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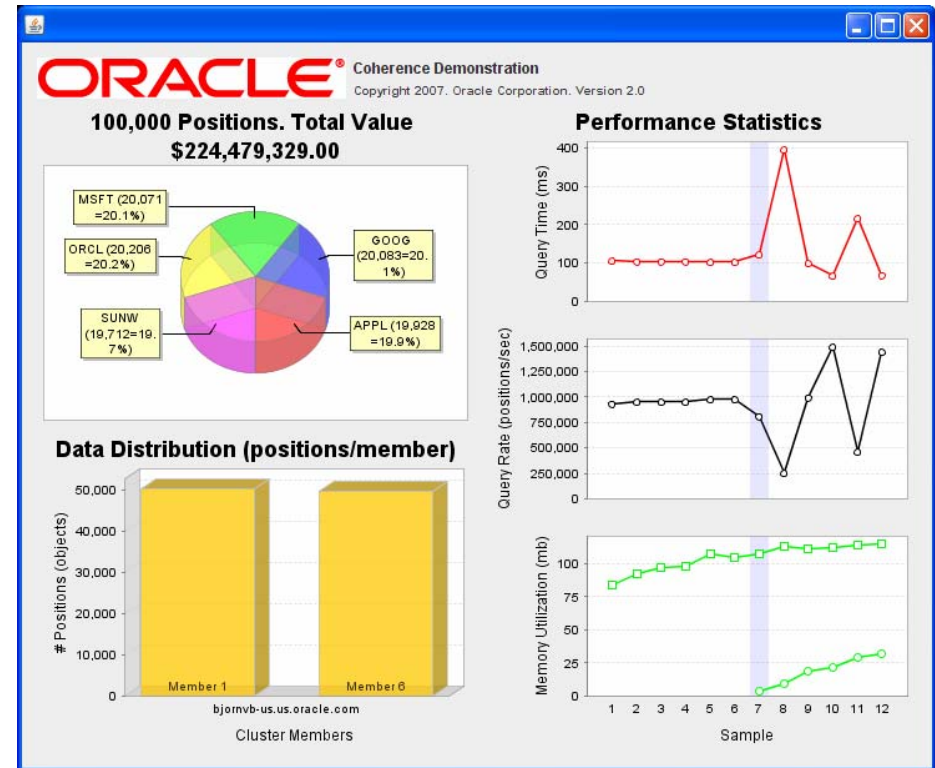
Light Demo

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Demo

Order Book Management

Show in real time what the state of the stock portfolio is (value / number of shares per value) by running a parallel query and parallel aggregation of data distributed in memory in a Oracle Coherence Data Grid.

