

# Cincom and Gemstone

## A Strong New Partnership

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## Who is Gemstone

- They are a long term – 20 year Smalltalk company
- They have a range of server side Databases and transaction managers for Smalltalk and Java
- Their Smalltalk OO Database Gemstone/S is the premier OO Database and Server
- Gemstone/S works with VisualWorks and VAST clients and development environments
- They are backed by a large Asian conglomerate

# What does this partnership mean?



- **Cincom and Gemstone will work together on:**
  - **Sales**
  - **Marketing**
  - **Engineering**
- **Better Products from both sides**
- **Better integration of those products**
- **Stronger Smalltalk community**

# Early Days



- **Still working on the details in terms of product features**
- **Ephemerons (in VW 7.0) are part of that collaboration**
  - **Give better performance for Gemstone**
  - **Cleaner implementation for Gemstone**
- **It will take a number of releases before stuff really starts to appear**

# So why should you care?



- ◆ **What is Gemstone/S anyway?**
  - ◆ (An OO DB and Application Server all in one)
- ◆ **Why would I want to use an OO Database?**
  - ◆ Won't relational do everything I need?
- ◆ **Do I need an application server?**
  - ◆ What more do I get than I already get from VisualWorks?
- ◆ **We are wall to wall relational in our company...**
  - ◆ How do I convince them to take a non standard Database?

# The Benefits



**The only reason you will use a piece of technology  
is if it gives you real tangible benefits**

**So how could You benefit?**

**The next few slides will give you some idea**

# Gemstone

## The 30 second description



### Client

- Client – Server Interaction managed for you
- Single Object Model across Client, Server and DB
- Write application code on the client

### Smalltalk on the Server

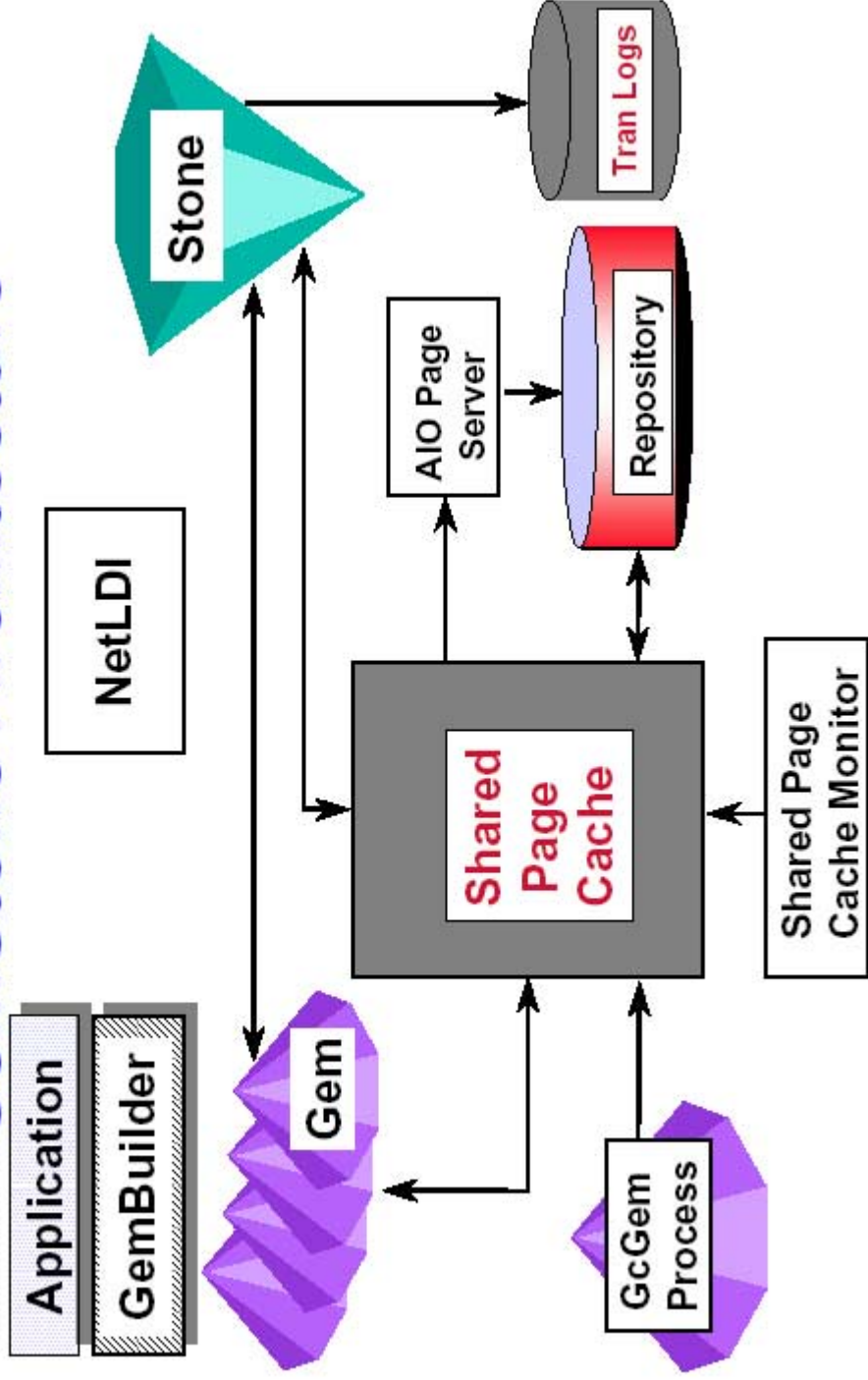
- DB Schema in Smalltalk
- Query engine in Smalltalk
- Write application code on the server
- Fully Featured Database

