

How Kenetek helped its customer manage the Basel regulation

About the customer

The customer that requested the support service for the Scheduler optimization:

- Is a banking group with over 5,000 employees.
- Has over 70 employees that are entrusted to manage its proprietary IT environment.
- Has an IT architecture that ranges from the Mainframe to the distributed environment.

About Kenetek

Kenetek is a global company with a highly qualified staff whose mission is to support you to manage your Application in a changing environment and put your BUSINESS in a better position to predict and control the future.

In over twenty years Kenetek has developed its skills and expertise. Founded in 2011 Kenetek has begun giving its customers an exhaustive answer in the field of application and data analysis.

Since 2012 Kenetek has been PCI Participating Organization and showcases its products and services at the PCI Community Meetings all over the world since 2013.

The customer's problem

"We needed a turn-key solution to help us to describe the algorithms of the software in scope of the Basel regulation"

Repository Summary				
Endevor Environment				
Applications	Qty	Loc	Loc on scope	Elaboration
Distributed Model				
Application	150	50.434	16.419	23/06/06
Application	817	198.520	62.469	
Database Credit Management				
Application	2.245	785.592	239.056	
Application	2.293	1.050.266	122.797	
Application	201	80.266	17.541	
Application	356	113.683	28.184	
Application	84	19.365	5.072	
Non Performing Credit				
Application	2.591	636.901	150.297	
Application	2.603	605.743	205.443	
Application	1.115	197.773	53.674	
Application	0	0	0	
Application	1.226	402.390	101.872	
Performing Credit - Lending				
Application	1.374	931.649	238.478	
Application	7.281	3.011.025	658.763	
Application	0	0	0	
Application	0	0	0	
Performing Credit - Management				
Application	84	19.365	5.072	
Application	317	160.987	28.482	
Application	2.227	831.692	171.899	
Application	823	212.305	40.328	
Application	320	86.161	20.304	
Application	495	397.726	55.633	
Application	151	18.819	3.962	
Credit Datawarehouse - Basel				
Application	334	149.742	38.650	
Application	253	98.723	29.343	
Application	0	0	0	
Application				
TOTAL	27.340	10.059.127	2.293.738	



Code Similitude Dashboard and Application Assessment



The dimensions of the problem

Kenetek, using KLR®, has scanned over 25 applications with 10 million line of code written in Cobol.

The challenges

One of the most important challenge that we addressed was the identification of the rules to apply and the analysis of the similarities.

The project has required the following steps:

1. Identify what information is managed by the applications.
2. Identify the algorithms impacted by the regulation.

Possible solutions

With a *manual approach*¹ it is hard to determine where and how the applications meet the Basel regulation.

Kenetek's solution

Kenetek uses a holistic approach thanks to the tools that have been developed over the years. By performing a static analysis of the application source code and the regulation documents the customer has the power to truly know what happens in their application with the minimum effort on its side, the only phases where the customer's IT support is required are:

1. During the source code and documents extraction.
2. During the repository installation.

The produced data can be shared within the various actors involved in the process, both internal and external to the organization, using a *centralized platform*² where people from different backgrounds can navigate through dashboards, metrics and reports. They can access the information they need to achieve their goal in the most efficient way possible,

The screenshot displays the 'System Application Area' interface. At the top, there's a navigation bar with 'Home > Comparative Analysis > Paragraph'. Below this is a 'Comparative Analysis' section with a table. The table has columns: Call, Loc, Name, Type, Paragraph, Similarity Index, OSI, Identifier, and Length Index. Four rows are visible, each with a 'Compara' button. Below the table, two browser windows are open, showing side-by-side source code for 'BPO80072_PBC' and 'BPO80047_PBC'. The code is Cobol, showing similar lines of code in both windows, such as 'CALL UT18D001 USING G-UT18D001' and 'ACCEPT V21-ORA-SYS FROM TIME'.

Call	Loc	Name	Type	Paragraph	Similarity Index	OSI	Identifier	Length Index	
1	Compara	889	BPO80070	PBC	5000-DATA-E-ORA	37879	4	5	50
1	Compara	174	BPO80292	PBC	5000-DATA-E-ORA	40182	4	5	49
1	Compara	511	BPO80047	PBC	5000-DATA-E-ORA	82844	15	15	127
1	Compara	453	BPO80072	PBC	5000-DATA-E-ORA	82844	15	15	127

Comparative Analysis display the source code from two different programs with the same Line of Code

1. By manual approach we intend an approach where a team of highly qualified professionals interview system managers and manually go through the schedulers and business processes with them.
2. The centralized platform is a win and web client (KLR.Net®) provided by Kenetek where the customer can, once authenticated, access the information uncovered during the analysis process using dashboards, reports, etc. All the dashboards and reports can be customized to customer requirements. All the information can be extracted (if authorized by a platform administrator) to standard formats (xls, pdf, etc.) to easily share using methods external to the platform itself.



About KLR[®]

KLR[®] (Knowledge Language Recognition) is the answer in the field of application analysis. Proposed as a holistic engine it is used to analyze the evolution of a complex system and its parts, and the relationship between each other.

The Results

Using KeneteK's approach the customer was able to identify the algorithm used to support Basel regulation.

This resulted (compared to the other approaches) in a drastic reduction of time and relative cost for the company and reduction of the risk of related penalties.