

Component Broker

Object-Based Network Computing

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ARCHITECH
IT EXECUTIVE CONFERENCE

What is Component Broker?

■ Component Broker Connector ...

- CORBA 2.0 compliant middleware for new, component-based business applications, enabling deployment and management of multi-tier applications linking new capabilities with business-critical legacy systems

■ Component Broker Toolkit ...

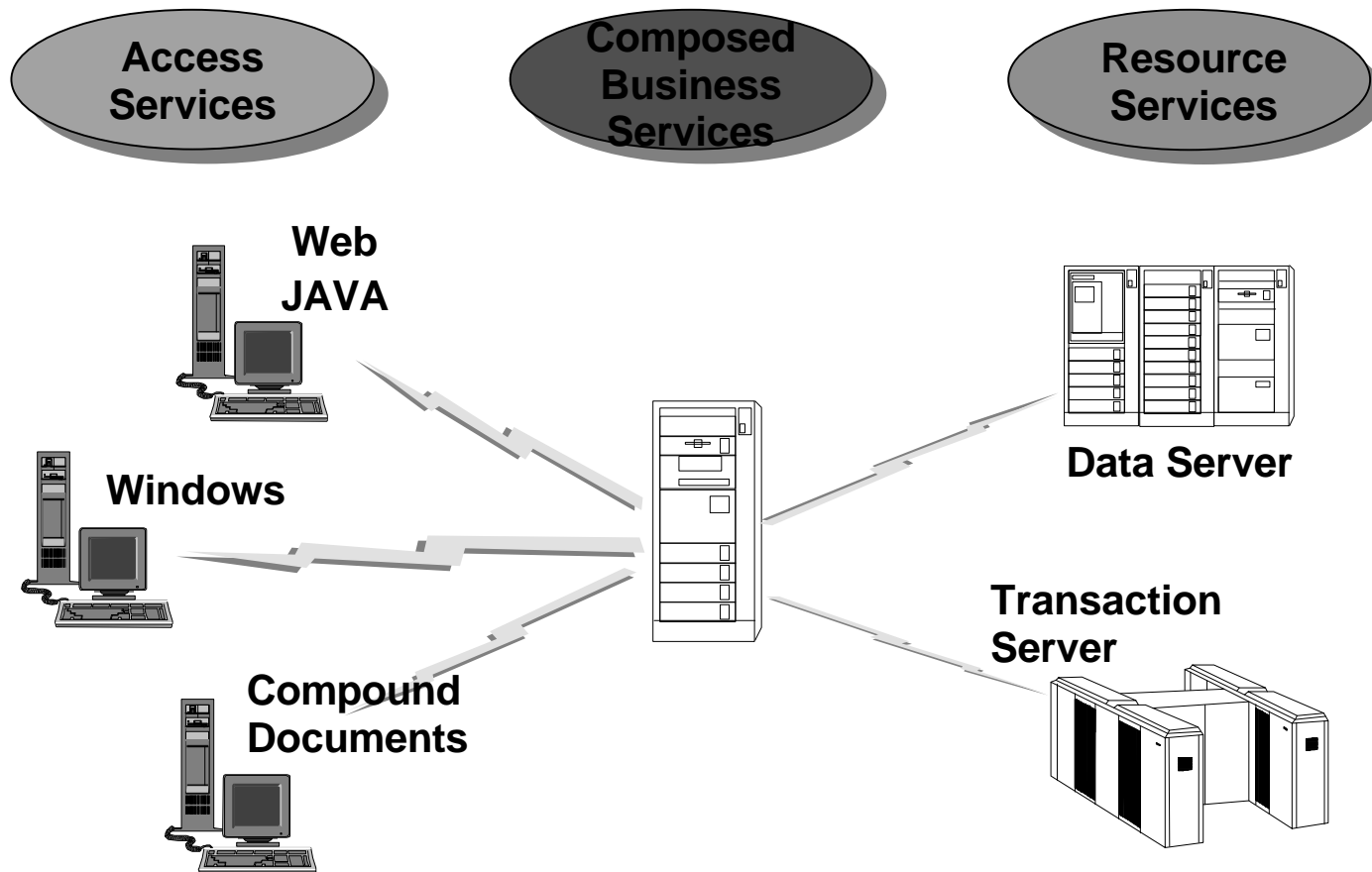
- Next generation development tools for component based applications to rapidly integrate new capabilities and existing backend systems

■ Future Technology for Transaction Series ...

