

# PowerCurve Strategy Management EMEA PCSM User Webinar

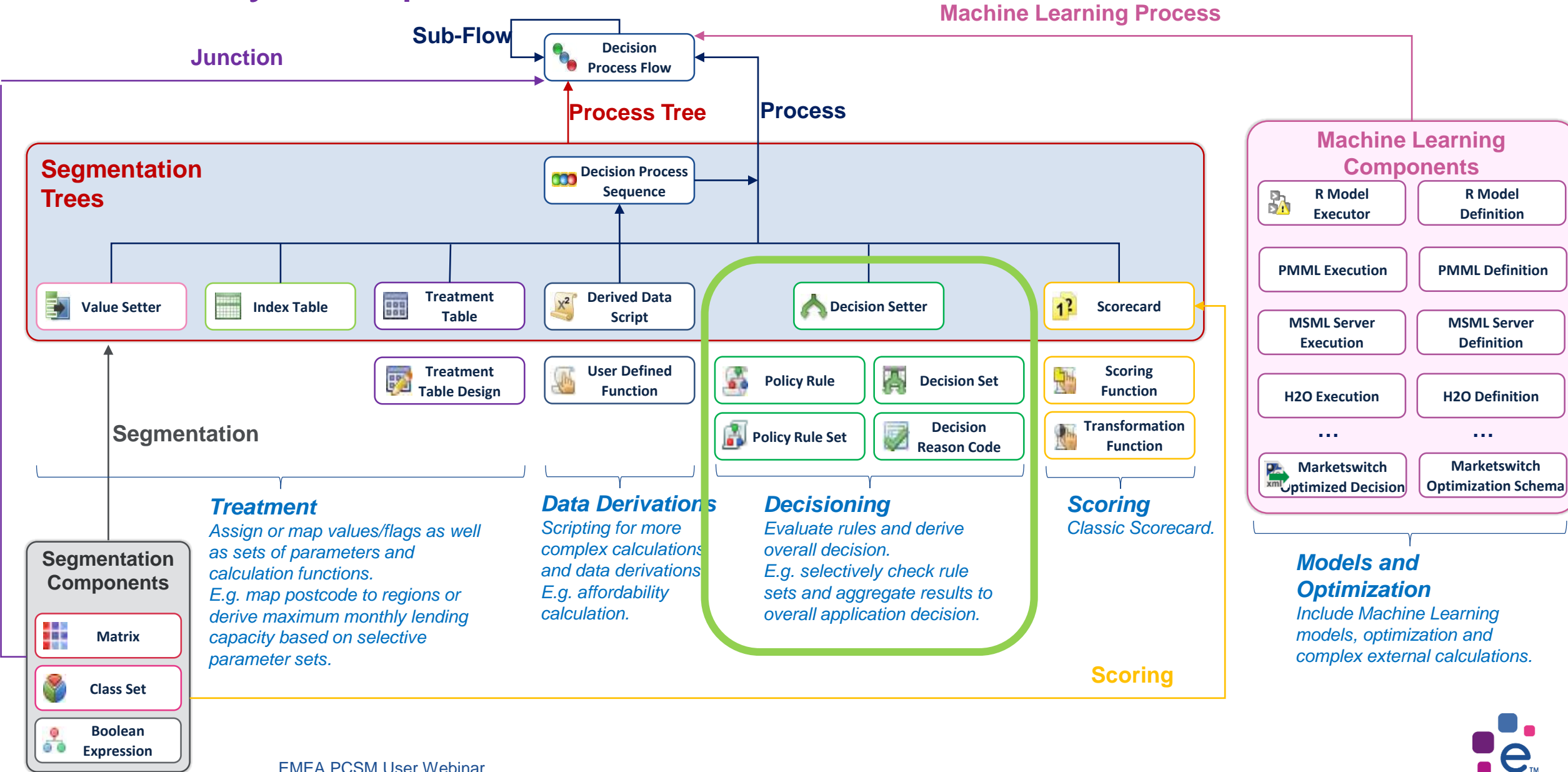
## Decision Setters:

How Decision Setters can help you  
to organize and apply your Policy Rules  
more efficiently