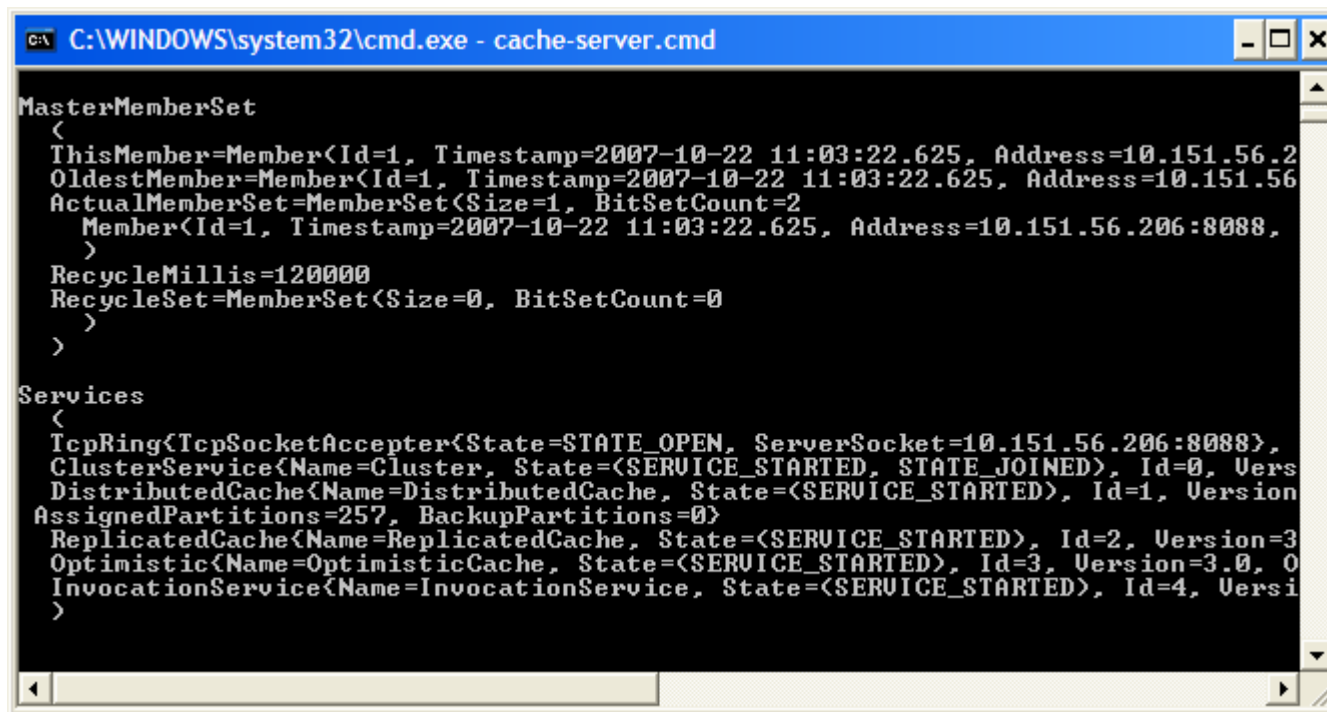


Prerequisites

- Java 5 in path
- More than one machine if showing scalability is the purpose

Startup

- Start one server
("cache-server.cmd")