- CB technology will be integrated with Transaction Series products in a future release, across the range of platforms:
-->Components come to Transaction Server!!

CB Connector Provides the Composed Business Hub in Your Environment

Multi-Tier Software Environments

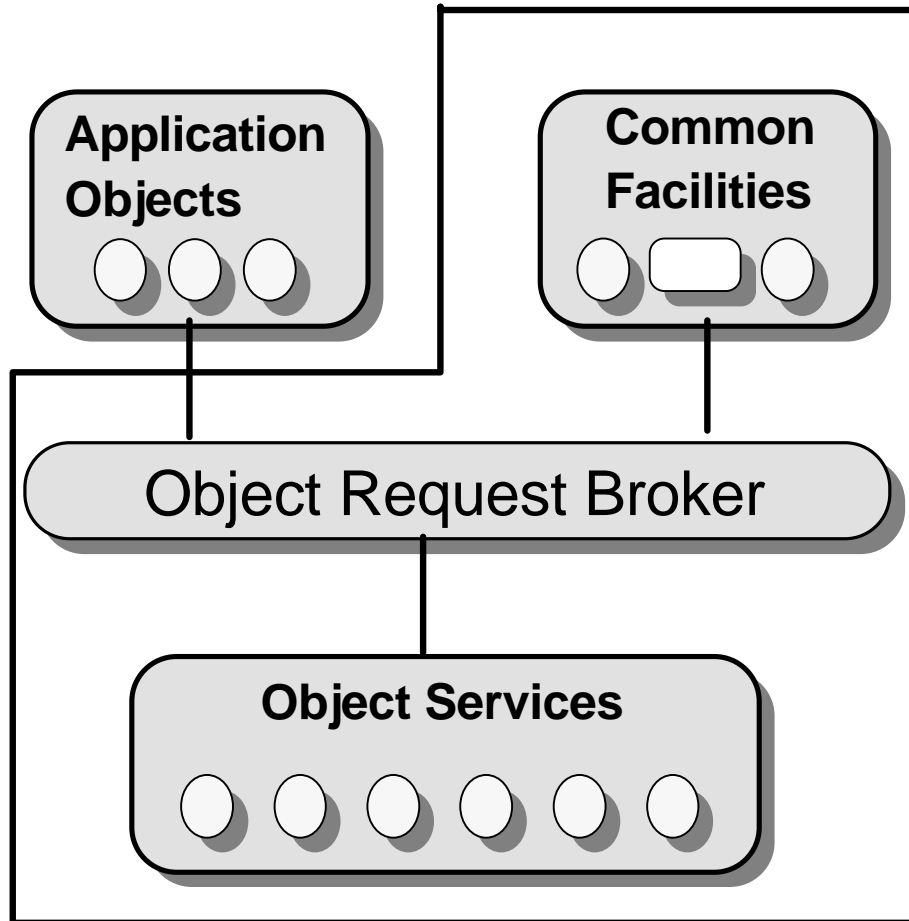


ARCHITECTURE

ASSUMPTIONS AND DESIGN POINTS

- CORBA Compliance: ORB, Services, Transport
- "Real" objects: Runtime and Tools
- Focus on re-use: Runtime vs Library
- True client/server structure
- Create a complete environment
 - non exclusive: links to non-object world
 - server structure
 - "managed" objects
 - links to non-object services
- Build a componentized technology stream
- Cross platform: clients, servers, languages