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# PCSM Key Components

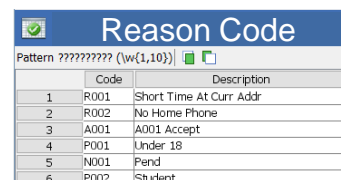


# The Decision Setter Components

Together they build a powerful hierarchical decision making functionality

## Make your decisions understandable

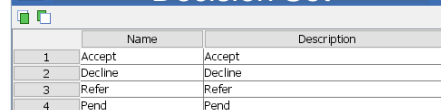
Useful for reporting, lookup of manual systems (code to text)



Reason Code

Pattern	Code	Description
1	R001	Short Time At Curr Addr
2	R002	No Home Phone
3	A001	A001 Accept
4	P001	Under 18
5	N001	Pend
6	P002	Student

## Decision Set



	Name	Description
1	Accept	Accept
2	Decline	Decline
3	Refer	Refer
4	Pend	Pend

## Each specific business decision has its own decision options

Define the potential decision consequences in prioritized order

## Decide according to clear rules

Use lean and simple rules to reflect each single decision aspect. They do not reflect any decision consequence at this point.



Policy Rule

Mode: ☒ True ☐ False

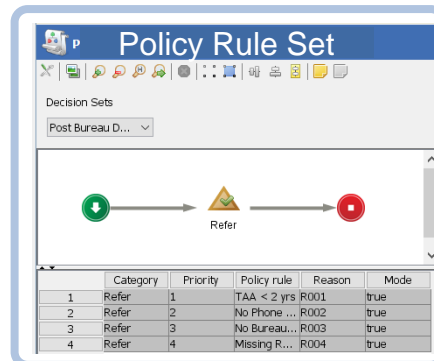
Reason codes:

1 | A01App.GAI' > 60000

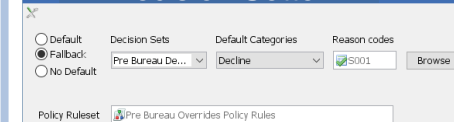
2 |

## Combine simple rules to powerful and prioritized policy rule sets

Assign the rules to decision buckets and execute them according to a defined evaluation sequence



## Decision Setter



Decision Setter

☐ Default ☒ Fallback: ☐ No Default

Decision Sets: Pre Bureau De...

