## Better Customer Service & Support Through Monitoring and EAI

A Case Study of The eQuality Connect Product

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#### The Case Study Outline



- & The Witness Integration Problem
- & The Solution eQuality Connect
- & Witness' Integration Strategy
- & Lessons Learned
- & Next Steps

#### **Quality Monitoring**



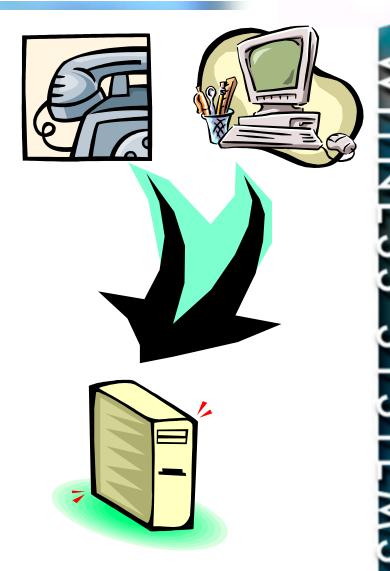
Witness products are used to monitor customer interactions in order to improve the quality of customer service.

- "This call may be monitored"
- "This web chat may be monitored"
- "This e-mail may be monitored"

#### **Quality Monitoring**



Witness Systems
eQuality Suite
combines telephony
voice recording with
synchronized screen
capture to record the
entire customer
interaction.



#### Why Quality Monitor?



If: High quality customer service is absolutely critical for customer retention in today's commodotized marketplace

**And:** Monitoring and reviewing allows organizations to improve customer service

**But:** Quality monitoring and reviewing is expensive in human resources, bandwidth and storage

#### Then it follows:

Monitoring the most valuable customer interactions increases customer retention and optimizes the use of human resources, bandwidth and storage

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#### The Integration Problem



#### The EAI Problem:

How to use the information within the customer service applications (CRM, eCRM, web chat or e-mail) to strategically target the customer interactions for Witness monitoring.

#### Witness created eQuality Connect

- An EAI decision support middleware product used to surgically target customer interactions through business rules applied to information in the customer support applications.
- Customizable rules and client interfaces
- Supports a wide range of customer support applications and contact mediums (CRM, eCRM, web chat, e-mail, etc.)

#### eQuality Connect Middleware



SYSTEM

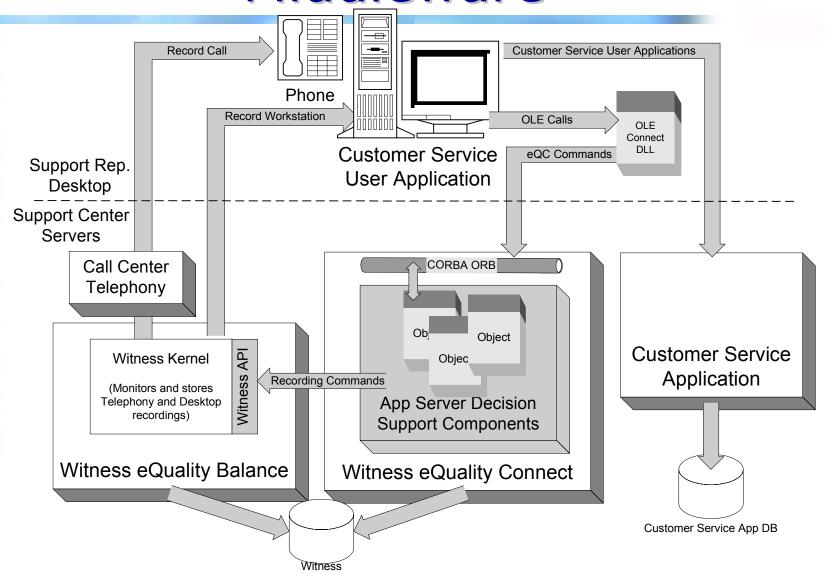
#### eQuality Connect is:

- Sybase Enterprise Application Server 3.5
- Decision support Java components for evaluating business rules for monitoring.
- Integration C++ components for eQuality Balance monitoring product.
- Multiple client options:
  - COM OLE Component for client interface
  - Java Servlet for HTTP interface
  - CORBA client components
- JDBC and DB Connection Caches for DB access.