Support of OMG Architecture



Component Broker Connector

Componentry

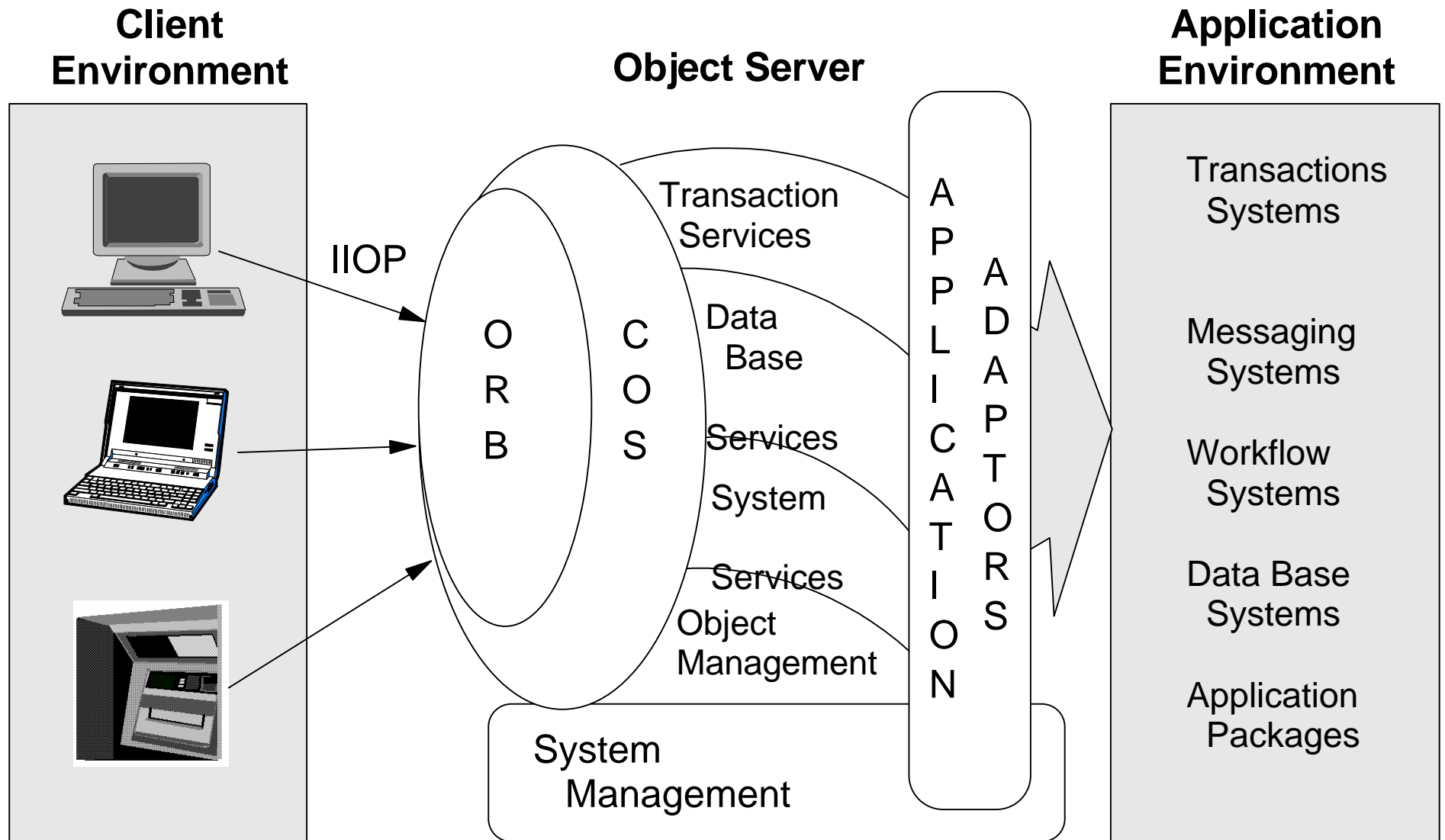
- Interoperability object model
- OMG Object Services
- Application Adaptors and Application Adaptor Framework
- Clustered/Distributed Server Management
- Frameworks for Composed business objects and Application objects
- CORBA 2.0 Object Request Broker with downloadable Java client implementation
- Client Enablement
 - ActiveX
 - Java clients
 - C++
 - .. others in the future

CBCConnector Components ...