Default Categories: Decline

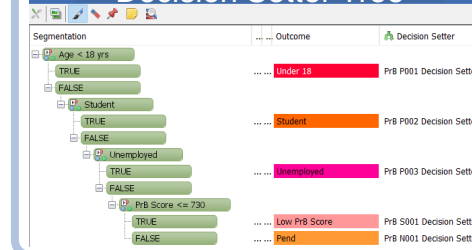
Reason codes: S001

Policy Ruleset: Pre Bureau Overrides Policy Rules

## Apply: Derive a single decision

Combine a rule set with an optional tree decision

## Decision Setter Tree

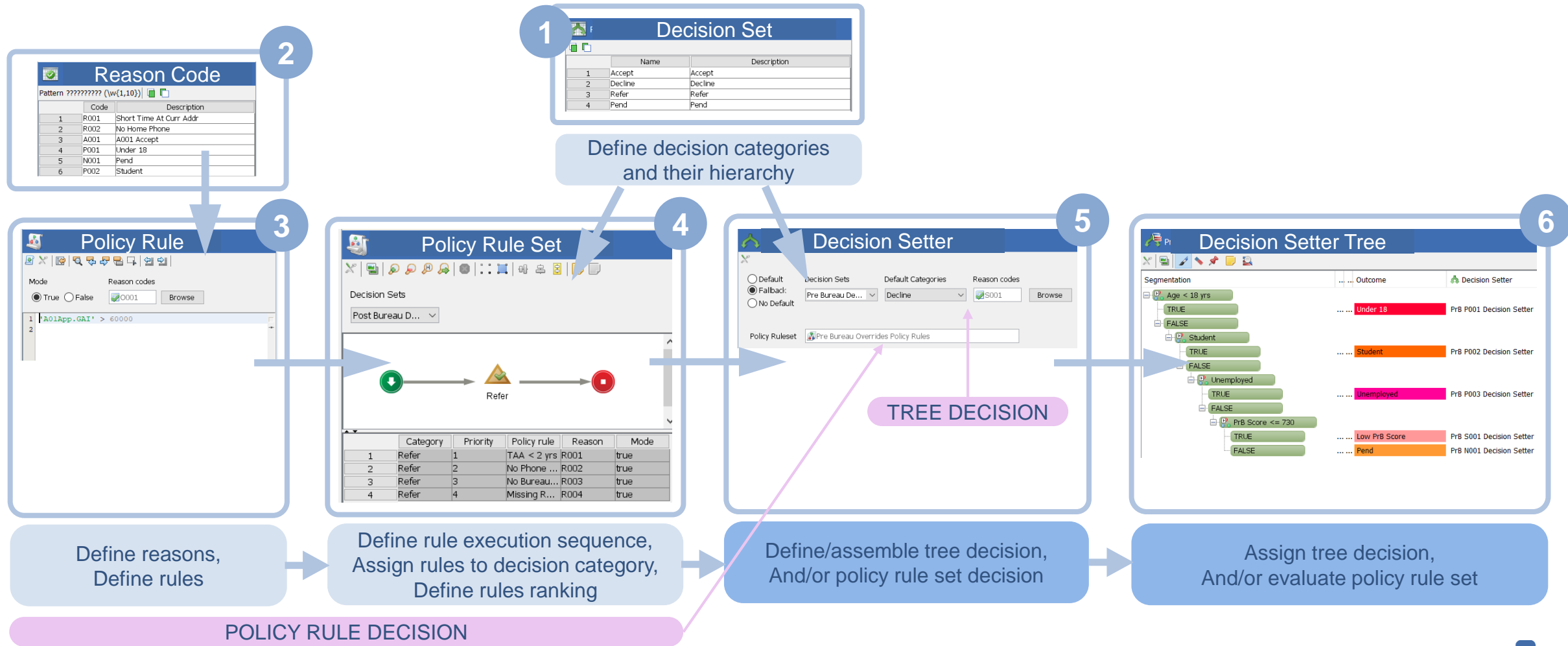


## Apply: Set your decision based on a decision tree

Selectively assign decision setters (rule set + tree decision) to leaf nodes of your decision tree

# How Decision Setter Components Work Together

## Derive a single decision using the built-in decision hierarchy process



# Demo: Review Decision Making Example

The screenshot displays a software interface for decision flow analysis. The top window is titled 'Overall Decision CC'. Below the title bar is a toolbar with icons for various functions. The main area is divided into two sections: 'Risk Classes' and 'Outcomes'.

**Risk Classes Section:**

Segmentation	Leaf N...	Outcome	Application ...	Product Rules	Risk Rules	Merge Rules...	Escalation Rules
Low	... Accept	Low Risk	App Accept Rules	Product Rules	CC low risk rules	Merge Rule Sets	UW low risk
Medium	... Accept	Medium Risk	App Accept Rules	Product Rules	CC medium risk rules	Merge Rule Sets	UW low risk
High	... Accept	High Risk	App Accept Rules	Product Rules	CC high risk rules	Merge Rule Sets	UW high risk
Very High (Decline)	... Decline	Very High Risk (...)	App Decline Rules	Product Rules	CC high risk rules	Merge Rule Sets	UW high risk