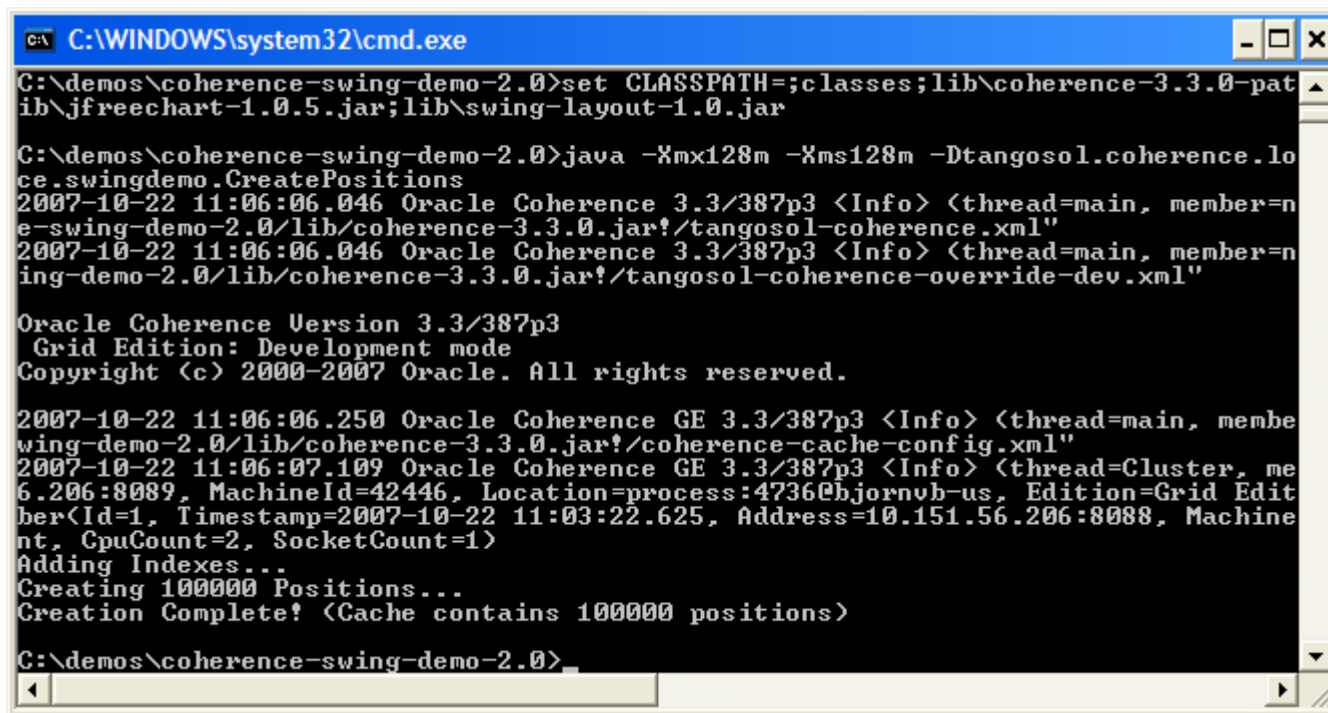
```
C:\WINDOWS\system32\cmd.exe - cache-server.cmd

MasterMemberSet
<
  ThisMember=Member<Id=1, Timestamp=2007-10-22 11:03:22.625, Address=10.151.56.2
  OldestMember=Member<Id=1, Timestamp=2007-10-22 11:03:22.625, Address=10.151.56
  ActualMemberSet=MemberSet<Size=1, BitSetCount=2
    Member<Id=1, Timestamp=2007-10-22 11:03:22.625, Address=10.151.56.206:8088,
  >
  RecycleMillis=120000
  RecycleSet=MemberSet<Size=0, BitSetCount=0
  >
  >

Services
<
  TcpRing<TcpSocketAcceptor<State=STATE_OPEN, ServerSocket=10.151.56.206:8088>,
  ClusterService<Name=Cluster, State=(SERVICE_STARTED, STATE_JOINED), Id=0, Vers
  DistributedCache<Name=DistributedCache, State=(SERVICE_STARTED), Id=1, Version
  AssignedPartitions=257, BackupPartitions=0>
  ReplicatedCache<Name=ReplicatedCache, State=(SERVICE_STARTED), Id=2, Version=3
  Optimistic<Name=OptimisticCache, State=(SERVICE_STARTED), Id=3, Version=3.0, 0
  InvocationService<Name=InvocationService, State=(SERVICE_STARTED), Id=4, Versi
  >
  >
  >
```

Startup contd.

