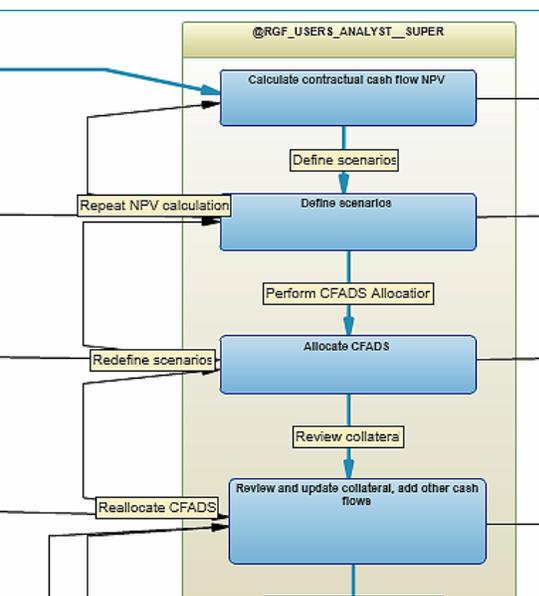


SAS® Credit Assessment Manager

Automate the process of categorizing loans down to the individual assessment level



What does SAS® Credit Assessment Manager do?

SAS Credit Assessment Manager automates the process of categorizing impaired loans, down to the individual assessment level - whether they are nonperforming loans, related exposures or unlikely to pay. It flags and reports on customers that fall into these categories and enables management to resolve individual cases through refinancing, restructuring the loan, calling in collateral or other remediating action.

Why is SAS® Credit Assessment Manager important?

SAS Expected Credit Loss (IFRS 9 and CECL) evaluates a bank's entire portfolio of loans. SAS Credit Assessment Manager extends this capability, enabling credit and risk managers to zero in on bank-specified subsets of impaired loans individually, identify any related exposures, proactively manage those exposures in time to mitigate losses and optimize the recovered amount.

For whom is SAS® Credit Assessment Manager designed?

It is designed for financial services CROs, CFOs, CCOs and credit portfolio managers. These executives must mitigate risk, optimize recovery of impaired loans and report on individual assessments of impaired loans to regulators.

Are you confident of your bank's ability to assess, manage and optimize returns on impaired loans? Are you sure you have established the correct amount required for a capital buffer?

SAS Credit Assessment Manager provides a framework for both qualitative and quantitative assessment of individual nonperforming loans, enabling you to obtain the information needed to establish capital reserves, mitigate losses and improve collections. It was designed based upon the European Central Bank, as well as other international regulatory guidance, and complements the collective IFRS 9 or CECL assessment of your credit portfolio.

With this solution, your bank can diagnose a nonperforming loan using cash flows available for debt service and collateral allocation to determine the impairment amount. The ability to carefully analyze individual loans may result in lowering the impairment assessment along with its impact on reserves. It also helps you link an impaired loan to related positions, enabling timely collection procedures.

SAS Credit Assessment Manager is a workflow-based solution that seamlessly fits into any credit risk management infrastructure. It is designed to work as a companion to your bank's IFRS 9 or CECL infrastructure, regardless of whether you are using a SAS, in-house developed or third-party solution.

Benefits

- **Improve collections.** Proactively manage troubled loans so your bank can act in time to mitigate risk, limit losses and optimize recovery. Collections from impaired loans may be improved through monitoring timely collection programs, including dunning, refinancing, restructuring or seizure of collateral.
- **Optimize impairment provisions.** SAS Credit Assessment Manager automates the process of loan categorization and integrates individually assessed impairment values with your expected credit loss (ECL) solution. The result is a comprehensive picture of collective and

individually assessed positions, providing the insight required to optimize impairment provisions.