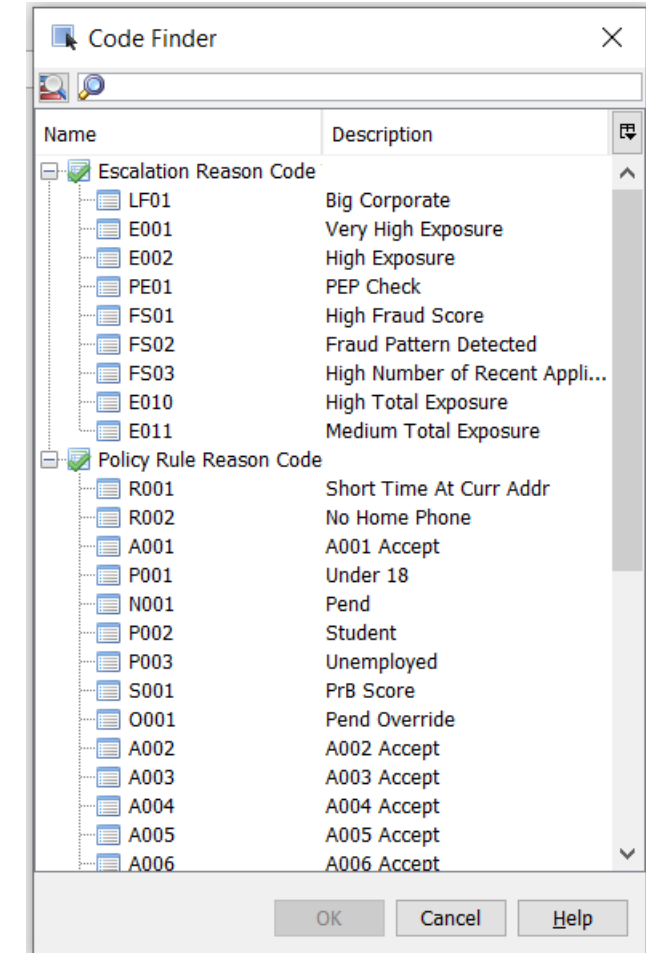
**Outcomes Section:**

	Outcome Name	Colour	Active	Applicati...	Product ...	Risk Rules	Merge R...	Escalatio...
1	Low Risk	Green	✓	App Accept Rules	Product Rules	CC low risk rules	Merge Rule Sets	UW low risk
2	Medium Risk	Yellow	✓	App Accept Rules	Product Rules	CC medium risk r...	Merge Rule Sets	UW low risk
3	High Risk	Orange	✓	App Accept Rules	Product Rules	CC high risk rules	Merge Rule Sets	UW high risk
4	Very High Risk (Decline)	Red	✓	App Decline Rules	Product Rules	CC high risk rules	Merge Rule Sets	UW high risk

# Decision Setting

## Best practice to maintain complex rule sets

- Use separate Decision Sets for different decision purposes
- Organize your Reason Codes in more than just a single table
- A single Reason Code can be assigned to more than a single rule
- Organize your rules according to purpose/level/product in separate Policy Rule Sets
- Use Decision Process Sequences and Trees to organize efficient evaluation of several Policy Rule Sets for better overview and easy maintenance
- Use MERGETABLES() to merge the results of several Policy Rule Sets to a single Reason Code list and single decision
- Enhance reason code sorting with writing your own merge function