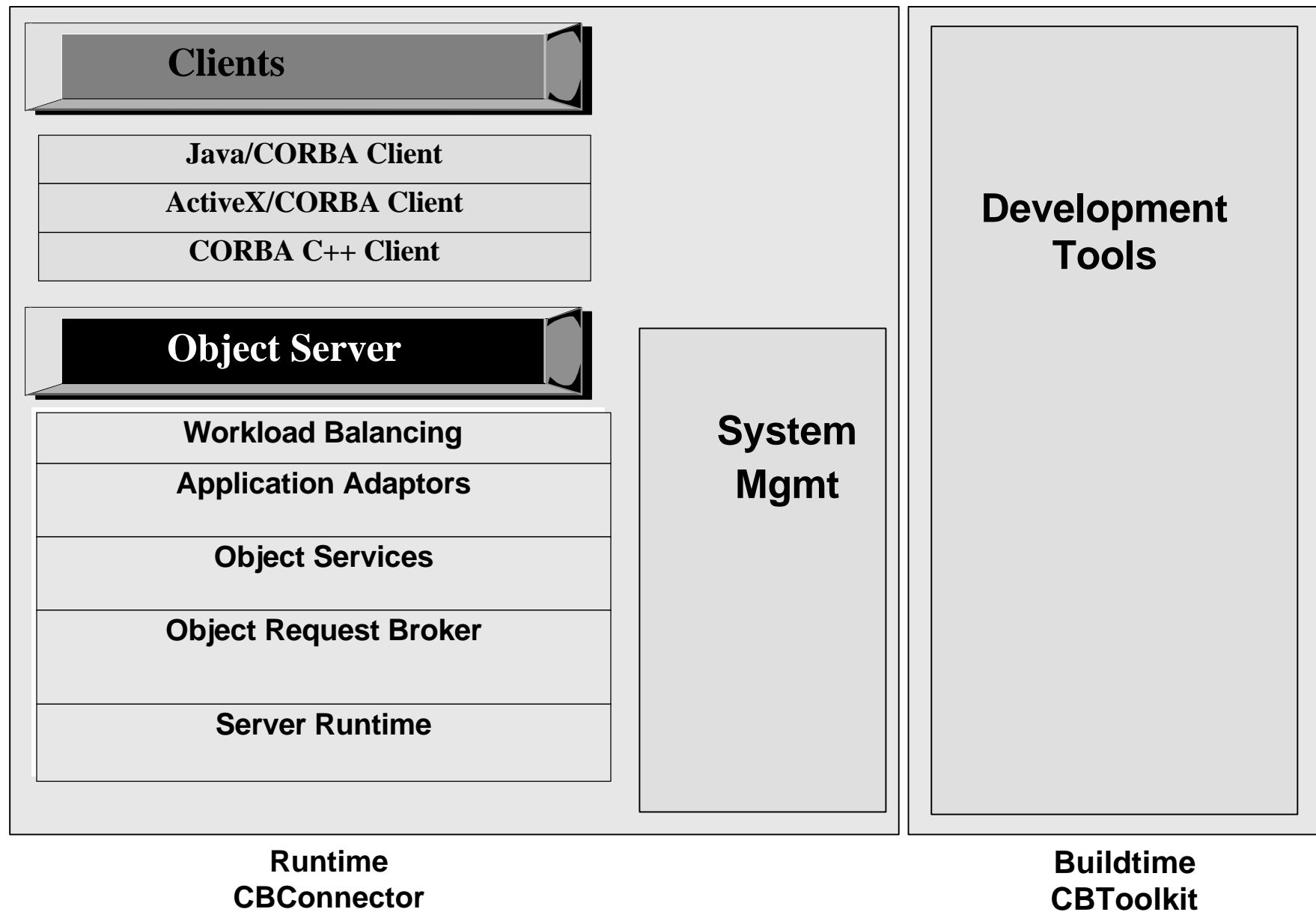
- **Runtime Application Environment for Distributed Services**
 - OMG Common Object Services (COS)
 - Integration and Control of Services
 - CORBA 2.0 Compliant ORB (DSOM 4.0)
 - Provide standards-based interoperability and application portability
 - CORBA Naming & Security implemented with DCE
 - Planned support for LDAP and SSL via DSSeries

- **System Management/Monitoring Services**
 - Application Adapters
(CICS, Encina, DB2, IMS, Oracle . . .)