- **Analyze high volumes of loans.** Use a well-defined process to analyze very high volumes of individual loans. You can assign specific cases to knowledgeable customer relationship managers and calculate impairment values in a timely manner. Test multiple cash flow outcomes, including baseline, optimistic and pessimistic economic scenarios to support your collections strategy.
- **Establish a single source of truth.** SAS Credit Assessment Manager centrally captures all relevant loan information, including counterparty details and relationships, loan instruments, cash flows and collateral. Reap the benefits of a full, centrally managed and reliable range of management reports, including regular assessment of borrower repayment capabilities beyond basic loan servicing data.

- Ensure auditable workflow.** The SAS solution offers a complete audit trail of workflow, including documentation of decisions ranging from foreclosure to concessions, reclassifications or modifications. It also enables automated escalation of any reclassification decision that requires additional evidence, such as performing or nonperforming forbore exposures with inadequate payment plans.
- Address regulatory requirements.** Streamline the process of addressing regulatory requirements, including European Central Bank (ECB) guidance on nonperforming loans and related IFRS 9 and FASB reporting rules. Be prepared to easily present all relevant information, including counterparty data, loan instruments, cash flows and collateral from one source.

Overview

SAS Credit Assessment Manager ensures well-run regulatory exams that comply with IFRS 9/CECL accounting rules and related requirements for individual assessment of nonperforming loans. It extends the capabilities of SAS Expected Credit Loss (IFRS 9/CECL), providing SAS financial services customers a uniquely comprehensive and scalable solution with optimized time to benefit.

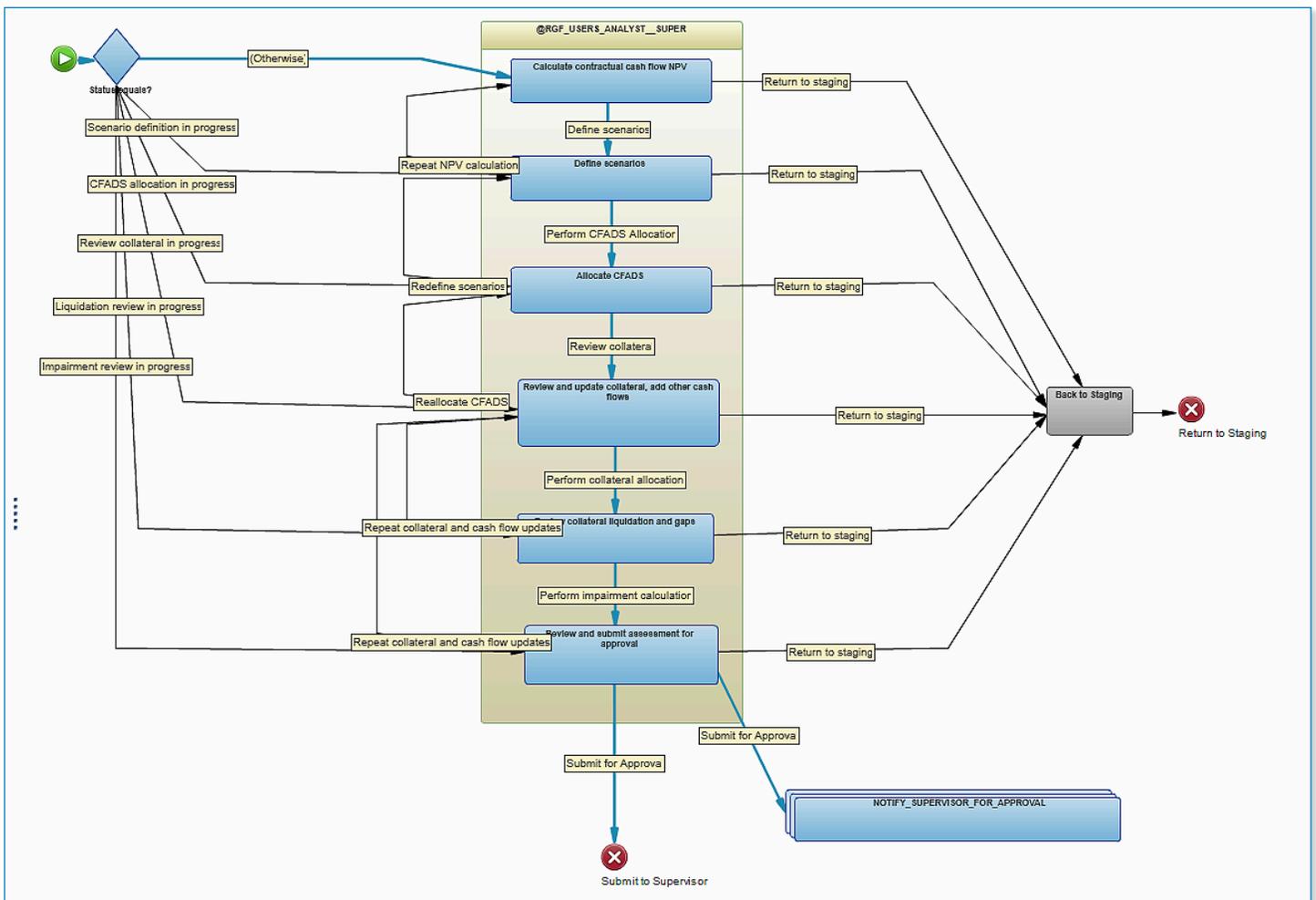
The solution provides a central place to manage credit processes and controls across lines of business, from process documentation and certification to control testing, capital planning and self-assessment procedures that are fully aligned with regulatory expectations. Seamless support for the management and approval process at each