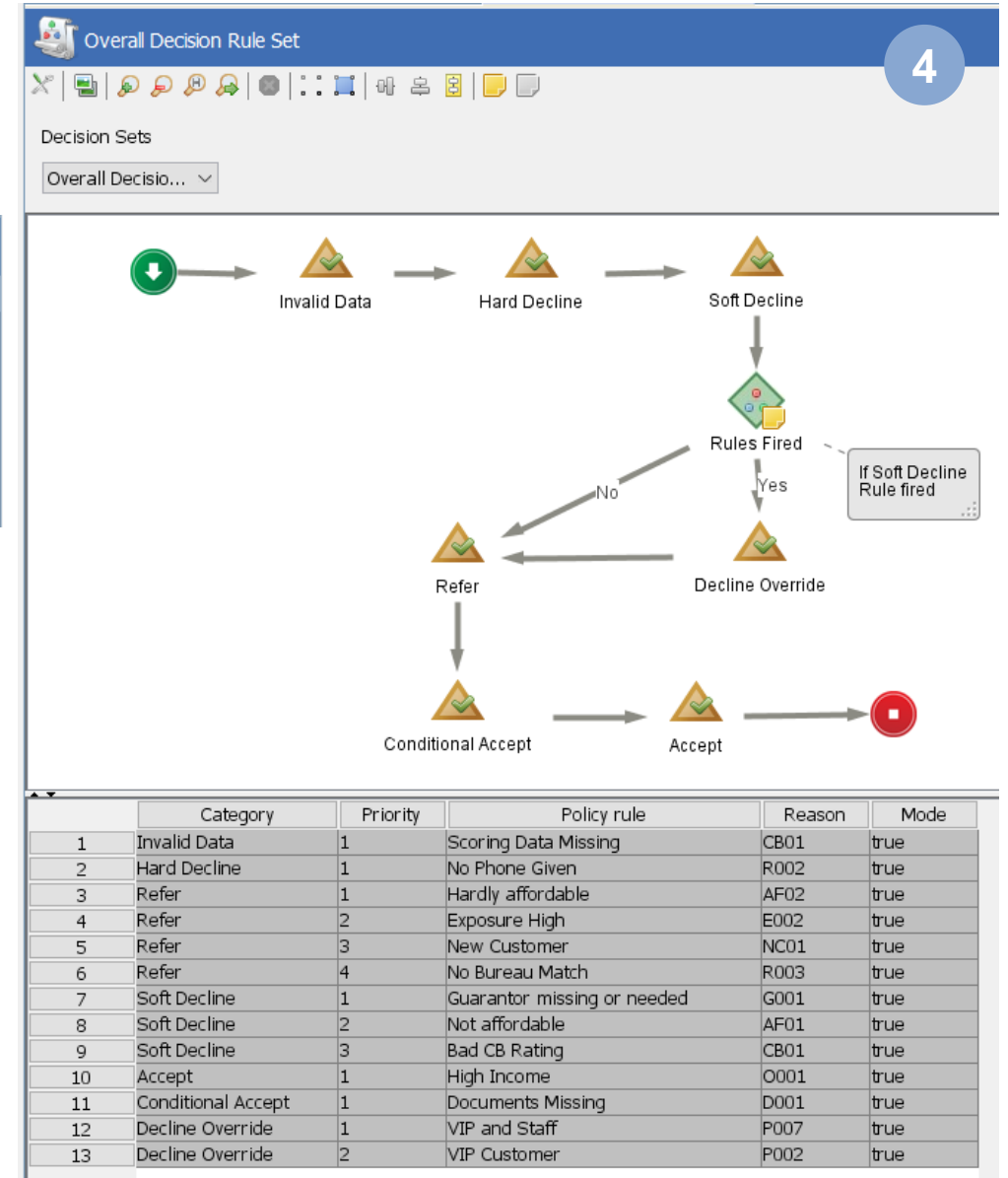
# Decision Setting

## Example Application Decision

- The Decision Categories set the main sorting priority (1)
- Setter buckets are evaluated dependent on each other (4)
- The rules priority sets the secondary sorting priority (4)
- A tree decision can be integrated into the Decision Setter along with a Policy Rule Set (5) – a score decision here

Overall Decision Set 1

	Name	Description
1	Invalid Data	Invalid Data
2	Hard Decline	Hard Decline
3	Decline Override	Decline Override
4	Soft Decline	Soft Decline
5	Refer	Refer
6	Conditional Accept	Conditional Accept
7	Accept	Accept



App Decline Rules 5

☒ Default  
☐ Fallback  
☐ No Default

Decision Sets: Overall Decisio...  
 Default Categories: Soft Decline  
 Reason codes: SD01

Policy Ruleset: Overall Decision Rule Set



# Decision Setting

## Example Escalation Decision

- More than a single decision set can be used in a single strategy
- In this case separate rules and sets are used for assigning manual tasks
- The Decision Categories define the sequence for manual checks.

