

Risk Management

 **CreditQuest**[®]
Portfolio Manager

**Portfolio Risk
Management and
Stress Testing**





CreditQuest® Portfolio Manager: Powerful Portfolio Analysis and Management Reporting

Management needs timely access to detailed portfolio information to monitor performance, identify problems and take prompt action. Yet, portfolio-level reporting for most institutions is a burden. It involves a multi-day or multi-week process of data gathering and manual consolidation before analysis can begin. CreditQuest® Portfolio Manager streamlines the process, eliminates errors and puts additional and higher-quality information into management's hands more quickly.

CreditQuest Portfolio Manager provides:

- Reduction of costs and errors over spreadsheet-style analysis
- A single database to provide complete and consistent data views for analysis
- Easy-to-use access to pre-defined reports
- Powerful ad-hoc report and analysis creation without the need for a database expert
- Convenient, centralized, secure, automated process for loading data
- Advanced calculation functions and data manipulation techniques

Reveal the Trends and the Outliers

CreditQuest Portfolio Manager rapidly sifts through an extensive amount of data and produces routine or ad-hoc reports for internal, external or regulatory needs. It allows users to roll up monthly snapshots by quarter or by year so they can more effectively monitor and report trends. Routine reports are predefined in a gallery for easy access and use, and are produced immediately after each monthly data import. These reports help answer questions such as:

- Where are the top-performing officers, branches, regions and markets?
 - How has the business changed in the past few months?
 - What are the exposures and trends in various industry sectors, and in various lines of business? How are risk ratings migrating period by period?
 - How much regulatory capital must the bank maintain according to Basel II?
 - What credit balances will run off in the near future?
 - What does the new replacement business look like?
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Break Free of the Spreadsheet Jungle

A great deal of portfolio analysis today is performed using many spreadsheets. While providing strong flexibility and strengths for report presentation, the proliferating number of files has made that type of reporting process a time-consuming and manual effort. Additionally, data integrity concerns increase as more hands touch and adjust the data, causing file iterations to occur.

CreditQuest Portfolio Manager improves the information management process with a safe and standard data file handling routine. The result is that senior risk managers and executive-level staff quickly obtain a thorough and consistent analysis of the entire portfolio.

Look Deeper and See More

Essential to portfolio oversight is the ability to see the big picture, as well as the details of undercurrents and trends. For example, a report might display the counts and exposure total in each risk grade and reveal changes in recent periods. This insight could suggest further exploration into how the exposure correlates with loan-to-value (LTV). As LTV values approach or exceed policy requirements, account reclassification or at least a fresh loan review may be warranted. It is through this type of analysis that one can fully understand the overall book of business and better identify what is needed to defend, strengthen and improve the situation.

Reports and analyses enable one to analyze loans from the portfolio-level down to specific relationship groups and customers. CreditQuest Portfolio Manager provides rapid and detailed insight into a financial institution's credit portfolio. Flexible data segmentation enables drill-down into the portfolio to continuously monitor concentration levels by exposure, industry segment and geography. It allows viewing of historical banking activity by customer, relationship manager, branch and more. With this information in hand, users can quickly identify individual loans or portfolio segments that require attention.

Aggregate Data Automatically

CreditQuest Portfolio Manager aggregates data monthly, automatically displaying the changes in your portfolio. It accepts data from the core system and then applies mathematical functions. Optionally, it supplements the host data with data from CreditQuest, so users have the data measures they want. It automates the entire process and advances the date on prior work. For example, if standard reports represent the last three months of data, those same specifications are maintained.

Own, Build and Expand the Analysis Library

Common data populations are defined for the entire portfolio, such as retail loans, corporate loans, commercial real estate, collateral types, LTVs, etc. Common display layouts are created for viewing of Risk Analysis, Customer Profitability, Balances Detail, Collateral Analysis and so forth. These

reusable components supply a common view for various populations, or a common population with various views. The result is that users can always find a report that suits their needs. Simple selection dialogs enable users to define the desired reporting dates and other criteria. Individual values may be adjusted for reporting without losing the original value.