stage up through board approval ensures compliance with international regulatory principles.

SAS Credit Assessment Manager streamlines both internal audit and regulatory examination through the intuitive alignment of artifacts with internal and external stakeholder expectations. Any issues raised during an examination may be tracked, traced and mitigated through the issue resolution process.

Individual assessment decisioning

SAS Credit Assessment Manager provides qualitative retail and corporate questionnaire-based decisioning for restaging individual loans, including business rules. This enables identification of contaminated companion exposures.



SAS Credit Assessment Manager includes prebuilt, customizable workflow templates.

Workflow-driven analytics

A systematic, workflow-driven process establishes different economic scenarios and available cash flows, aligning them with rigorous analytical methods to arrive at a revised impairment amount.

A wide range of analytical methods computes impaired expected credit loss based on the likelihood of occurrence under various economic scenarios.

The workflow then maps these results to the percentage of cash flows available to service debt under each scenario, including the application of collateral and related factors.

Full transparency

The solution offers a complete audit trail of workflow, including documentation of decisions ranging from foreclosures to concessions, reclassifications or modifications. It also enables automated escalation of any reclassification decision that requires additional evidence, such as performing or nonperforming forbore exposures with inadequate payment plans.

A transparent process for selecting non-performing exposures and associated counterparties assesses each position individually, computing revised impairment amounts periodically for fully transparent management reporting.

Interconnected exposures

SAS Credit Assessment Manager links both exposures and collateral to counterparties, related legal entities and parties of interest, enabling the evaluation of all related exposure factors. It is integrated with SAS Expected Credit Loss (IFRS 9/CECL) to assess required provisioning through stress tests and quality reviews, providing timely reports on impairment through recognition of loan losses.

Key Features

Exposure selection for individual assessments

- Rules-driven process for filtering loans and other credit exposures for individual assessment.
- Ability to manually add counterparties for individual assessment.
- Visualization of selection rules used for each monthly run.
- Rules for establishing validity of prior individual assessments.

Individual assessment decisioning

- Questionnaire-based decisioning for both retail and commercial loans.
- Supports restaging of individual loans.
- Rules-based triggers.

Comprehensive workflow and analytics

- Iterative, workflow-driven processes involving available cash flows, likelihood of various economic scenarios, available and matched collateral, and other cash sources.
- Alignment of data and analytics.
- Mapping of results to debt-servicing options.

Complete audit trail

- Documentation of decisions.
- Includes all required records and artifacts from modification through foreclosure.
- Transparent assessment processes.

