Crystal Cruises is a luxury cruise line that strives to provide a first-class travel experience for guests. This includes luxurious accommodations, the finest amenities, gourmet dining, and an expanse of shipboard activities—all backed by technology systems that keep everything running efficiently.

In order to have statements available for passengers when their cruise docked at its final destination, the on-board mainframe processors tracked accounts for each guest, including charges incurred in restaurants, gift shops, spas, and other ship amenities. Combined with a mainframe at the headquarters, the system also managed behind-the-scenes functions such as the crew duty rosters and payroll.

Crystal Cruises cuts its IT expenses by 80% with Neo Suite and Fujitsu software NetCOBOL.

**CLIENT**
Crystal Cruises

**INDUSTRY**
Leisure and Tourism

**CHALLENGE**
Migrate off the mainframe while preserving existing applications

**SOLUTIONS**
GT Software’s NeoSuite
Fujitsu Software NetCOBOL
CHALLENGE
The mainframes had been in place for many years and were a reliable, albeit expensive solution. The legacy technology on the mainframes included Customer Information Control System (CICS)/COBOL code—and a lot of it: more than two million lines of code in the headquarter’s system and another 500,000 lines of code in the shipboard systems’, making it difficult to integrate with contemporary systems, such as the ship’s point-of-service system.

To make matters worse, new programmers weren’t being trained in CICS/COBOL, which made it very difficult to find developers with the ability to update the basic code when needed.

A decision was made to migrate off the mainframes. However, because of the around-the-clock operations the process had to be fast and seamless for customers and users alike. “We are a 24/7 environment, when one cruise ends another starts. It’s very important that customer’s bills are accurate when disembarking, and that the oncoming passenger’s accounts are immediately initiated,” says Boban Dragojilovic, Vice President of Computer Services at Crystal Cruises.

Crystal Cruises turned to GT Software’s NeoSuite to quickly and easily convert its existing applications to native Microsoft ASP.NET, to improve functionality and make them accessible via the ship’s intranet.

SOLUTION
Using GT Software’s NeoSuite would allow Crystal Cruises to preserve its original business logic, thus promising to be faster and less expensive than rewriting the applications for .NET. NeoSuite also made possible a less-risky, phased-approach, allowing migration from the mainframe to a web services environment.

RESULTS
The new technology added much-needed simplicity and efficiency, for example:

• Check-out now takes 90 seconds—down from an hour
• Systems are backed-up frequently, rather than just once a day
• Everything integrates easily, such as the ship’s phone system
• Reports are now digital and no longer require printing
• Instead of adding and deleting accounts at the start of a new trip, the crew now easily resets the entire roster, eliminating error

“The benefit of using GT Software’s NeoKicks®, Fujitsu Software NetCOBOL, and NeoBatch® is that they mitigate much of that risk by allowing Crystal Cruises to migrate in increments, when and as we were ready, rather than having to migrate all at once. Plus, implementing the conversion of code was unbelievably simple.”

-Boban Dragojilovic, VP Computer Services
Crystal Cruises also replaced the legacy system navigation using the Microsoft development systems to create a dynamic menu control in place of the old system’s twelve function keys.

The staff can now access information graphically, making it easier to understand data such as passenger demographics and needs. According to Dragojilovic, “The graphs we’re providing to staff through the .NET solution were impossible to create on the mainframe. Now, our employees have an important new tool that gives them information and insight to do their jobs.”

Maintenance of the Windows-based systems is more cost effective, saving Crystal Cruises about 60 percent of its previous maintenance costs. Savings are also achieved by the lower price of hardware, software licensing and use of virtual servers. The simplified user navigation with the new interface has also reduced training costs.

“We’re seeing a tremendous reduction in total cost of ownership, which means more than saving money—it means we can redirect our investment to areas where it has the greatest impact on guest services,” said Dragojilovic.

Total IT expenses cut by 80%
Maintenance cost reduced by 60%
Check-out time shortened from an hour to 90 seconds

“We’re seeing a tremendous reduction in total cost of ownership, which means more than saving money— it means we can redirect our investment to areas where it has the greatest impact on guest services,”
-Boban Dragojilovic, VP Computer Services

ABOUT
GT Software (www.gtsoftware.com) turns yesterday’s legacy systems into tomorrow’s leading edge applications. Its solutions help organizations extend the value of their IT investments through agile development and standards-based APIs, which improves workflow and enhances operational efficiency. Masters of application modernization and a global distributor of the Fujitsu NetCOBOL compiler, GT Software’s proven solutions power mainframe integration with today’s technologies. Currently, more than 2,500 organizations globally trust GT Software’s solutions to ensure they are able to drive forward innovation that improves customer experiences, increases operational efficiency, and generates revenue.