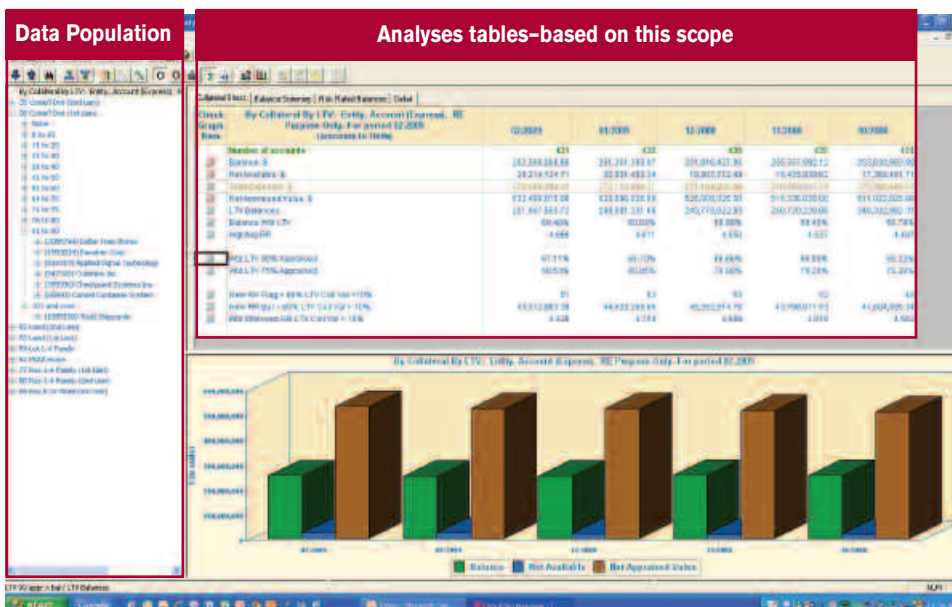


Illustration 1: With data population, users may view several types of analyses.

Reports for Every Type of Credit Risk Oversight

The reports users can create are only limited by the type of data included. Following are some examples of common risk management reports.

Portfolio Stress Tests

CreditQuest Portfolio Manager enables defining "what-if" stress scenarios and applying those calculations. Data is applied consistently across all periods and updated as each new month's data is added.

Illustration 2 represents a stress test in a "what-if" scenario challenging collateral values. "What-if" collateral values decreased 10% or 25%. How many loans would be affected? What is the total value of those loans? This report addresses what the overall impact is on the Weighted Average Risk Rating.

Item	02/2009	01/2009	12/2008	11/2008
Number of accounts	431	432	430	430
Balance \$	238,403,015.23	237,586,774.47	238,147,190.37	241,550,887.50
Net Available \$	13,041,168.30	21,106,120.50	10,693,843.61	15,109,501.79
Total Exposure	257,044,183.61	256,752,899.97	256,841,033.98	256,660,446.29
Net Appraised Value \$	537,498,018.00	523,191,623.00	525,009,629.00	515,336,025.00
LTV Balances	238,014,926.72	236,047,052.89	236,261,493.74	237,233,344.04
Balance Wtd LTV	96.00%	96.07%	96.29%	96.04%
Wgt Avg RR	4.954	4.814	4.652	4.537
Wtd LTV 90% Appraised	63.21%	62.86%	62.81%	62.27%
Wtd LTV 75% Appraised	76.85%	75.42%	75.98%	74.73%
New RR Flag > 80% LTV Coll Val < 10%	36	37	35	30
New RR Flag > 80% LTV Coll Val < 10%	25,038,709.71	29,126,451.00	28,642,045.00	33,292,829.01
Wtd Stressed RR LTV Coll Val < 10%	4.780	4.737	4.672	4.675

Illustration 2: Collateral Stress Test Analysis

Top Customer Relationships

A popular report for auditors and bank regulators is the Top Ten Borrowers Report. The "80-20 rule" applies to these vital customer relationships. Though few in number, they represent significant exposure and usually are the most active customers. These are important relationships that must be examined to ensure that balance-weighted returns are commensurate with the risk.