- Load data
("create-positions.cmd")



```
C:\WINDOWS\system32\cmd.exe
C:\demos\coherence-swing-demo-2.0>set CLASSPATH=.;classes;lib\coherence-3.3.0-pat
lib\jfreechart-1.0.5.jar;lib\swing-layout-1.0.jar
C:\demos\coherence-swing-demo-2.0>java -Xmx128m -Xms128m -Dtangosol.coherence.lo
ce.swingdemo.CreatePositions
2007-10-22 11:06:06.046 Oracle Coherence 3.3/387p3 <Info> <thread=main, member=n
e-swing-demo-2.0/lib/coherence-3.3.0.jar!/tangosol-coherence.xml"
2007-10-22 11:06:06.046 Oracle Coherence 3.3/387p3 <Info> <thread=main, member=n
ing-demo-2.0/lib/coherence-3.3.0.jar!/tangosol-coherence-override-dev.xml"

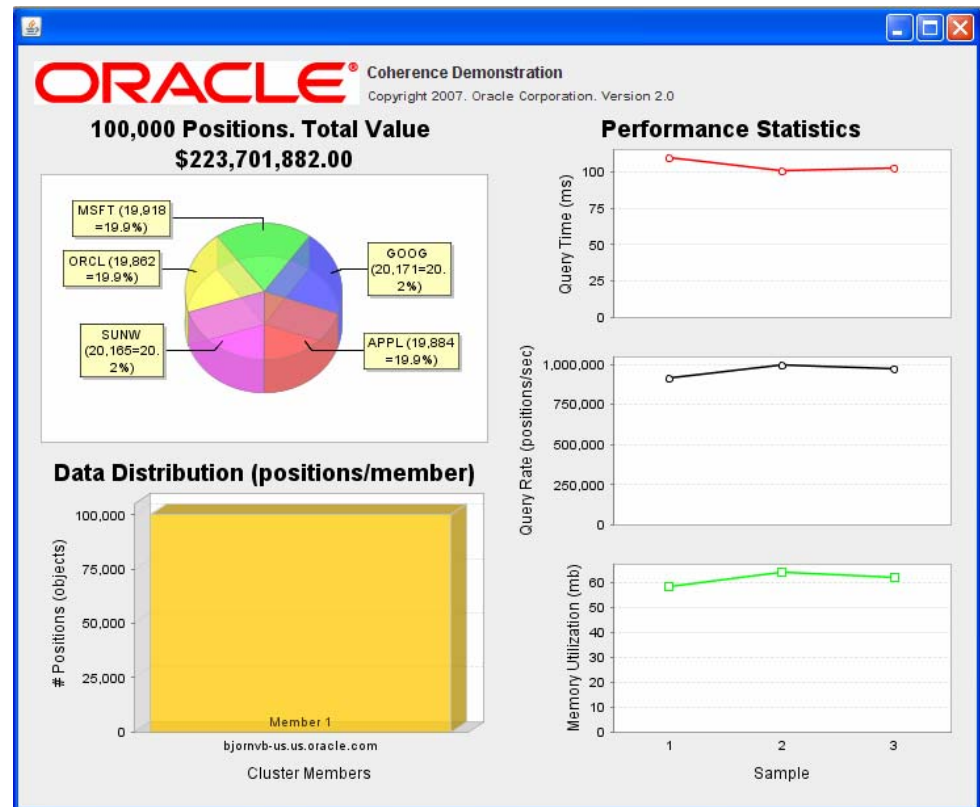
Oracle Coherence Version 3.3/387p3