CB Runtime Architecture



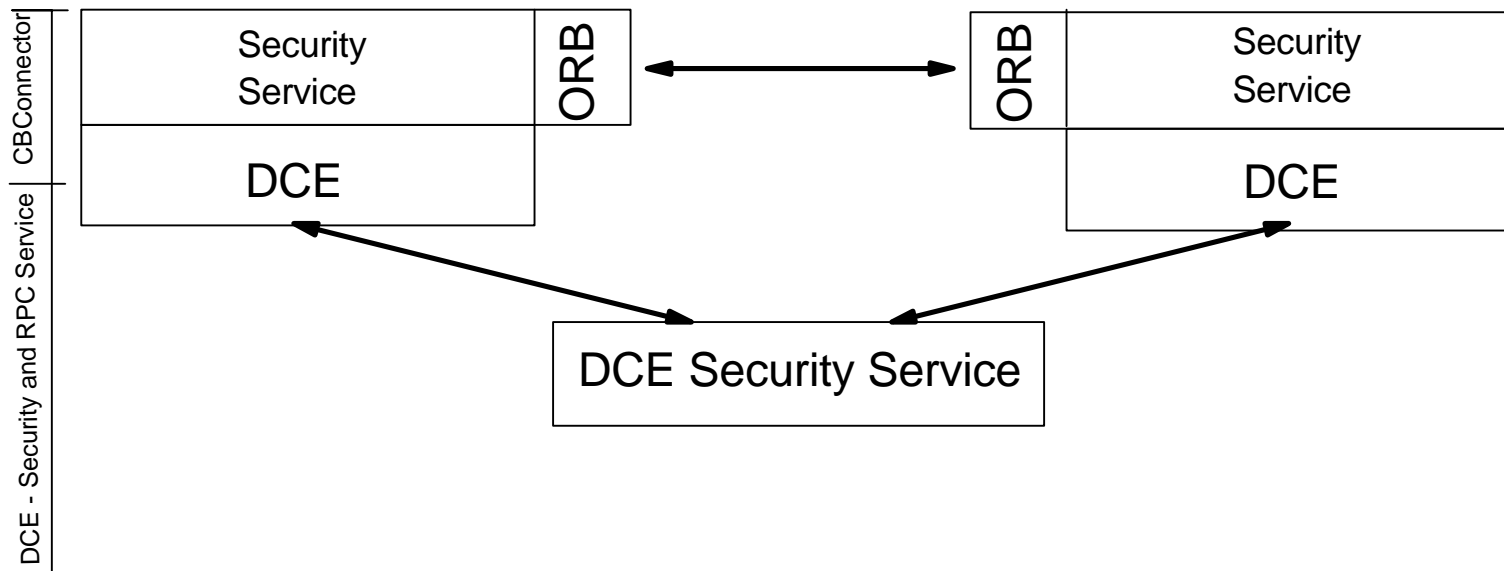
Component Broker Structure



Component Broker Security Service

- **Authorization is through DCE Security Service**

- Automatic server logon
- Client logon by user or ORB



- **Security Context created through DCE 3rd Party Authentication**

- Cascaded requests use single DCE login
- Parent and children processes share a client's credentials
- Delegated requests carry credentials for transparent management
- Credentials required for EACH process

- **Simplify cross-vendor application access and cross-platform operations**

- **Middleware Glue**
 - Knit together existing and new applications, resource managers, and databases

 - Provide application access to the industry-wide, open, standard architecture (CORBA)

Component Broker Naming Service

- **Current Service: DCE Cell Directory**
 - CORBA standard
 - DCE reliability: replication and caching

- **Future Services: Federated Naming Systems**
 - Relational Data Bases
 - Lightweight Directory Access Protocol
 - NT Registry

- **No user knowledge required**

- **Hidden through common interface**

Building with CBToolkit is Easy ...

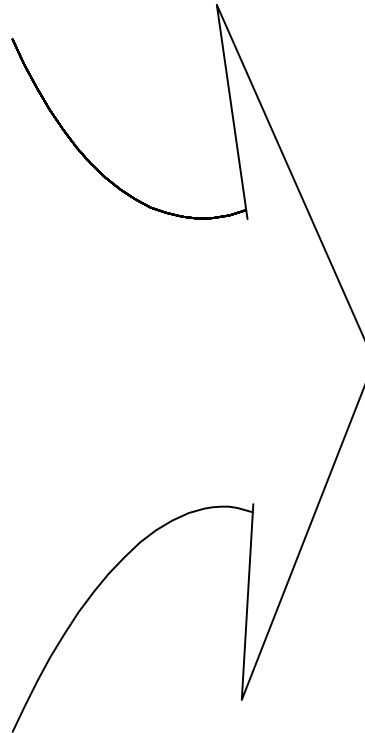
- **Use visual building environment**
- **Use familiar tool set**
- **Eliminate need to be an "API expert"**
- **Automates interface code generation**
- **Sophisticated test and debug**

CBToolkit -- What It Does ...

- **Assists you in building distributed applications easily**
- **Easily enables access to all vendors' databases, middleware and application systems**
- **Generates application code from visual processes**
- **Focuses build process on the business problems, not the "glue"**
- **Provides interactive, modular testing capability**

What Does it Build?

