_NAMED_CONSTR...
        - CUSTOMER_TEL_2_SYSTEM_NAMED_CONSTR...
      - Indexes
        - CUSTOMER_TEL_0_SYSTEM_NAMED_CONSTR...
        - CUSTOMER_TEL_1_SYSTEM_NAMED_CONSTR...
        - CUSTOMER_TEL_2_SYSTEM_NAMED_CONSTR...
    - DISCOUNT_CODE_TBL
    - DOCUMENTS
      - ID
      - AUTHOR
      - DESCRIPTION

Table

Command Editor jdbc: [Command Editor jdbc:pointbase:server//localhost:9092/sample [POPUBLIC...

select CUSTOMER_NUM, DISCOUNT_CODE, ZIP, NAME, ADDR_LN1, ADDR_LN2, CITY, STATE, PHONE FROM NEW.CU...

Execute

CUSTOMER...	DISCOUNT...	ZIP	NAME	ADDR_LN1	ADDR_LN2	CITY	STATE	PHONE
1	4	33015	SuperCom	430 Rivers...	Suite 678	Miami	FL	305 777 4... 305
2	M	33055	Livingston...	3784 Harr...	P.O. Box 537	Miami	FL	305 456 3... 305
25	M	75200	Cay Comput...	8367 Cumb...	Suite 9887	Dallas	TX	21- 999 1... 214
3	L	12347	MicroApp	8989 Murre...	P.O. Box 453	Alamo	CA	555 275 3... 555
36	4	94021	HealthCare	5989 E. C...	Suite 2323	San Mateo	CA	650 456 3... 650
			Centra Comp	827 Free Dr...	Suite 853	San ...	CA	408 987 1... 408
			Golden Val...	4381 Rolls...	Suite 77	San ...	CA	408 483 1... 408
			Hi Systems	489 4th St...	Suite 45	San Mateo	CA	650 245 ... 650

DB Browsing

Properties

Catalog	POINTBASE
Column type	TABLE
Name	CUSTOMER_TBL
Nodes	null
Schema	POPUBLIC

Output Window [Compiler]

Web Services Support - Choice of Solutions

- Sun ONE Studio 4, Enterprise Edition native support

    - Support for JAX-RPC (SOAP, WSDL) and JAXR (UDDI)

    - Generating Web Services from WSDL or existing Java Components

    - Generating Client Proxies and Test Clients

- Sun ONE Studio Extension Partners

    - Provide bleeding edge technology

    - Web Services for J2ME applications

Sun ONE Studio Web Services Support

- SOAP 1.1 specification
  - http://www.w3.org/TR/2000/NOTE-SOAP-20000508

- JAX-RPC 1.0
  - http://jcp.org/jsr/detail/101.jsp

- kSOAP 1.0 (a SOAP API suitable for J2ME)
  - http://www.ksoap.org/

- WSDL 1.1 specification
  - http://www.w3.org/TR/2001/NOTE-wsdl-20010315

- UDDI 2.0 specification

  - http://www.uddi.org/specification.html

- JAXR 1.0. API specification

  - http://jcp.org/jsr/detail/93.jsp

- J2EE 1.3 components, e.g. J2EE 1.3 Ref. Impl.

# Sun ONE Application Framework

The Sun ONE Application Framework product provides:

· A consistent, extendable, scaleable and robust core Web Application infrastructure foundation for any Enterprise.

· Provides major design pattern implementations.

· A pure J2EE technology solution for any J2EE container.

· Wizard based Web Application creation using Sun ONE Studio (Plugin) abstracts all of the key aspects of the underlying framework technology

S1AF Key Features

·Pure J2EE JAVA

·Evolving graphical tools.

·Enterprise strength Web Application Development

·Powerful Component usage methodology

·Well defined Models (and Custom models)

·Multiple Rendering (same business logic)

·Events (application level, page level and field level)

·Web Services using JAX RPC (requiring no developer code)