#### eQuality Connect Middleware



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Database

### eQuality Connect Middleware



#### **Example Call Flow:**

- A customer calls into the contact center.
- The customer call is routed to an available CSR (customer service representative) by the ACD (automatic call distributor).
- eQuality Balance receives an event notification from the telephony server that the CSR is receiving a call.
- The CSR receives a screen pop from their CRM application identifying the customer as their telephone rings.
- The CRM application has been customized. The Visual Basic based hooks in the CRM application use the eQuality Connect COM client to pass customer name and account balance to the eQuality Connect server via CORBA.
- The business rules engine, an EJB component within eQuality Connect, uses real-time customer information to evaluate quality monitoring business rules.
- eQuality Connect passes eQuality Balance a record message based on the customer's Platinum Card status and recent purchase history.
- eQuality Balance records the telephone call through the ACD and the CSR's computer screen over the corporate network using Witness' patented screen capture technology.
- Recording stops when the telephony server notifies eQuality Balance that the call has terminated.
- The customer attributes that triggered monitoring are attached to the recording record for searching and sorting.

#### Whole $> \Sigma$ Parts



#### Focused Service/Process Improvement

- Record the most **strategic** customer interactions across **all** contact mediums
- Enterprise information gives the recorded interaction context
- EJB with CORBA on top is our middleware platform for rapid integration to a heterogeneous mix of customer service applications

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#### Why We Chose?



#### **Integration Middleware**

- Leveraged existing API to core voice and data recording product (eQuality Balance) which allows external entities to control recording, (AIM) Agent Initialed Monitoring.
- Componentized design allows separation of delivery allows eQuality Connect to be licensed and delivered separately.

#### **Application Server**

- Time to market. Using off the shelf application server allowed rapid development.
- Scalability. Clustering possible.
- Sybase EAS 3.5 supports a mixed bag of components. C++ for eQuality Balance connection, Java for EJB, JDBC and Servlets.
- Witness Systems core competency is developing quality monitoring solutions.

#### Why We Chose?



#### Client

- COM Client because Sybase made it painless and most applications support COM interfaces.
- Java, HTTP and CORBA interfaces to support widest range of web chat and e-mail applications.
- Integrate primarily at the CSR desktop because of the need for real-time information and events that may not be available on the Customer Service Application server.

# JUE SYSTEM

#### Lessons Learned



#### **Demonstrate Open Integration**

- Target an initial set of strategic integrations
  - Target formal certification programs with key partners. They will help market your integration product.
  - Choose those that demonstrate the solutions flexibility.
- But don't over-extend integrations!
  - ROI is highly variable and case by case
  - Ruthless focus on minimizing costs until customers are involved
  - Don't be driven by the number of integrations, but by their strategic value.
  - Don't underestimate the closed ness of legacy systems

#### Lessons Learned

## Sybase EA Server 3.5 was a good choice for an Application Server!

- Provided an environment for heterogeneous components (Java, EJB and C++).
- Provided an environment for a heterogeneous interface (OLE, Java and ORB Clients plus HTTP Servlet support for Internet messages).
- Negotiated a reasonable runtime for an embedded application server.

#### **Challenges**

- Less than perfect support for CORBA standards
- JDBC to ODBC driver glitches

#### Next Steps



#### & Data Mining

Asynchronous customer information retrieval

#### & Integrate with training systems

- Use CSR skills competency information for real time recording decisions
- & Non human interaction recording
- & Of course more integrations



#### Questions?

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Thank You

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