The Top Ten Borrowers Report as show in Illustration 3 provides a detailed display showing not just the percentage of total, but the individual Weighted Risk Rating and Weighted Rate for each of the Top Ten Borrowers and the trend for the periods shown. Changing the periods shown is also a two-click selection.

Check Graph Item	Selected Entities as a % of Scope Total (Accounts in Thousands)	02/2009	% Total	01/2009	% Total	12/2008	% Total
Number of accounts		811	10.0%	810	10.0%	810	10.0%
Balance \$		943,578,874.28	38.0%	309,791,747.87	10.0%	386,547,616.53	10.0%
Margin Growth		7,223,711.84	2.0%	7,111,828.82	2.4%	7,209,243.18	3.4%
Margin LTI		8,892,576.71	2.2%	8,942,071.91	2.2%	8,857,983.27	2.3%
Flooded Portfolio Group		2,248,768.89	0.7%	2,249,700.00	0.7%	2,248,592.29	0.7%
Flooded Inc		5,248,768.89	1.1%	5,249,700.00	1.1%	5,248,592.29	1.1%
Flooded		3,004,002.44	1.0%	3,395,072.31	1.1%	3,118,024.05	1.1%
Margin Security Systems		4,381,679.20	1.4%	4,495,478.99	1.4%	4,424,855.77	1.4%
Trading Securities Portfolio		4,328,879.20	1.4%	4,497,478.99	1.4%	4,424,855.77	1.4%
Applied Mortgages		4,155,714.85	1.4%	4,097,902.31	1.4%	4,086,779.48	1.4%
Corporate Real Estate CRE		4,038,888.89	1.3%	4,093,000.00	1.3%	4,039,000.00	1.3%
Trust Investments		3,874,541.51	1.3%	3,770,607.74	1.3%	3,862,192.78	1.3%
Non-Residential		8,848,239.72	0.9%	8,298,063.12	10.0%	8,417,889.29	10.0%
Total Exposure		2,738,724,843.00	50.0%	3,225,545,271.00	10.0%	3,708,858,287.00	10.0%
Wgt Avg RR		4.879		4.559		4.488	
Margin Growth		2.00%		2.00%		2.00%	
Accounts LTI		3.00%		3.00%		3.00%	
Flooded Portfolio Group		4.00%		4.00%		4.00%	
Flooded Inc		4.00%		4.00%		4.00%	
Flooded		4.00%		4.00%		4.177	
Margin Security Systems		4.00%		4.00%		4.189	
Trading Securities Portfolio		4.00%		4.00%		4.166	
Applied Mortgages		5.00%		5.00%		5.00%	
Balance Wtd Avg RR		6.03%		6.03%		5.96%	
Margin Growth		7.00%		7.00%		7.00%	
Accounts LTI		6.20%		6.20%		6.20%	
Flooded Portfolio Group		7.20%		7.20%		7.20%	
Flooded Inc		7.20%		7.20%		7.20%	
Flooded		5.70%		5.70%		5.70%	
Margin Security Systems		6.20%		6.20%		6.20%	
Trading Securities Portfolio		6.20%		6.20%		6.20%	
Applied Mortgages		7.40%		7.40%		7.40%	
Corporate Real Estate CRE		7.00%		6.80%		6.90%	
Trust Investments		6.00%		6.00%		6.00%	

Illustration 3: Ten Top Borrowers Report

Risk Migration

Knowing how risk has changed is equally important to knowing counts and totals by risk-rating category. Management must identify accounts moving deeper into the trouble zone and those working their way out. If problems are uncovered earlier, only minor corrective action may be needed, whether this is acting on an account or making an early loss appropriation. CreditQuest Portfolio Manager filters and quantifies risk information to identify “who,” “how much” and “how far.”