S1AF Architecture
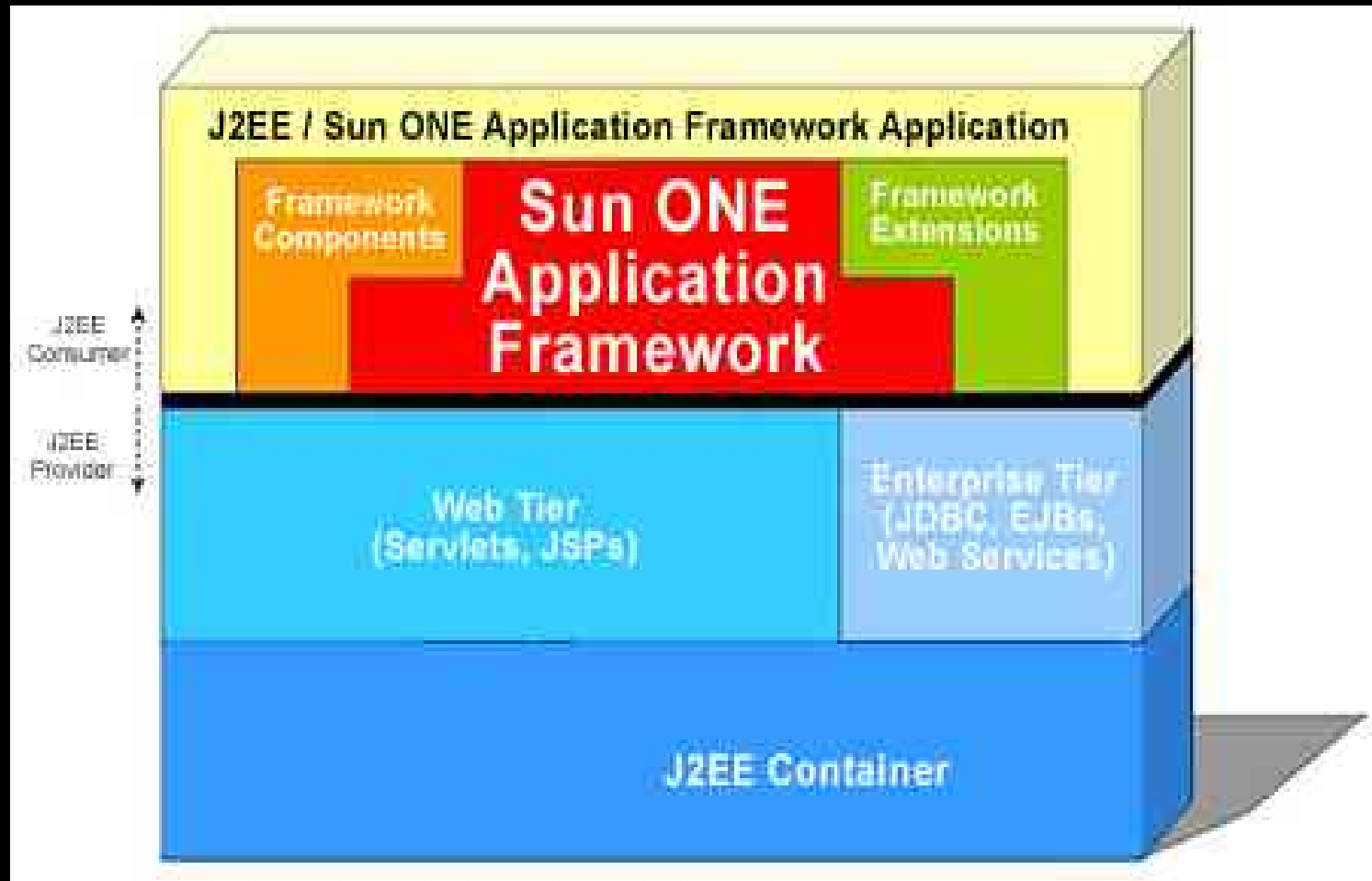
Sun ONE Studio