  Grid Edition: Development mode
  Copyright (c) 2000-2007 Oracle. All rights reserved.

2007-10-22 11:06:06.250 Oracle Coherence GE 3.3/387p3 <Info> <thread=main, membe
wing-demo-2.0/lib/coherence-3.3.0.jar!/coherence-cache-config.xml"
2007-10-22 11:06:07.109 Oracle Coherence GE 3.3/387p3 <Info> <thread=Cluster, me
6.206:8089, MachineId=42446, Location=process:4736@bjornvb-us, Edition=Grid Edit
ber<Id=1, Timestamp=2007-10-22 11:03:22.625, Address=10.151.56.206:8088, Machine
nt, CpuCount=2, SocketCount=1)
Adding Indexes...
Creating 100000 Positions...
Creation Complete! <Cache contains 100000 positions>

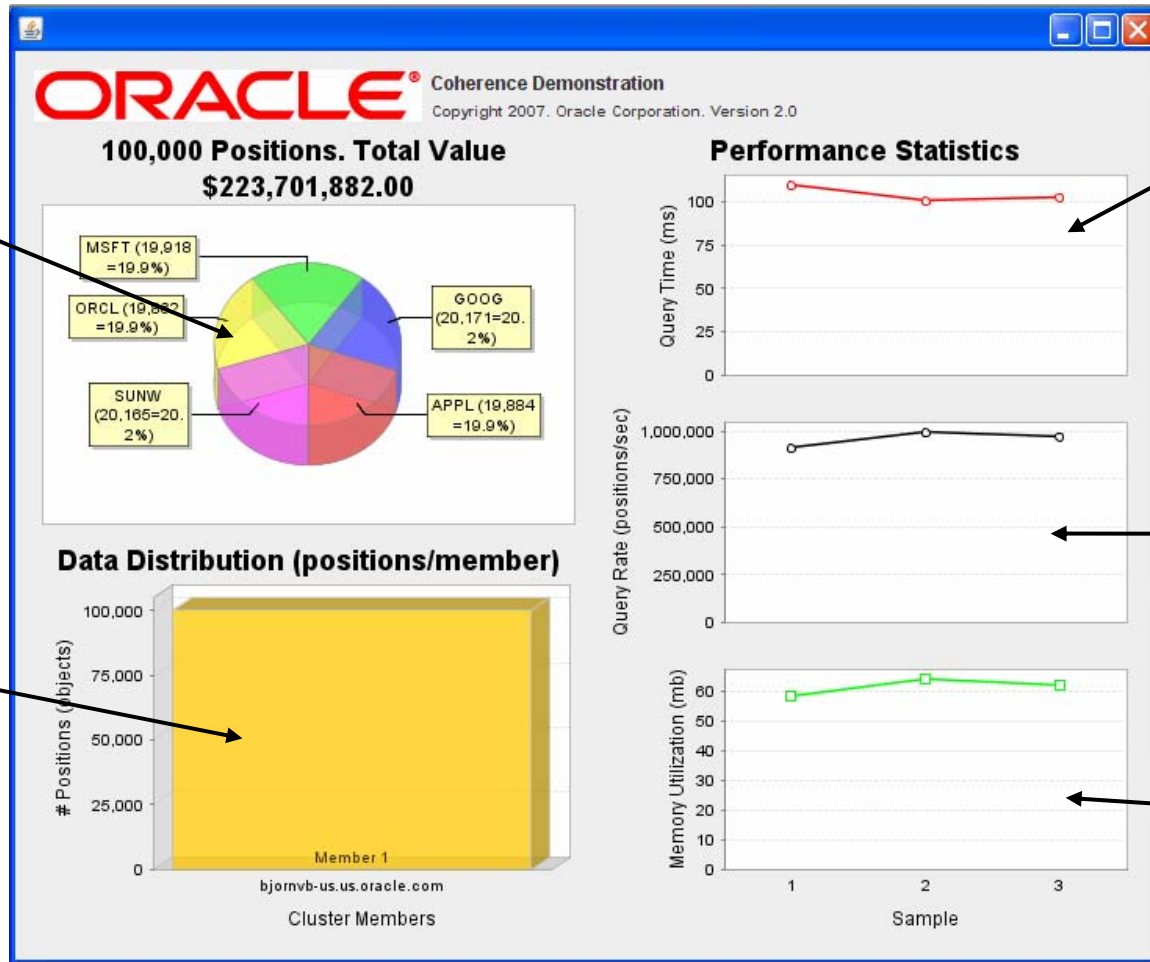
C:\demos\coherence-swing-demo-2.0>
```