Portfolio Reports on Loan Losses

Allowances for loan losses is another area that requires close and detailed analysis. Realistically, there is no way to know specifically what losses ultimately will be revealed, but continually estimating and “triangulating” on the target helps ensure that realistic reserves are maintained. CreditQuest Portfolio Manager enables users to aggregate loans in risk pools against which they can assess loss factors. As the data is refreshed monthly, the latest risk situation immediately appears. It also lets users dynamically

identify impairment situations. Candidate-impaired accounts can be identified and the impairment amounts entered; the results automatically update the pool totals and provide the data needed for impairment detail reports. The powerful calculation engine within CreditQuest Portfolio Manager is designed to enable detailed data manipulation, for whatever reporting is needed by financial institutions.

Regulatory Capital Requirements Under Basel II

CreditQuest Portfolio Manager can perform portfolio-level calculations to determine capital requirements in accordance with the credit-risk requirements of Basel II. This regulatory capital mitigates the credit risk resulting from the financial institution’s loan portfolio. Using the filter mask, the portfolio analyst can limit Basel II calculations to only data that meets specific criteria. The analysis capabilities offered by CreditQuest Portfolio Manager can help financial institutions steer their portfolio safely through changing economic conditions, while meeting credit risk capital requirements.

Impairment Suspect Report For period 02-2009							
02/2009							
Responsibility Code	Collateral Type	Entity	Account	Customer Name	Balance	Net Available	To Expo
3 Adam Fitz	63 Land (1st Lien)	Georgia Pacific	001-10424047	Georgia Pacific	1,775,826.92	0.00	1,775.8
9 Carina Williams	63 Land (1st Lien)	Clayton Homes	001-10423678	Clayton Homes	131,822.62	0.00	131.8
9 Carina Williams	63 Land (1st Lien)	Anheuser Busch	001-10419287	Anheuser Busch	129,936.41	0.00	129.9
9 Carina Williams	63 Land (1st Lien)	Imperial Oil	001-10619288	Imperial Oil	128,848.19	0.00	128.8
9 Carina Williams	66 Multiple Collateral	Asat Communication & Software	001-13225605	Asat Communication & Software	336,363.91	0.00	336.4
9 Carina Williams	66 Multiple Collateral	H&R Block	001-13224688	H&R Block	224,016.01	0.00	224.0
9 Carina Williams	66 Multiple Collateral	H&R Block	001-13225604	computer horizons corp	440,360.00	0.00	440.4
9 Carina Williams	66 Multiple Collateral	Anthem	001-13225603	Bluebonnet Solutions Ltd	432,260.00	0.00	432.3
10 Dan LaCounts	38 Comm'l Det (2nd Lien)	M-Systems Flash Disk	006-11223110	M-Systems Flash Disk	830,866.32	0.00	830.9
10 Dan LaCounts	77 Res 1-4 Family (1st Lien)	Matthew Cameron	006-88124658	Matthew Cameron	640,000.00	0.00	640.0
26 Debbie Snyder	38 Comm'l Det (1st Lien)	Toyota Motor Corp ADB	001-11424678	Toyota Motor Corp ADB	149,396.67	0.00	149.4

01/2009							
Responsibility Code	Collateral Type	Entity	Account	Customer Name	Balance	Net Available	To Expo

Illustration 4: To further support ALLL calculations, a list of potentially impaired accounts can be generated based on characteristics such as “Non-Accrual” or “Impaired Last Month” for review and distribution.