Escalation Decision Set

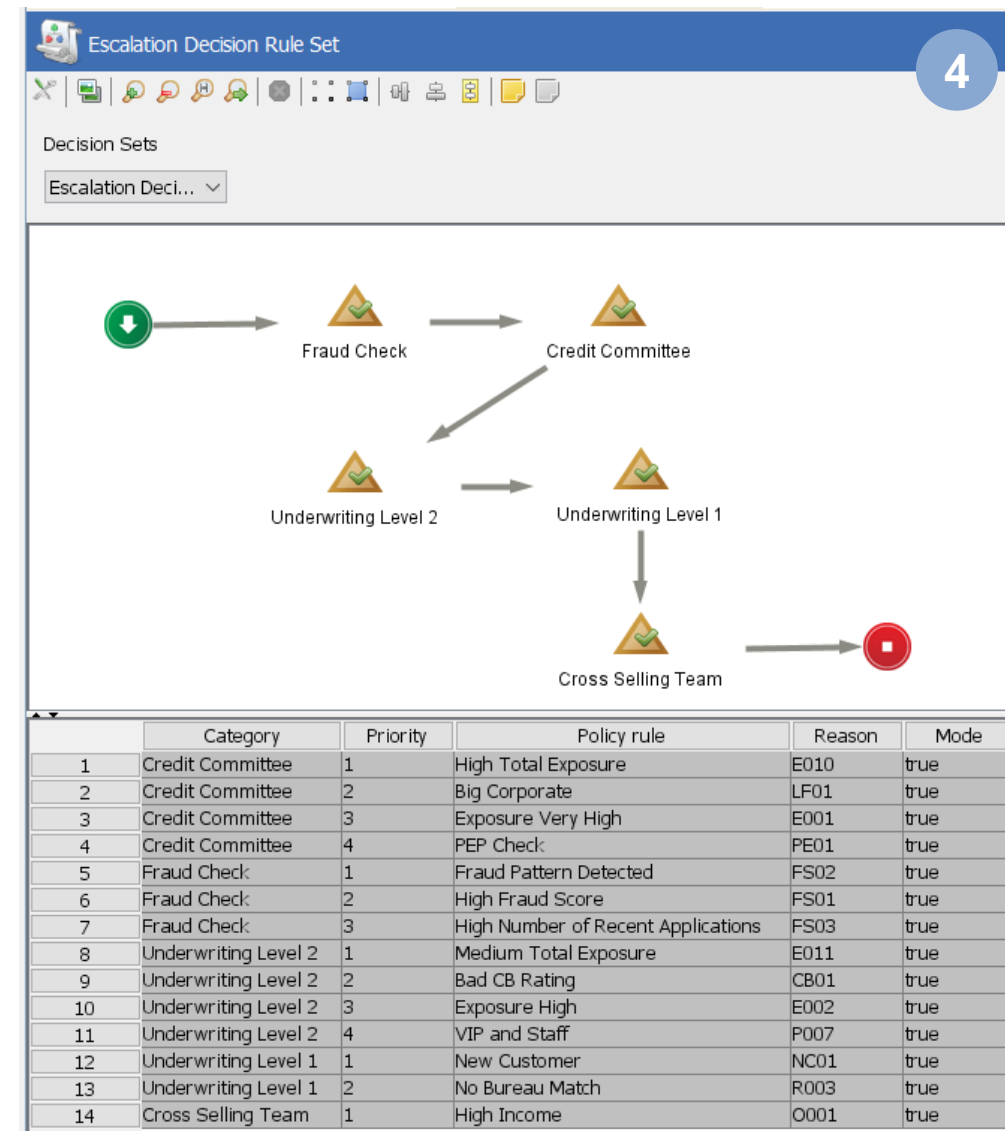
	Name	Description
1	Fraud Check	Fraud Check
2	Underwriting Level 1	Underwriting Level 1
3	Underwriting Level 2	Underwriting Level 2
4	Credit Committee	Credit Committee
5	No Manual Checks	No Manual Checks
6	Cross Selling Team	Cross Selling Team

UW high risk

☐ Default
 ☐ Fallback
 ☒ No Default

Decision Sets: 
 Default Categories: 
 Reason codes:

Policy Ruleset:

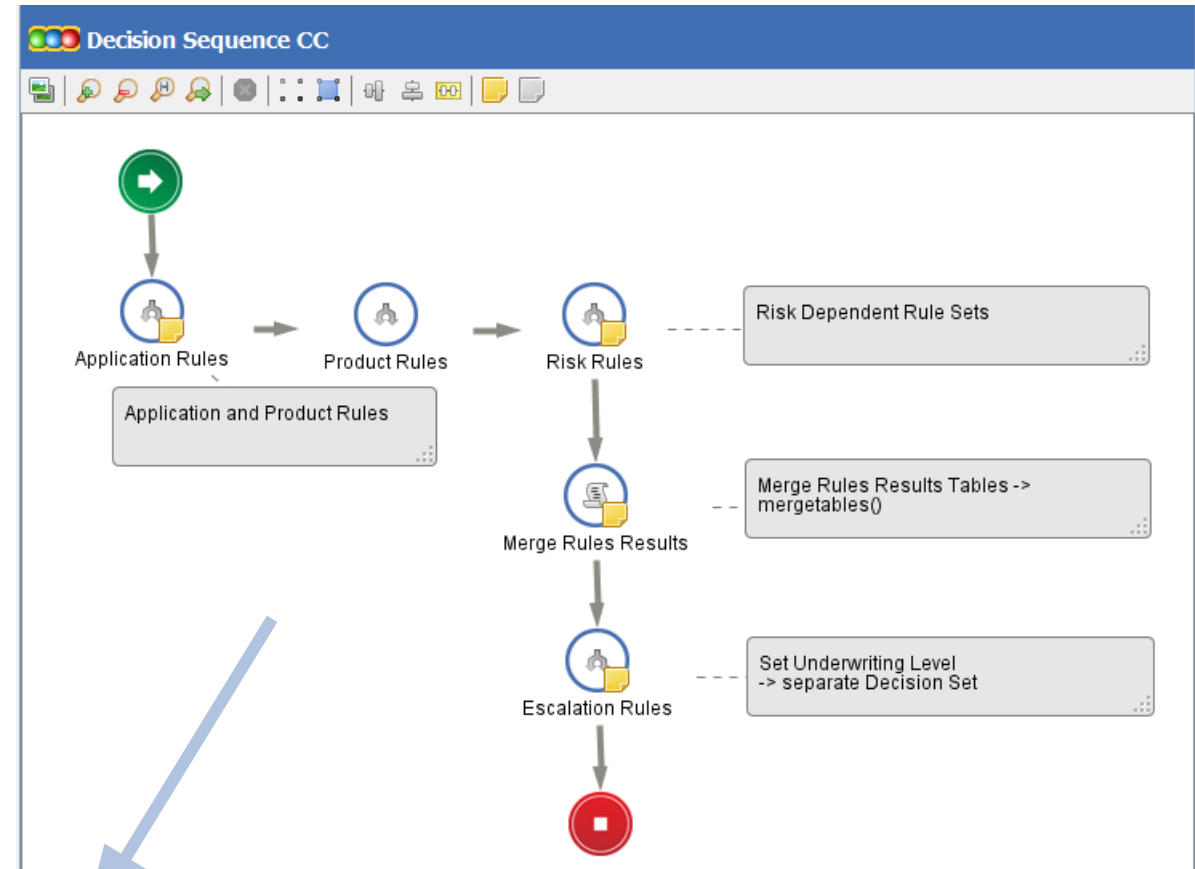




# Combine Rule Sets

## Decision Process Sequences

- Create a Decision Process Sequence which can take various Decision Setters and Scripts
- Use this sequence in a Decision Process Tree
- Assign rule sets (Decision Setters) selectively. Note: they can be based on different Decision Sets having a different purpose (application decision and escalation decision)
- Use a script with MERGETABLES() functions to merge and sort results from two and more decision setters according to defined hierarchies.



Overall Decision CC

Segmentation	L...	Leaf N...	Outcome	Application Rules	Product Rules	Risk Rules	Merge Rules Results	Escalation Rules
<b>Risk Classes</b>								
Low	11	Accept	Low Risk	App Accept Rules	Product Rules	CC low risk rules	Merge Rule Sets	UW low risk
Medium	12	Accept	Medium Risk	App Accept Rules	Product Rules	CC medium risk rules	Merge Rule Sets	UW low risk
High	13	Accept	High Risk	App Accept Rules	Product Rules	CC high risk rules	Merge Rule Sets	UW high risk
Very High (Decline)	14	Decline	Very High Risk (...)	App Decline Rules	Product Rules	CC high risk rules	Merge Rule Sets	UW high risk

Merge Rule Sets

```
//Merge Application-Product-Risk Rules

// Merge Application + Product -> Application
MERGETABLES( 'A16KRLM.PoBD.Sorted Decision Table', 'A16KRLM.PoBD.Sorted Decision Table', 'A16KRLM.PoBD.Decision Category' )

// Merge Application + Risk -> Application
MERGETABLES( 'A16KRLM.PoBD.Sorted Decision Table', 'A16KRLM.PoBD.Sorted Decision Table', 'A16KRLM.PoBD.Decision Category' )
```

# Decision Making with Decision Setters

## Use Case: From Policy Rules to Overall Decision – Sorting of Reason Codes

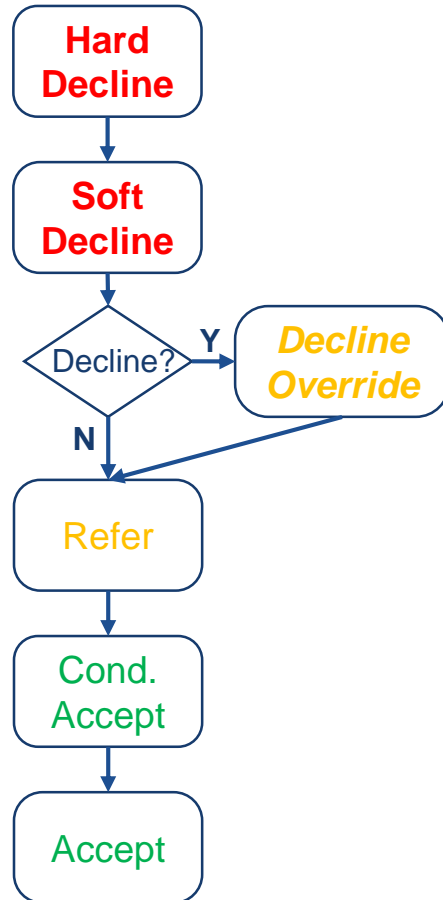
### 1 Decision Set

1 : **Decline Override**  
2 : **Hard Decline**  
3 : **Soft Decline**  
4 : **Refer**  
5 : **Conditional Accept**  
6 : **Accept**