and S1AF
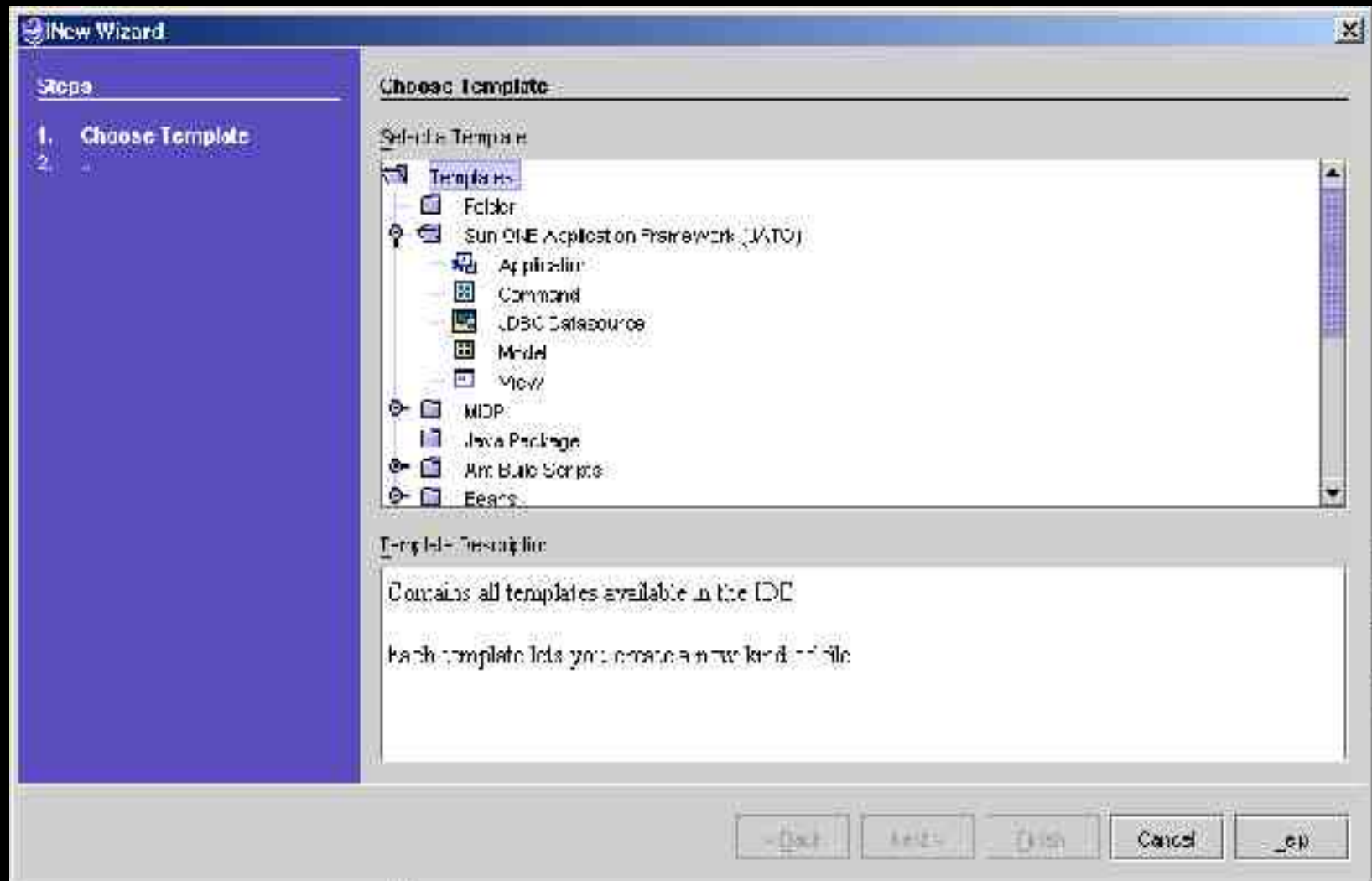
Sun ONE Studio 5