- Applications
 - Client C++
 - Server Java
- Application Adaptors
- Business Objects
- State Objects

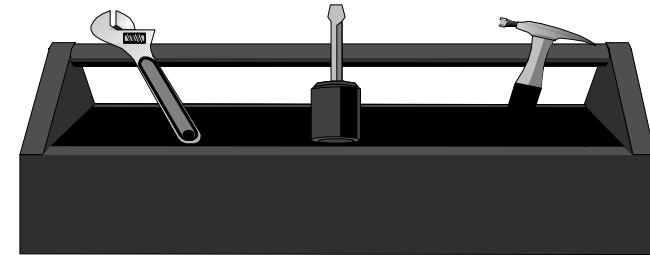


Using Framework Completion

- Managed Object Frameworks
- Application Adaptor Frameworks
- BOSS Frameworks

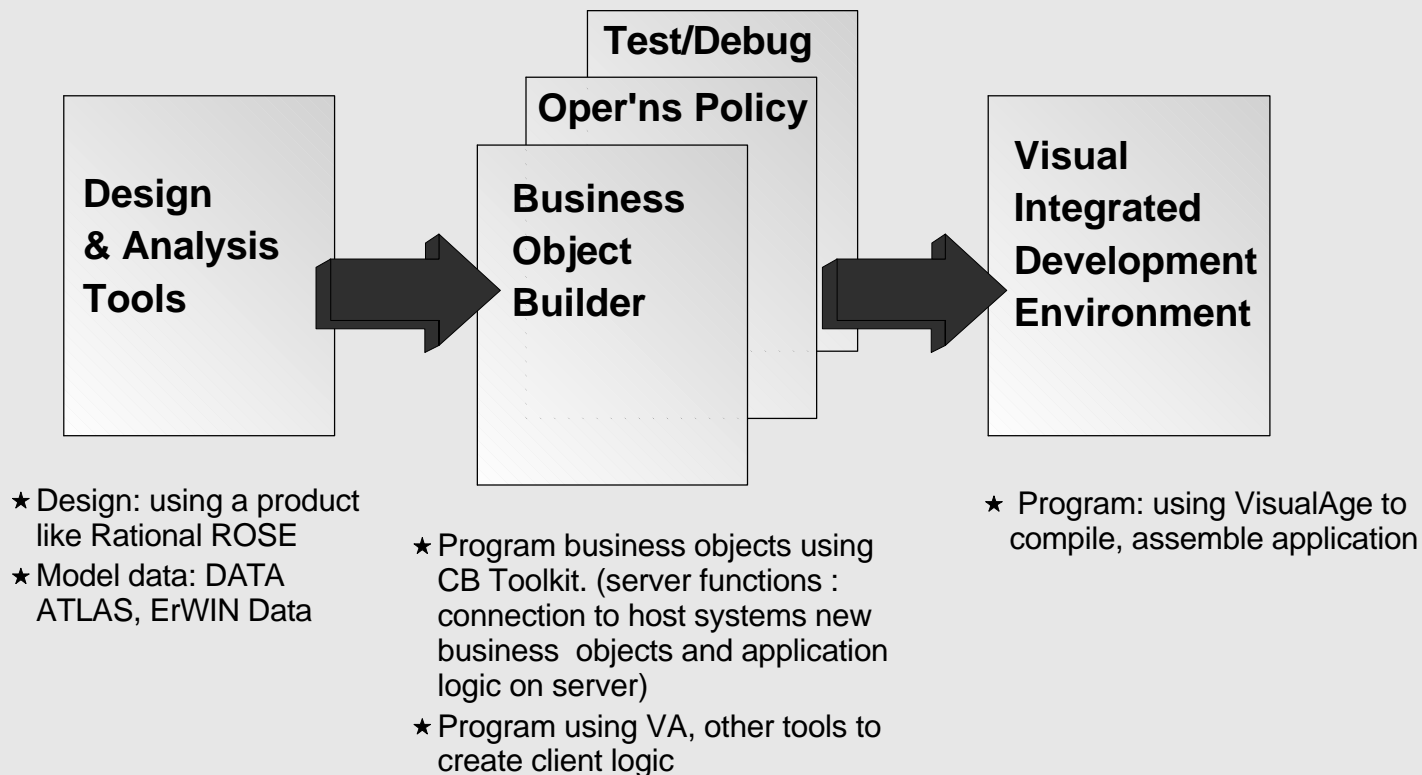
Workstation Based

- Programming Tool
- Java, C++ languages
- Object Builder
- State Object creation
- Remote Debug
- Application Assembly
- Integration
 - Business Modeling
 - Data Modeling
 - Analysis/Design
 - Build environment
 - Client Development

