

Risk Management System integration & Solutions

Robust market and liquidity risk controlling has gained a new prominence and urgency in the last years. Adapting to a turbulent market has created new challenges in managing your risk. Partnering with acarda is a step towards a more transparent and streamlined risk management process, allowing more time and energy dedicated to analysing and responding to emerging risks instead of administering your processes.

acarda has the expertise to offer a range of services and solutions (see acarda **ARDM** risk data management framework on the second page) to your risk management needs. Our services span the steps involved in migrating or implementing a new risk or liquidity management platform; as well as, improving the efficiency and automation of your existing system and processes. We can support you from the first project phases with our system selection, integration and implementation knowledge all the way to improving reporting capabilities and having our experienced consultants assist you in operating and administering your risk management system.

Risk Management Service Offering

Analysis of Risk Management Process

- Optimisation of process and data framework
- Adoption of new regulations
- Integration into the investment process

Software Selection and Project planning

Implementation

- Implementation of risk management applications
- Migration to service provider

Automation

- Setup of acarda **ARDM** risk data management framework
- Automation of interfaces, workflows and controlling

Reporting

- Definition of reporting framework
- Setup or enhance reporting platform for internal departments and clients

Support with Administration and Operation

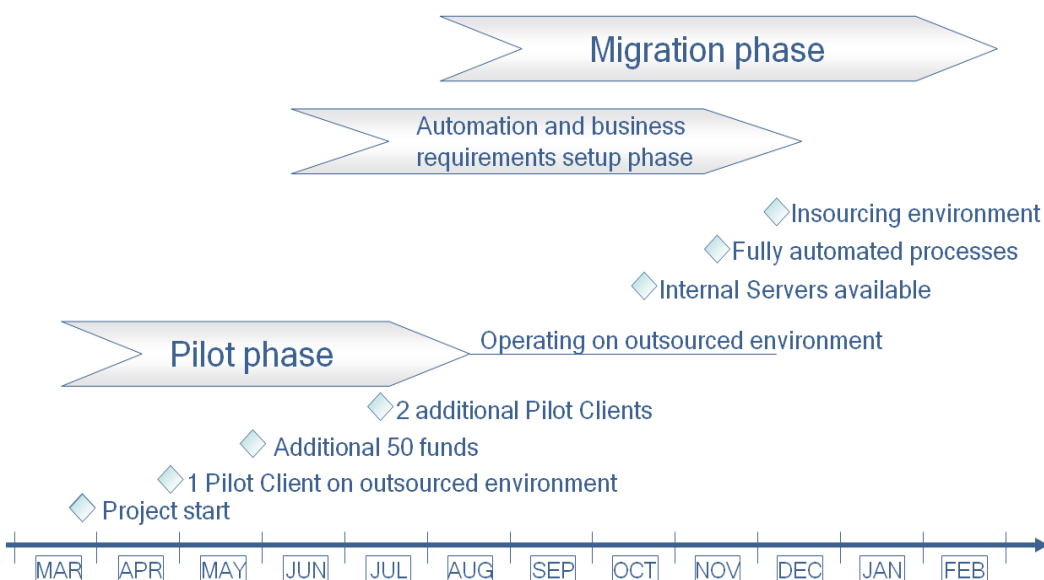
About acarda

acarda is based in Frankfurt and Luxembourg, and operates across Europe. acarda concentrates on the investment management areas of brokerage, fund industry and custody. We optimise and parameterise front, middle and back office processes, standard solutions and also the corresponding market and security data beyond national boundaries.

acarda was involved in more than 30 projects for clients in Luxembourg, Austria and Germany in 2010. We work in cooperation with selected software vendors and audit firms, such as: BDO, Diamos, Incentage, Intalus, Sim Corp & RC Banken.

acarda is a member of the funds and brokerage associations BVI, ALFI and bwf.