Startup contd.

- Start demo (“swing-demo.cmd”)



The demo application



Information about the data in the system

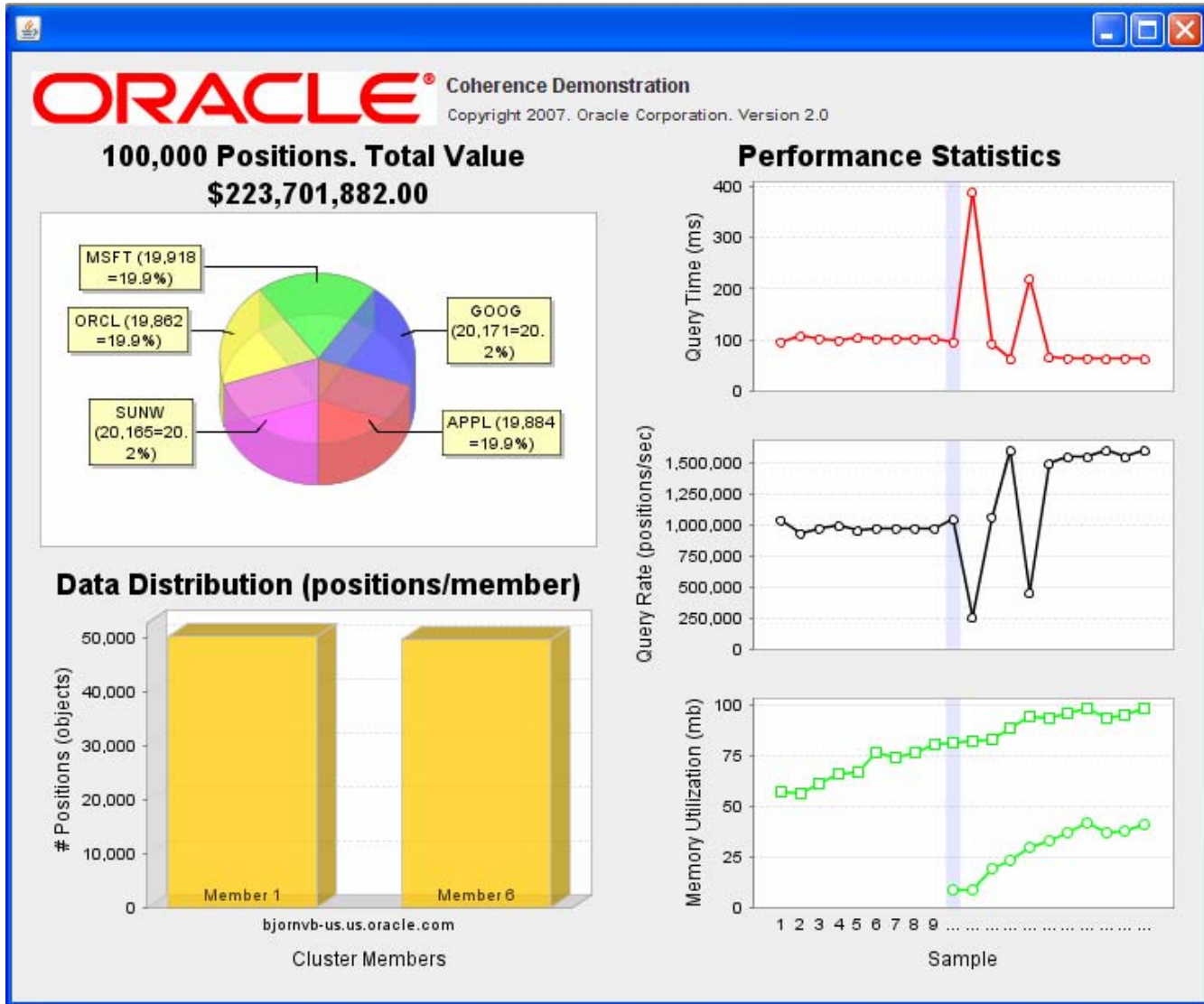
Distribution of data per server

Query time

Data being queried per second

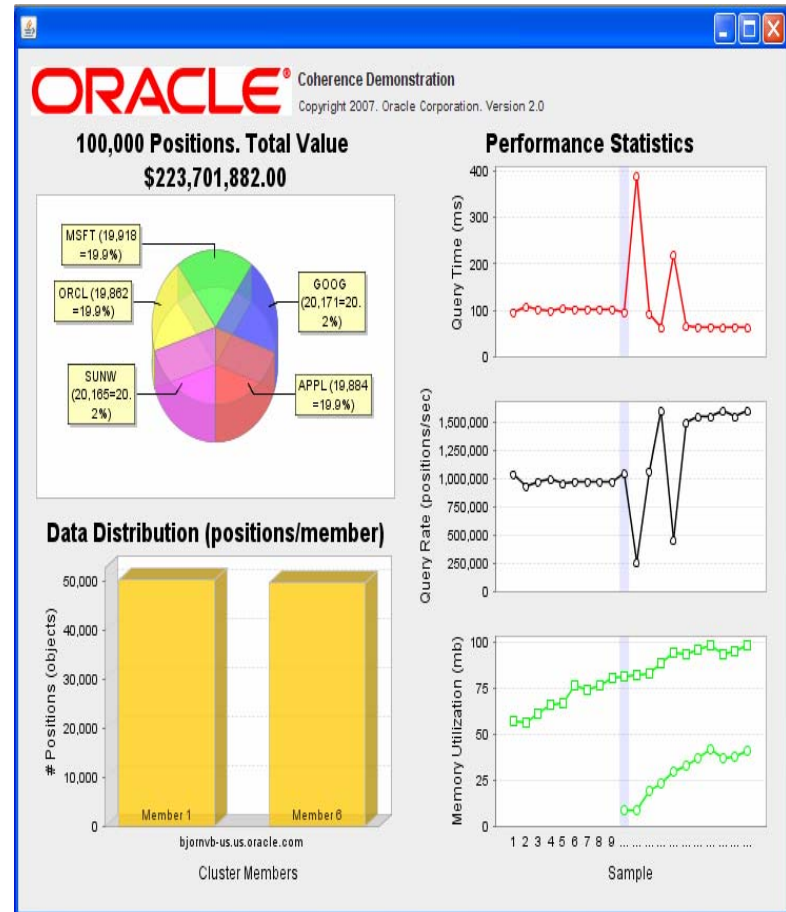
Memory utilization

Start another server

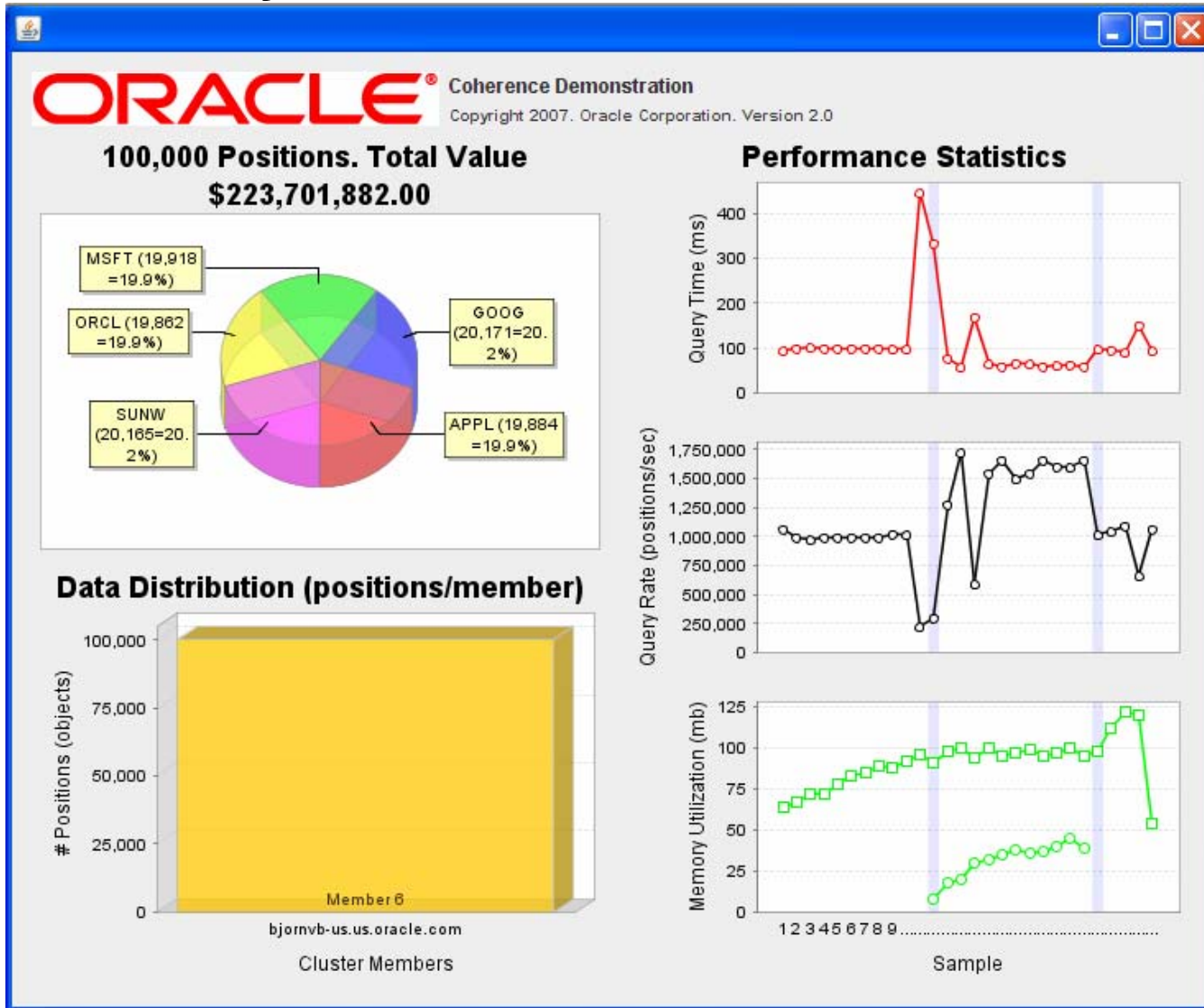


Important points

- Data automatically redistributed to new server
- Immediately offloads other servers
- No interruption of service
- No management console to add servers
- Increased performance*

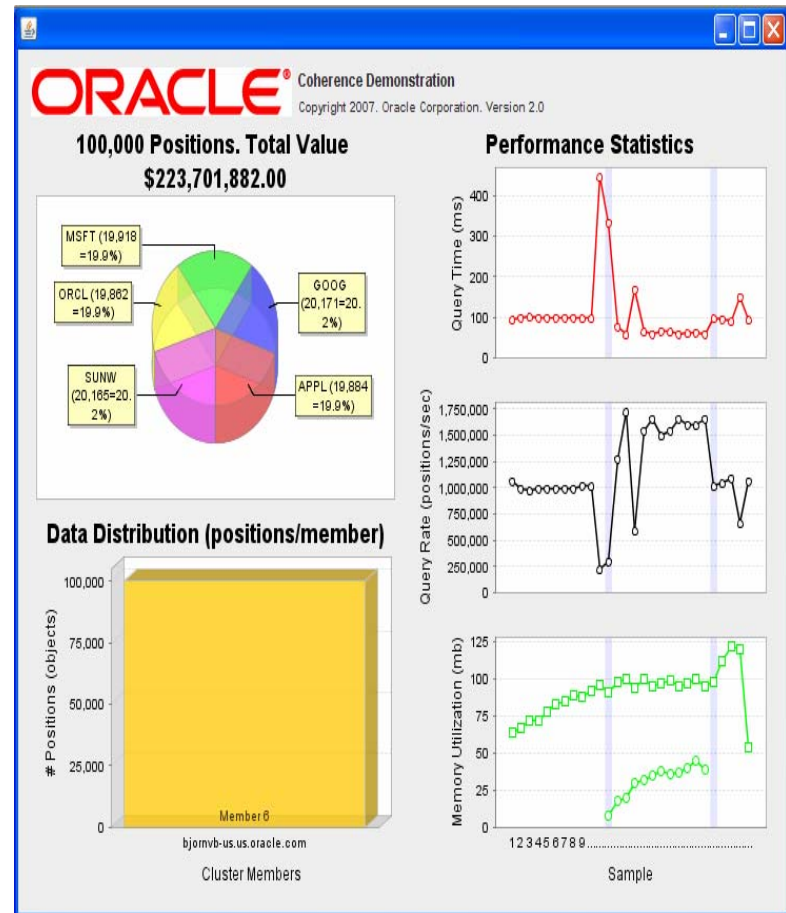


Shutdown any of the servers



Important points

- Data automatically recovered and redistributed
- No interruption of service
- No remote exceptions to catch
- Same mechanism for failure situations as for scaling down



Troubleshooting

- VPN, firewalls and other network tools may affect connectivity and performance.
- May need three servers before demo scales properly
- Run “optimize.reg” for increased performance
- Use multicast-test and datagram-test for testing network connectivity
- Test your demo before showing it to the customer!
- Production Planning and Troubleshooting section in the user guide provides valuable information

Availability of demo

- Source code and executable will be made available this week
- No need for TDS or ATC to run demo, but ATC can be helpful when multiple servers are needed.

Other demos

- Order book demo available at TDS
Source code can be found at the Coherence page at <http://ias.us.oracle.com/>

When to do demos

- Swing demo works well as a part of a customer presentation
- Visualizes well how Coherence works
- Helpful to avoid POCs
 - POCs tend to have more complicated environments, but not because of Coherence