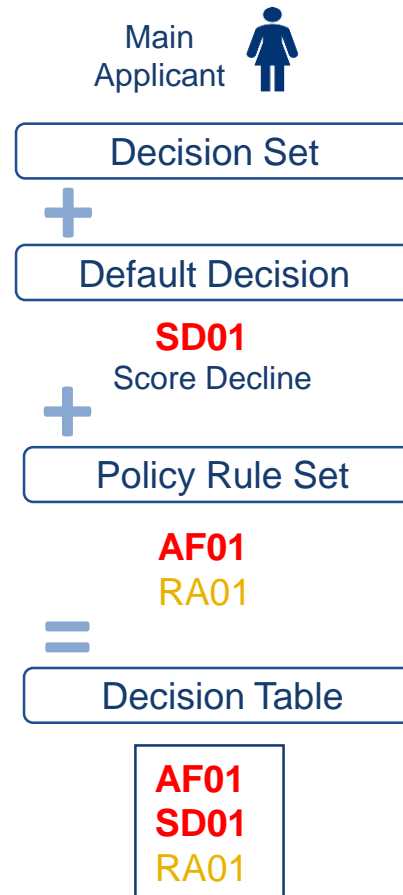
### 2 Policy Rules

CSoo - Citizenship non-EU  
AFoo - Insufficient Affordability  
CBoo - Negative CB entry  
RAoo - Bad Rating  
Cooo - Insufficient Collateral  
VIPo - High Value Customer

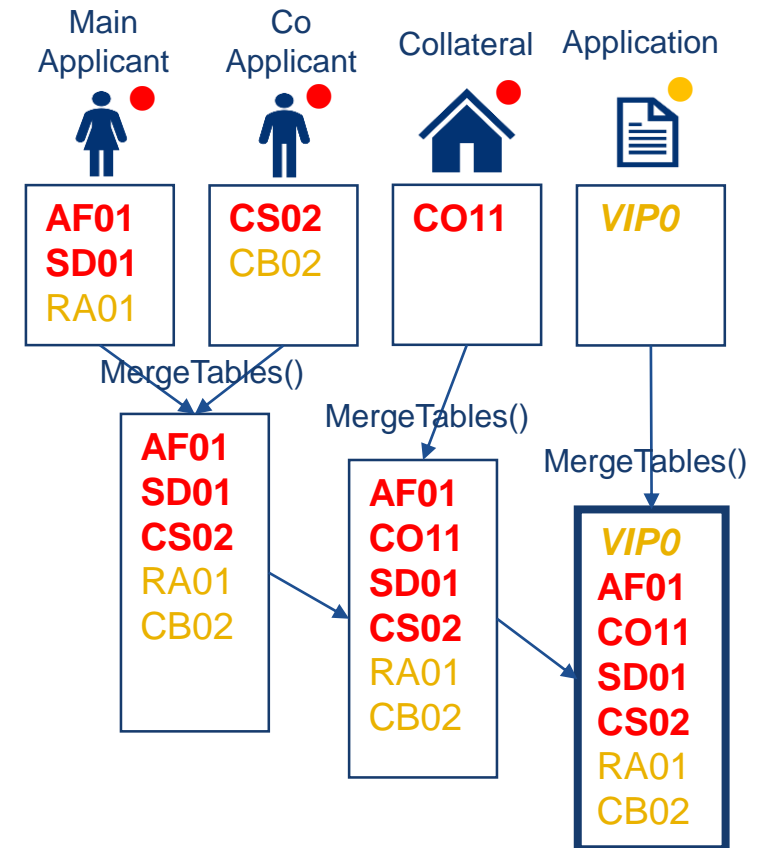
### 4 Policy Rule Set



### 5 Decision Setter



### 6 Decision Setter Tree/Sequence



# Thank You!