Our approach - Project Timeline and Tasks



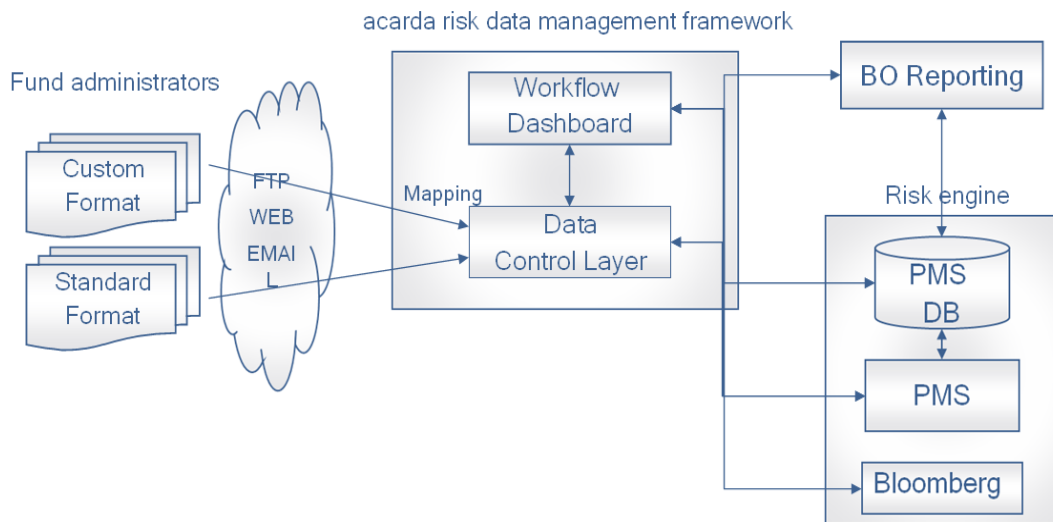
Project Reference

Royal Bank of Scotland - Portfolio Risk Management Services, Luxembourg

- Analysed risk management processes and requirements
- Analysed funds to be migrated to new PMS risk engine.
- Supported risk engine integration
- Mapped different Fund Administrator's NAV files to a common format
- Setup dashboard to monitor workflow
- Operated Pilot Environment.
- Migrated existing clients onto PMS.
- Tested and supported configuring risk calculations and results
- Trained RBS staff with data integration tools.
- Supported Production Environment and development of new clients.

ARDM – acarda Risk Data Management Framework

ARDM framework and IT architecture for management of risk data



ARDM

In the acarda risk data management framework, we have developed a transparent and automated way to monitor and control your risk data and workflow.

The acarda framework includes:

- Dashboard workflow monitor provides transparent overview and control of workflow progress.
- Automated handling of market and instrument data.
- Ability to transform all incoming Fund Administrator NAV data to common format.
- Smooth migration and implementation from old to new system.
- Improved instrument mapping and management capabilities.

ARDM workflow dashboard

Global										
Funds-Administration	Client	PF_ID	Portfolio Name	NAV-Date	Staging DB			PMS		
					Data	Loadir	QA	Impor	QA	Calc
Fund Administrator A	Client 1	PORT1	Portfolio 1	21.12.09	✓	✓	✓	✓	✓	✓
Fund Administrator A	Client 1	PORT2	Portfolio 2	21.12.09	✓	✓	✓	✓	✓	✓
Fund Administrator A	Client 1	PORT3	Portfolio 3	21.12.09	✓	✓	✓	✓	✓	✓
Fund Administrator B	Client 2	PORTA	Portfolio A	21.12.09	✓	✓	✓	✓	✓	✓
Fund Administrator B	Client 2	PORTB	Portfolio B	21.12.09	✓	✓	✓	✓	✓	✓
Fund Administrator B	Client 2	PORTC	Portfolio C	21.12.09	✓	✓	✓	✓	✓	✓
Fund Administrator X	Client 3	PORTX	Portfolio X	21.12.09	✓	✓	✓	✓	✓	✓
Fund Administrator X	Client 3	PORTY	Portfolio Y	21.12.09	✓	✓	✓	✓	✓	✓
Fund Administrator X	Client 3	PORTZ	Portfolio Z	21.12.09	✓	✓	✓	✓	✓	✓
Fund Administrator 9	Client 4	PORT9	Portfolio 9	21.12.09	✓	✓	✓	✓	✓	✓

Detail										
PF_ID_CP	POS_ID	Status	Instrument-Class	Instrument-Class_CP	SecID	SecID_CP	SecID Code	SecID Code_CP	SecName	Short
PORTB	PORTB_68839847	FX-Outright	DI	68839847	68839847				FX DEAL TRANSACT Long	
PORTB	PORTB_88839847	FX-Outright	DI	88839847	88839847				FX DEAL TRANSACT Short	
PORTB	PORTB_08810638	FX-Outright	DI	08810638	08810638				FX DEAL TRANSACT Long	
PORTB	PORTB_97290697	FX-Outright	DI	97290697	97290697				FX DEAL TRANSACT Short	
PORTB	PORTB_87290697	FX-Outright	DI	87290697	87290697				FX DEAL TRANSACT Short	

acarda workflow dashboard

Added value:

- Transparent workflow monitoring.
- Problems can be quickly identified and resolved.
- Process automation and reduced manual intervention.
- Capable of processing funds in parallel.
- Historical and archived funds can quickly be found and re-loaded.

Automaton of market and reference data:

- Generates automated requests of new instruments.
- Basic instrument mapping automated.
- Market data imported seamlessly.

Contact

Germany

acarda GmbH
Wilhelm-Leuschner-Straße 68
60329 Frankfurt am Main

Gerhard Jovy
Tel: +49 69 2444881-0
Fax: +49 69 2444881-99
gerhard.jovy@acarda.de
www.acarda.de

Luxembourg

acarda S. à r. l.
23, Boulevard Dr Charles Marx
2130 Luxembourg

Bernhard Bittner
Tel: +352 20 99 26 11

bernhard.bittner@acarda.eu
www.acarda.eu