

# HSN HITS A HOME RUN WITH ZERO DOWNTIME SIEBEL MIGRATION



## BUSINESS GOALS

### High Availability

- › Maintain 24x7 continuous availability during major Oracle Siebel application, database, and systems upgrade

### Support Phased Migration Approach

- › Gradually migrate users from Siebel 6.2 to Siebel 8.0 while limiting disruption to the business
- › Continuous operations for mission-critical order processing on Siebel application
- › Live parallel running on both old and new system
- › Provide application upgrade and downgrade logic to enable both systems to run in parallel
- › Real-time data movement for high-volume data transactions

## SOLUTION

GoldenGate Software Zero Downtime Upgrade for Siebel to Support Continuous Availability

## CUSTOMER QUOTE

“Being a live 24/7 business, HSN simply cannot afford to take any outage, so when other vendors suggested we take the systems down for a week to complete the migration, we knew we had to find an alternate solution. We selected GoldenGate because it could handle our key technical requirements which included low latency, the ability to work with an older version of the Siebel application, moving large volumes of data, and no extensive in-house development.”

- › Anitha Reddy  
Vice President of IT Applications, HSN

## CLIENT

HSN is an interactive lifestyle network and retail destination, offering a cultivated assortment of exclusive products combined with top brand names. The HSN experience takes shopping to a new level by incorporating experts, entertainment, inspiration, solutions, tips and ideas for its customers. On HSN's television programming and via hsn.com, customers find exceptional selections in beauty, fashion and accessories, jewelry, home and lifestyle, and electronics consumer goods.

A multi-billion dollar company employing 4,000 and reaching over 90 million homes, HSN is available across all media including its TV network and hsn.com, which ranks in the top 30 of the top 500 online retailers. HSN is an operating business of HSN, Inc (Nasdaq: HSNi).

## CHALLENGE

HSN has been a longtime user of Oracle Siebel's call center application—the central repository that processes and maintains HSN's orders, including all inbound customer orders from the website, automated Interactive Voice Response (IVR), and call center, as well as ongoing maintenance of all customer information. In late 2006, the decision was made to upgrade the Oracle Siebel application from version 6.2 to the most recent 8.0 release, while at the same time upgrading the underlying database from Oracle 8i to Oracle 10g.

With this daunting task ahead of them, the IT team at HSN was challenged to think outside of the box and come up with different solutions to upgrade both the database and the application. Initial ideas ranged from taking a week of downtime using the standard Siebel upgrade process and using a “big bang” approach, to in-house custom developed scripts. Being a live 24/7 TV shopping network and ‘e-Retail’ business, it simply cannot tolerate this level of outage. Likewise, developing a solution from the ground up in-house was deemed to be an unnecessary drain of valuable internal resources and would have taken up precious time that the HSN IT team simply did not have. Fortunately, after some online research and a recommendation from a member of the HSN IT team, the company turned to GoldenGate Software.

GoldenGate was chosen because of its capabilities to move data bi-directionally between different Oracle database versions and schemas, while providing the ability to gradually transfer users over from Siebel 6.2 to Siebel 8.0 without taking any downtime by using a configuration where the two applications could run live in parallel. This was all possible with negligible downtime, which ultimately was the deciding factor for HSN.

“Senior leadership really challenged our team to be creative in coming up with a solution for this Siebel upgrade project”, said John Shedd, Operating Vice President of Information Technology at HSN. “In all of our research it became clear that GoldenGate was the right fit to help us complete the upgrade without disrupting the business. GoldenGate provided a seamless solution that

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## GOLDENGATE BENEFITS

### High Availability

GoldenGate provides HSN's central CRM and order processing system with continuous availability during a major Siebel 6.2 to Siebel 8 application upgrade.

### Bi-directional, Real-Time Data Movement to Support a Live Parallel Running Configuration

GoldenGate supports a phased migration approach and enables a Siebel application upgrade with the ability to forward to Siebel 8 or fail-back to the old Siebel 6.2 environment in the event of any issues.

### Support Application and Database Upgrade

By leveraging GoldenGate's ability to embed application upgrade and downgrade logic as transformations, in support of a Siebel application upgrade, all while seamlessly upgrading from Oracle 8i to 10g database and by-passing any intermediate upgrades to Oracle 9, HSN achieved zero downtime.

## SYSTEMS SUMMARY

### Applications:

Oracle Siebel 6.2 & 8.0

### Databases:

Oracle 8i & 10g

### Software Infrastructure:

GoldenGate Zero Downtime Upgrade Solution for Siebel

### Hardware/OS:

SUN Solaris

enabled our business to continue as usual by allowing us to avoid a big-bang implementation in favor of a phased one. If I had it to do over again, I would make the same decision."

## SOLUTION

In selecting GoldenGate, HSN opted for a phased migration approach using a live parallel configuration in which both the old and new systems would be kept fully synchronized using GoldenGate as the means to move data back and forth. HSN spent a great deal of time working with both the GoldenGate and Oracle Siebel teams to ensure that the new system was sized appropriately and would scale over time as the transaction volumes and the number of users grew.

HSN began by moving 50-100 call center agents at a time from the old system to the new Siebel 8.0 application running on the Oracle 10g database, ultimately moving all 1,500 peak agents over to the new environment over a period of several months. With users working off both the new and old environments, it was essential that the underlying data be replicated, transformed (upgraded or downgraded depending on the destination) in real-time to ensure no errors or order duplications took place.

"GoldenGate's flexible parameter based approach to table mappings allowed us to quickly develop complex mappings, supporting even complex schema changes", said Bill Turnbull, Sr. Engineer of Technology at HSN.

Once all users were trained on the new 8.0 application environment and fully migrated to the production Siebel 8.0 system, HSN ran both environments for a period of time so that in the event of any issue or failure, users could be pointed back to the Siebel 6.2 system as both systems were kept fully synchronized with GoldenGate's bi-directional replication capabilities.

## CONCLUSION

Together, the HSN, Oracle Siebel and GoldenGate teams worked on developing upgrade and downgrade application logic so that both environments could run in parallel. GoldenGate's Siebel zero downtime upgrade solution is just one piece of this major project which spanned approximately two years in total. Additional work on the project not only involved training all users on the new application version, but also a new telephony integration, as well as new technology for all call center and agent scripts.

HSN is currently exploring other projects within its IT infrastructure where GoldenGate can be deployed to move data in real-time throughout the enterprise.

## ABOUT GOLDENGATE SOFTWARE

GoldenGate Software Inc. is a leading provider of high availability and real-time data integration solutions for improving the availability, accessibility and performance of critical data across heterogeneous enterprise IT environments. More than 400 enterprises use GoldenGate solutions worldwide, including Visa, Bank of America, US Bank, UBS, Sabre Holdings, DIRECTV, Comcast, Federated Investors, Mayo Foundation and Overstock.com, to standardize on GoldenGate solutions for real-time access to real-time information. The company broadens its global market reach through relationships with ACI Worldwide, Amdocs, Cerner Corporation, Fujitsu Computer Systems, Inc., GE Healthcare, HP, IBM, Ingres, Microsoft, Oracle, Teradata Corporation and others. For more information, visit [www.goldengate.com](http://www.goldengate.com).