Loan contamination

- Link exposures to specific counterparties.
- Identify contamination and interconnected risks.

Reliable data

- Aggregate internal and external data sources.
- Map to IFRS 9 and CECL collective assessment data.

The screenshot shows the 'SAS Credit Assessment Manager' interface for 'Individual Assessments: IA for CP10400 - September Assessment'. The 'Impairment Calculation' tab is active, showing 'Scenario Definitions' and 'CFADS Deviations'.

Scenario Definitions:

Define the percentages and weights below before starting the next step in the workflow.

Probability (%) per scenario that CFADS will be realized:

Scenario 1 %	75
Scenario 2 %	60
Scenario 3 %	40

Weighted sum of impairment amounts calculated per scenario for all instruments of a given counterparty:

$$\text{Impairment} = W1 * \text{ImpAmt1} + W2 * \text{ImpAmt2} + W3 * \text{ImpAmt3}$$

Scenario 1 Weight	20
Scenario 2 Weight	50
Scenario 3 Weight	30

CFADS Deviations:

Define the bank percentages for each period across the three scenarios, before moving to the next step in the workflow.

Period	CFADS	CCF	S1: Bank %	S1: Bank Amt	S1: CFADS	S1: Deviation	S2: Bank %	S2: Bank Amt	S2: CFADS	S2: Deviation	S3: Bank %
2017	99,000	100,000	90	89,100	66,825	-33,175	80	79,200	47,520	-52,480	70
2018	84,750	100,000	90	76,275	57,206.25	-42,793.75	80	67,800	40,680	-59,320	70
2019	81,400	100,000	90	73,260	54,945	-45,055	80	65,120	39,072	-60,928	70
2020	99,000	100,000	90	89,100	66,825	-33,175	80	79,200	47,520	-52,480	70
2021	100,000	100,000	90	90,000	67,500	-32,500	80	80,000	48,000	-52,000	70

SAS Credit Assessment Manager enables impairment calculations for individual loans.

SAS® Credit Assessment Manager

Individual Assessments: IA for CP10400 -- KL Demo 01

CFADS Non Core Collateral Core Collateral

	Scenario 1 (90.0%)	Scenario 2 (100.0%)	Scenario 3 (40.0%)	Impairment Amount
Instrument ID:I_10430, EIR: 0.035				
EAD	29,400.00	29,400.00	29,400.00	
Discounted CFADS prorated by EAD	30,314.92	29,940.66	10,479.23	
Other Cash Sources	2,385.30	2,385.30	2,385.30	
Gaps	0.00	0.00	-16,535.47	
Impairment Amount				-5,787.41
Instrument ID:I_10450, EIR: 0.035				
EAD	250,000.00	250,000.00	250,000.00	
Discounted CFADS prorated by EAD	257,779.96	254,597.49	89,109.12	
Other Cash Sources	20,283.13	20,283.13	20,283.13	
Gaps	0.00	0.00	-140,607.74	
Impairment Amount				-49,212.71
Instrument ID:I_10400, EIR: 0.065				
EAD	26,000.00	26,000.00	26,000.00	
Discounted CFADS prorated by EAD	25,369.11	25,055.91	8,769.57	
Other Cash Sources	1,978.88	1,978.88	1,978.88	
Gaps	0.00	0.00	-15,251.55	
Impairment Amount				-5,338.04
Instrument ID:I_10420, EIR: 0.065				
EAD	34,987.00	34,987.00	34,987.00	
Discounted CFADS prorated by EAD	34,138.04	33,716.58	11,800.80	
Other Cash Sources	2,662.89	2,662.89	2,662.89	
Gaps	0.00	0.00	-20,523.31	
Impairment Amount				-7,183.16

With SAS Credit Assessment Manager, you can easily view a list of impaired loans within specific portfolios.

TO LEARN MORE »

To learn more about SAS risk solutions and services, download white papers, view screenshots and see other related materials, please visit sas.com/risk.

To contact your local SAS office, please visit: sas.com/offices