Key Features of CreditQuest Portfolio Manager

- Reports on loans, collateral, deposits, activity and fees for all portfolios
- Augments imported data with calculated fields
- Pre-built reusable population and layout components make it possible for easy creation of new reports and modification of existing standards
- Provides on-the-fly flexibility for ad-hoc analysis
- Enables easy creation of all reports without the need for a database expert
- Analysis content control:
 - Detailed filters and segmentation
 - Specify sort and drill-down sequence
 - Include/exclude specific accounts
 - Manually edit specific values for any period
- Optional formatting features:
 - Graphics
 - Trend indicators
 - Highlight
 - Value scaling
 - Suppress blank lines/zero values
 - Narrative and comments
- Exports data, in summary or detail listing, for external presentation formatting or further analysis in another program such as Microsoft® Excel®

Data, Output and Format Control

All formatting controls are at users fingertips. Features include scaling, blank/zero suppression, cross sections, trend calculations, equal and balance-weighted values, period definitions, percentage change, account counts, headers/footers, portrait/landscape, report comments, and control over all graph elements. When printed reports are desired, the content may range from high-level summary information to detailed individual account values. Tables of data can be output in column or row orientation.

CreditQuest Portfolio Manager keeps all data readily available so users can flex the data to the desired format. While senior managers want summary portfolio-level views and analyses for executive reporting, other analysts and managers might want more specific loan-level and entity-level detail. All the data seen within CreditQuest Portfolio Manager can be output to a variety of reporting formats with multiple formatting options. The output report can be printed for archival purposes, saved as an electronic file, or saved as an HTML document. If desired, the HTML document may then be imported directly into Microsoft® Excel® for further processing, formatting or comparisons.

System Requirements

CreditQuest Portfolio Manager uses Microsoft® SQL Server® 2005 or 2008 with Analysis Services. Server requirements and recommendations will depend upon the amount of data to be processed. Please go to www.creditquest.com to download the latest information.

Implementation Jump Start: Simple to Comprehensive

Our Professional Services team can supply services based upon financial institutions' needs. The primary limitation on the power and depth of loan portfolio reporting is the amount and quality of the input data. CreditQuest Portfolio Manager addresses this fundamental issue. It is designed so that non-programmers can control and manipulate the raw input data, so they can select the data that is useful for them. Users control the entire process. We get financial institutions up and running quickly by providing a good starting suite of standard reports together with training on how to enhance reports or create new ones.

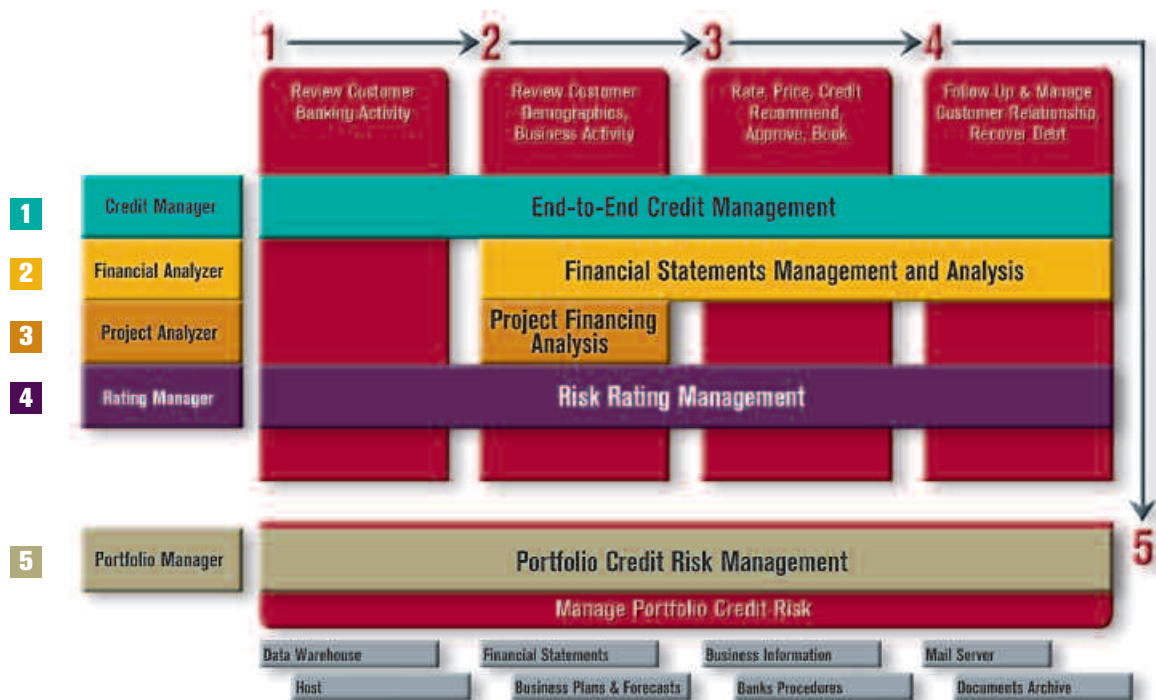
The data for each core system will be different; therefore, the final reports that can be produced will be different. Our staff will assist in defining the data and reports to provide a quick and complete solution.

