

BIAN & ACTUS PoC – The Power of Algorithmic Financial Contracts

June 15, 2020 | Q&A

Question	Answer
Do ACTUS algorithms use Artificial Intelligence?	ACTUS uses NI (natural intelligence 😊). Much of the current chaotic situation in banks IT systems, is due to the lack of a standardized algorithmic representation of the financial contracts. This can only be untangled with NI. Once an orderly situation has been achieved, I think it is possible that AI can help us making additional advance.
Does ACTUS support a "write once read many" times approach to financial contract data management?	This is the prime achievement of ACTUS. The same contract can be used in all types of financial analysis be it in risk management, finance or regulation.
In Fintech, services such as electronic purses are being created and linked to companies' payroll accounts, to provide top-up services, or payments for services, or to receive micro loans to employees. How can Actus help, in transactional models?	ACTUS helps in managing current or payroll accounts. The payment services as such are outside the scope of ACTUS.
Hi Willie, ACTUS use case you shared seemed very helpful to see a Customer Position (BIAN SD) over time. The underlying model for each asset/liability how it (Nominal/Actual) will change over time are subjects of many researches. Does ACTUS have their own models for this? How do they vary by region or countries?	ACTUS provides the underlying cash-flows which allow calculating value of any asset or liability (or off-balance sheet) at any point in time. Nominal value we will get directly from ACTUS since it is one of the state variables. Other values (fair value, amortized cost etc.) can be easily derived with some additional knowledge. It is possible to assign (however outside ACTUS) multiple accounting rules to ach contract which are country specific.
Answered in session	
Typical core banking offering this model in the system itself for the Banks and Financial Institutions today. What additional add value you can offer from ACTUS can offer to Banks?	Typical core banking systems (all those I know off) do not offer the broad range of financial contract. More complex financial contracts are usually managed via additional transaction processing systems, even if it is hidden under the hood. Having such a broad and consistent core as in ACTUS in itself is already a large step forward. In addition, with ACTUS it is possible to add any analytic feature without any data warehouse in between. In today's core banking world analytic functions (risk management, advanced accounting etc.) are offered again via

	additional systems with a myriad of data warehouses (data marts, data lakes...) in between.
How cash-flow based product descriptions are related and aligned with the BIAN product descriptions?	<p>The ACTUS cash flow contract attributes are simply mapped to the (higher level) BIAN semantic attributes for the corresponding product fulfilment Service Domain. In implementation the input and output data can then support following the ACTUS standard definitions as appropriate.</p> <p>In time we would hope that ACTUS attributes can be defined for the different product fulfilment Service Domains as an option for adoption in implementation.</p> <p>Note that for some products such as mortgage there are different implementation options meaning that more than one set of ACTUS contract types might apply.</p>
How can ACTUS help regulatory compliance requirements for banks?	<p>Regulation is changing from position reporting (nominal value, market value) to cash-flow reporting. Here ACTUS can help.</p> <p>ACTUS is also the ideal basis for advanced models.</p>
The analysis tool you show, is that part of ACTUS? Do you have example in SME (small & medium business) lending?	<p>The analysis tool I showed was AnalytX. AnalytX is not open source but has ACTUS in its core. I assume with “example” you mean implementations. Yes, there are implementations for SME lending.</p>
What are the thoughts about bringing this forward as an ISO standard to enhance the appeal to global regulators?	<p>People are working on this. We are already RMG members of ISO 20020. More should come.</p>
Why is the core implementation not available on github?	<p>If you mean by “core implementation” the ACTUS code: It is available on Github (the Java reference code).</p>