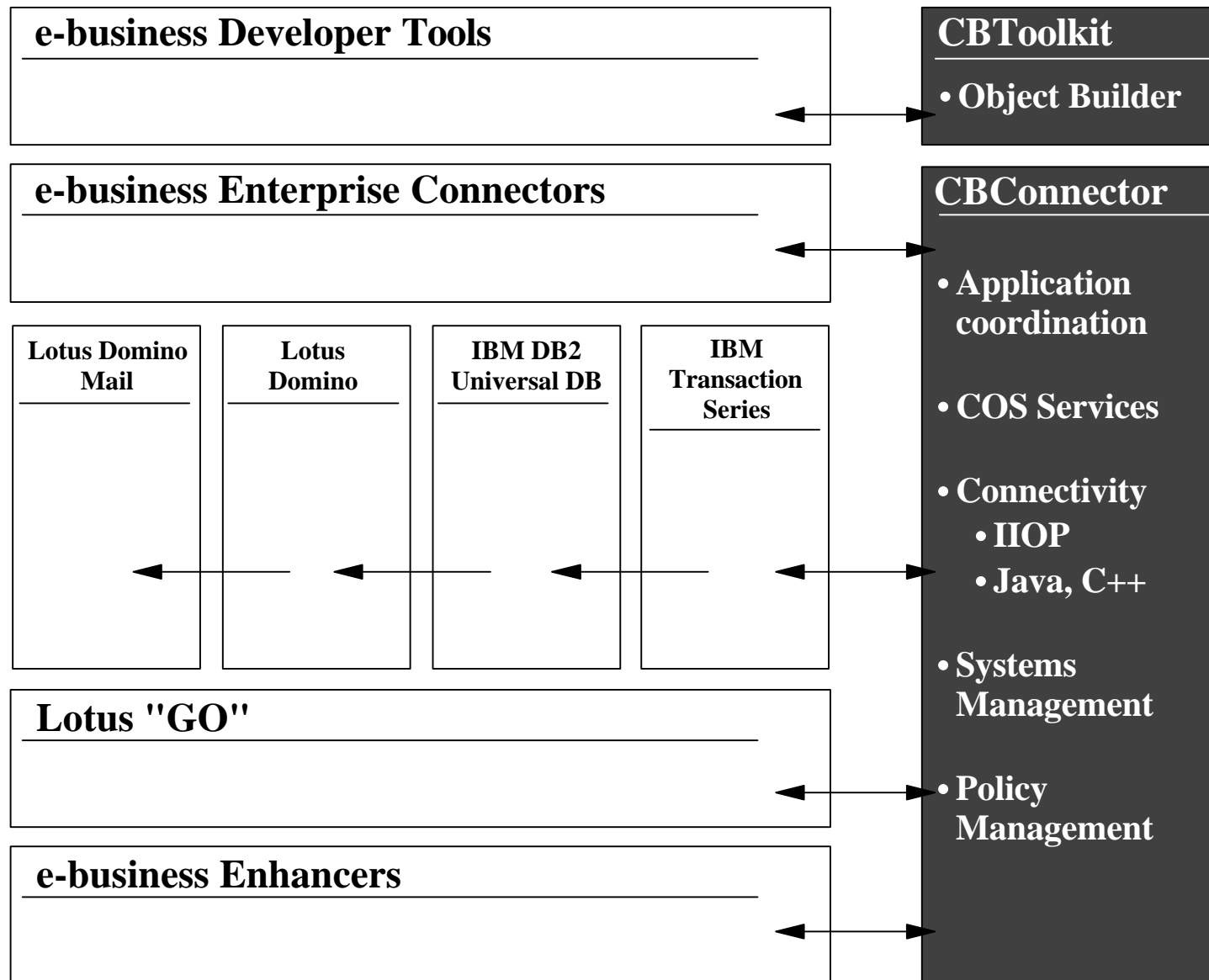


- Distributed Applications
- Transaction Processing
- Client Support
- Systems Management
- "Managed Objects"

Steps to build an application:



Fitting Into the e-business Environment

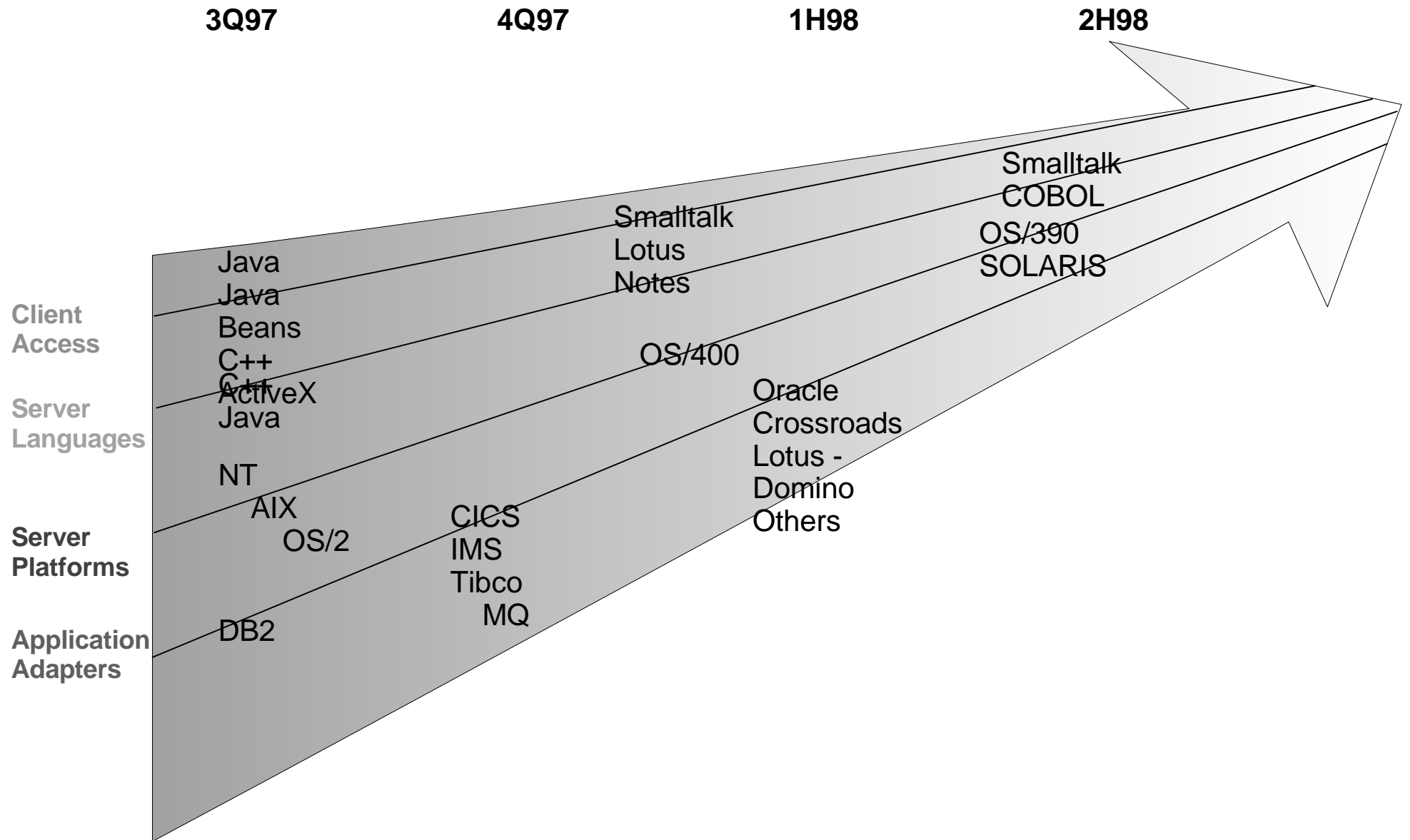


IBM's Commitment

- **Proliferating through all middleware products**
- **Investing heavily in component technologies**
- **Making strategic alliances**
- **Backed by global solutions and services**

**CBConnector/CBToolkit Introduce a New
Generation in Middleware !**

Product Timeline ...



Conclusions ...

- **CBConnector solves today's problems today**
- **CBConnector positions you to solve tomorrow's 'bet your business' problems**
- **CBConnector allows you to create economic value from your current assets**

GET ON BOARD!!!!

Getting Started ...

- **Preparing for the brave new world**
- **Acquiring CB products for implementation**
- **Working with CB products**
 - Web white papers
 - Textbooks
 - Redbooks
- **Available help**
 - Education
 - Services