Stronger in the Suite

The power of CreditQuest Portfolio Manager is available as a standalone system. It is enhanced with other modules of the CreditQuest suite, where more complete account relationships can be defined and where the latest ratings and other data can be included.

Overview of CreditQuest

Mapping the Credit Management Process



1 CreditQuest Credit Manager - An end-to-end credit management solution that supports the review, analysis, collaboration and decision making of corporate and retail credit applications by incorporating workflow, document management, account aggregation, automated and manual decisions, relationship management, delinquency management and more.

2 CreditQuest Financial Analyzer - An advanced financial statement management and analysis solution offering configurable financial ratios, peer group comparisons, custom analysis reports and more. By leveraging financial data, CreditQuest Financial Analyzer enables effective customer risk rating.

3 CreditQuest Project Analyzer - A project financing analysis solution that assists in assessing the repayment capacity and viability of debt-financed projects. CreditQuest Project Analyzer reduces the time spent on project assessment from days to hours.

4 CreditQuest Rating Manager - A risk-rating software solution that enables the use of a wide range of rating models. CreditQuest Rating Manager supports models that incorporate borrower demographics, analysis of financial statements, management quality assessments, industry segment risk, related parties, bank account activity, quality of collateral, real-time alerts and more.

5 CreditQuest Portfolio Manager - An advanced credit portfolio management and analysis solution that provides metrics covering credit risk banking activity, concentrations and trends from the portfolio level down to the single customer. CreditQuest Portfolio Manager includes 16 standard reports and the ability to add or customize additional reports.

Part of the CreditQuest® Suite

CreditQuest Portfolio Manager is part of the CreditQuest suite of products, together providing an end-to-end credit management system. The CreditQuest suite brings origination, financial analysis, underwriting, documentation and executive reporting together in a single, streamlined workflow. The system can address workflow management needs for the entire lending process. It is able to combine a unified, relationship-centric view of the customer's financial data and supporting documents with portfolio management capability.

For more information about CreditQuest Portfolio Manager or the entire CreditQuest suite of products, contact us at +353 1 664 1430, or e-mail us at moreinfo@harlandfs.com.

Harland Financial Solutions (www.harlandfinancialsolutions.com) supplies software and services to thousands of financial institutions of all sizes, providing credit risk management software and related services to banks and financial services providers around the world.

Our flagship solution, CreditQuest, is an end-to-end credit management system that brings origination, financial analysis, underwriting, documentation, risk rating automation, rating model administration and executive reporting together in a collaborative, streamlined workflow. It combines a unified, relationship-centric view of the customer's financial data and supporting documents with advanced portfolio management capability.

RiskManagementSolutions

- CreditQuest
 - Streamlined Credit Workflow
 - Relationship Management
 - Financial Statement Analysis
 - Covenant Monitoring
 - Collateral and Exception Tracking
 - Executive Reporting
 - Risk Rating Automation
 - Rating Model Administration
 - Portfolio Management

CoreSystems

- Phoenix® System

Harland Financial Solutions

+353 1 664 1430

moreinfo@harlandfs.com

www.harlandfinancialsolutions.com