- Standard Edition only
    - Standard Edition 5 == Enterprise Edition 4
    - No Community Edition going forward
    - Mobile Edition will release later this summer
    - Enterprise Edition with greater functionality (Modeling, Refactoring,)

- Downloadable on 9.6.2003
    - http://www.sun.com/software/sundev/jde/index.html

- Mediakits on 31.7.2003

- Based on NetBeans 3.5
    - Work done contributed back to open source community

- Localized in Japanese, Chinese

Sun ONE Studio 5

- Performance, Performance, Performance

- Better integration with S1AS7

  - One button deploy

- JUnit testing Framework

- Updated support for JAX-RPC via JWSDP

  - Full JAX-RPC support (e.g. Session Duration, SOAP Header Processing, SOAP Attachments, Custom Serializer)

- Support on

  - Solaris SPARC and X86

  - Windows XP, 2000

  - RH Linux 8.0

Futures - Project Rave

- Targeting Corporate Developers

  - Application assemblers, not coders (for the most part)

  - Java for the mere mortal

  - Visual development of Web Applications

- Roadmap

  - Project Announcement at JavaONE

  - Early access around SunNetwork Conference

  - GA around JavaONE 2004

Sun ONE Studio Portals

- Open Source Portal
  - NetBeans OpenSource Community at www.netbeans.org
- Sun ONE Portals
  - Central portal for all ressourcen around Sun ONE Studio: forte.sun.com
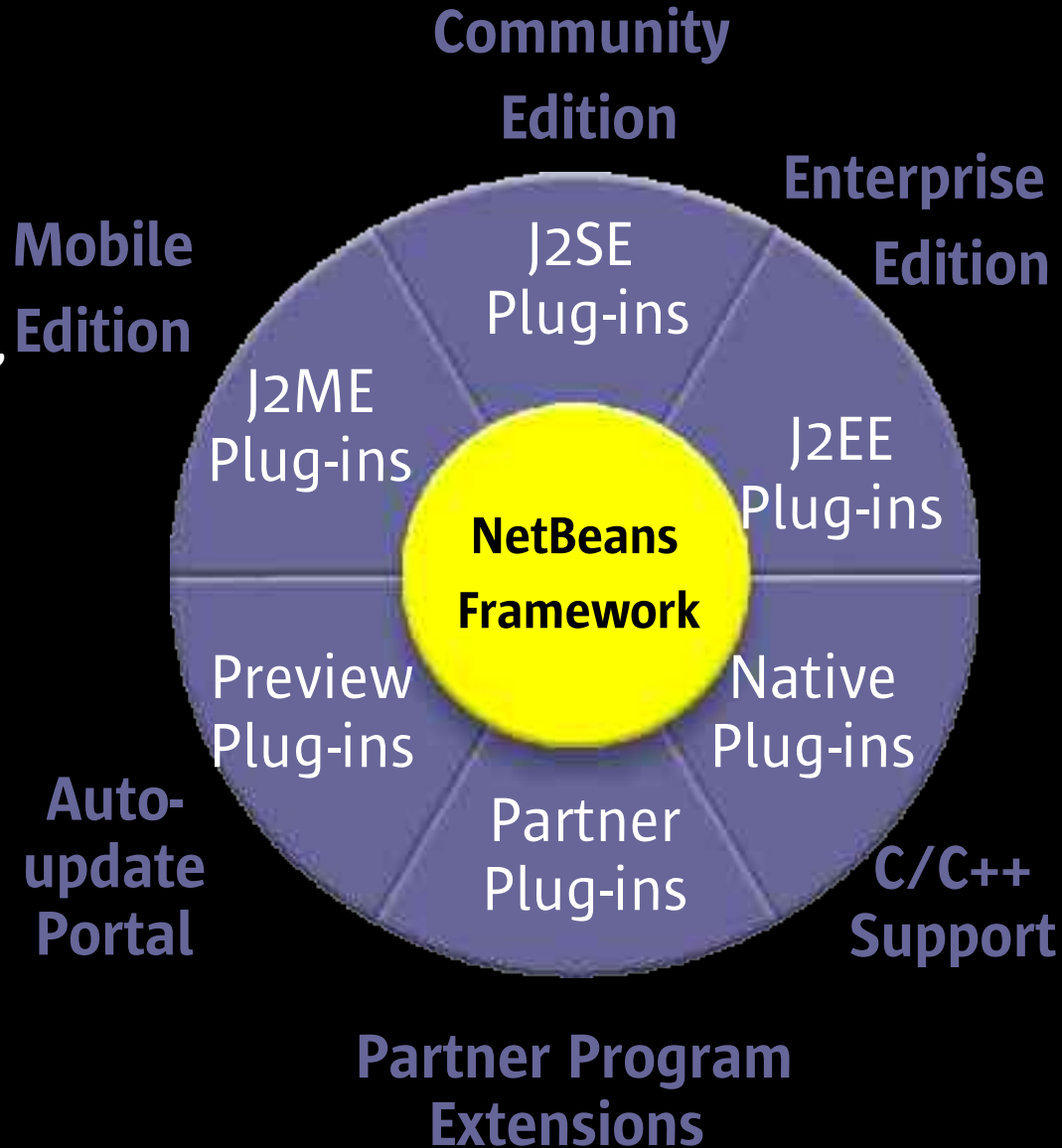 - Marketplace for modules around Sun ONE Studio www.sun.com/forte/ffj/modulemarket

Tight integration of product and portal!

Useful URLs

- www.sun.com/software/sundev

- Www.netbeans.org

- forte.sun.com

- java.sun.com

- wireless.java.sun.com

In Summary

- Editions for Java
  - Mobile Edition(J2ME)
  - Community Edition(J2SE)
  - Enterprise Edition(J2EE)
    - Application server & Web Services support (JAX-Pack, SOAP, WSDL, etc.)
- Editions for Solaris
  - Compiler Collection
  - Enterprise Edition (IDE plus compilers)
- Partner Program
  - 100+ partners shipping 50+ plug-ins today
- Auto-update capability
- NetBeans Framework
  - source:www.netbeans.org
  - No vendor lock-in/out

Community Edition

Enterprise Edition

Mobile Edition

J2SE Plug-ins

J2ME Plug-ins

J2EE Plug-ins

NetBeans Framework

Preview Plug-ins

Native Plug-ins

Auto-update Portal

Partner Plug-ins

C/C++ Support

Partner Program Extensions

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