# Fully Featured Database



- ◆ **1000+ Concurrent Users**
- ◆ **100+ GB Databases**
- ◆ **1 Billion Objects stored**
- ◆ **Shared Page Cache**
- ◆ **Fully Transactional**
- ◆ **Interoperable with Relational databases**
- ◆ **Huge range of Features**

# GemStone Architecture



# So why use an OO Database?



- **Gets rid of Object to Relational mapping complexity**
- **Much faster performance for many types of application**
  - 10-15 times is not uncommon
  - Set manipulation and data manipulation is very fast
- **Because of single object model across whole application faster to re-factor application**
- **Wonderful for Extreme Programming**
- **Schema Migration for applications is trivial and immediate**
- **Can still keep a relational DB as data of record if you want**
- **Integrates transparently to VisualWorks**

# Do I need an Application Server?

- If you want an Internet solution
- If you have heavy data manipulation or processing requirements
- If you use web interfaces you save the deployment costs
- Web Services need one
- It is the way people build systems today

# VisualWorks as App Server



- **Over the last 3 years VisualWorks has grown up as a Server**
  - **2 GIG in memory images**
  - **True headless operations**
  - **Enhanced Wave Server with Apache integration**
  - **Integrated load balancing**
  - **New Opentalk Server with Web Services support**
  - **And many other enhancements**
  - **Server farms capable of handling 15 million page hits a day**

# Gemstone goes one step beyond...



- **100 TPS**
- **Multi user/concurrency control**
- **Multi-user garbage collection**
- **Logging/Rollback/Roll-forward**
- **Intimate DB integration**
- **Large collection retrieval and manipulation**
- **Shared Memory and SMP support**
- **Complex Page cache architecture**
- **Fault tolerant**
- **Inbuilt user based security**

# What the Customers say



**Smalltalk customers love it – makes their life easy**

**Mature**

**Robust**

**Bug Free**

**“Installed 6.0 upgrade in 1 minute with one guy against 5 guys for 6 weeks and still running for the latest release of Oracle.”**

**“The way GemBroker handles client to server object mapping is simply magical”**

**“The reduced code base is fundamental saving for costs and makes it simpler to extend you app and faster to do it”**

**“Incremental profit from the GemStone system allows purchase of one new container ship per year (\$67 million)”**

# Who uses it



**JP Morgan – exotic derivatives trading system with front and mid office integration**

**OOCL – container transportation – this system gives them a critical business advantage over their competition through better handling of cargo.**

**Large multi-national Bank – money market, foreign exchange and precious metals – back office confirmation matching and settlement over 2 trillion dollars a month handled in money market system alone.**

**Swiss National Bank – record keeping system for those records required by law**

**Inter-Continental Exchange – worlds largest energy exchange - surpassed Enron trading volume of 4.3 billion dollars a day late last year – 8500 traders online. System load grew 15 fold in 2001 and doubled again after the collapse of Enron.**

# TRY IT



- **Take the eval of Gemstone on our CD and give it a go**
- **You will be amazed at what it can do for you.**
- **If you are interested come and talk to us**
  - **we can can talk to you in more detail about what Gemstone could do for you.**