Risk Rating

What is a Risk

- What is Risk?
  - Default Risk (Credit Risk) – Probability that the obligation can't be repaid

- What are Contributing Factors of Risk?
  - Tenants
  - Market
  - Interest Rates
  - Environmental
  - Management
  - Location
  - Many More........

How to Manage or Mitigate Risk

- Method or Framework to evaluate and assess all of these various risk factors:

  - Underwrite Deals to Mitigate Risk and Optimize Returns
  - Manage Risk and Portfolios effectively
  - More Optimal Investment & Allocation of Capital Resources

How do you Risk Rate

- Existing Systems and Methods
    - Outsourced Provider?
    - Excel Models?
    - Other System?

- Strategy Risk Rating – How will it work

Risk Rating Categories and Components

- How do you Categorized Risk?

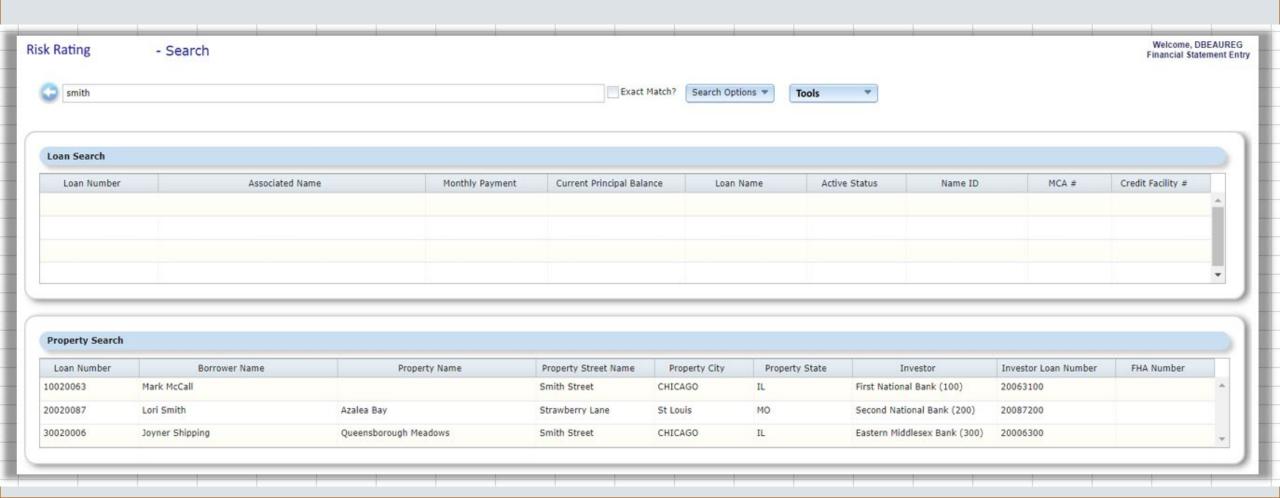| Qualitative	Quantitative
Liquidity/Reserves Management Physical/Property Condition Payment Status History	DSCR (Debt Service Coverage Ratio) Legal Percentage (%) Units Sold LTV (Loan To Value)

- How would you group/rate your portfolio?

New Risk Rating

- New Widget
- Full Search and Risk Rating History
- Review, Approval and Override Screen
- Create and Manage Multiple Risk Templates
- Ability to Create Multiple Risk Categories
- Flexibility to Create and Weight Risk Components according to your Risk Model

Risk Rating

- Final Risk Rating Report Export
- New Rules for Managing Risk Ratings
  - Rule on Final Risk Rating Threshold
  - Rule on Change in Overall Risk Rating Threshold
  - Rule on Risk Component Threshold
  - Rule on Change in Risk Component Threshold
- Ability to add Watchlist Items for Risk Rating

Risk Rating
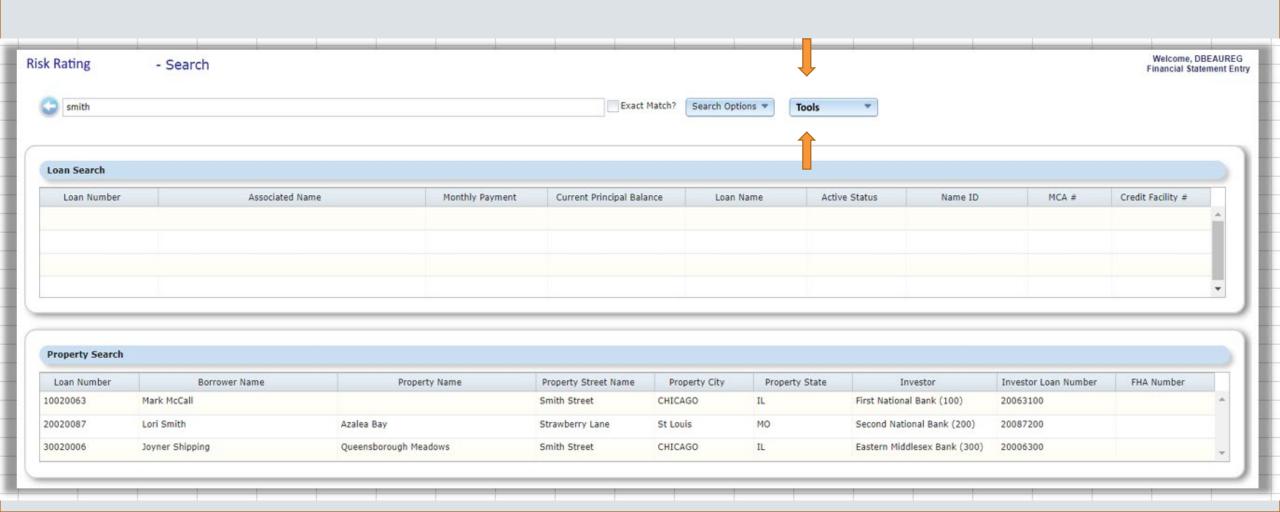
Landing Page with Standard Search

Risk Rating

- Risk Ratings History

Risk Rating Loan History

Loan Information

Loan Number	10020001	Investor	First National Bank (100)	Investor Loan	200001100	Fiscal Year End	00/00	Related Loans
Servicer	RYLOWICZ, SUSAN [SR]						

Processor Code — Loan Type CONVENTIONAL (PURCHASED) [P] — Original Loan Date 09/30/2013 — Load Added Date 11/01/2013

Product Line — Product Line Detail 1 — Product Line Detail 2 — Source Code — Hold Code

Collateral ID 145 — Property Name Ridge Roads (1) — Property Address 488 Ridge Road CLEVELAND, OH, OH 44102 — Property Desc 1 MULTI APARTMENT >250 [12] — Property Desc 2 LND-RAW LAND [49]

[View Detail] [Property Maintenance] — Asset Manager REVIEW [ZZZ] — CMBS Property Type

[CANCEL]

Period Date	Risk Rating Form/Template	Overall Risk Rating	Overall Risk Rating	Run Date	System Risk Rating	Finalized / Approved?	
3/31/2022	Perm - A	1.3	Strong	4/1/2022	1.2	N	⇧
12/31/2021	Perm - A	1	Strong	1/1/2022	1	Y	
9/30/2021	Perm - A	2.2	Average Under	10/1/2021	2.2	Y	
6/30/2021	Perm - A	1.5	Average	7/1/2021	1.5	Y	
3/31/2021	Perm - A	1.8	Average	4/1/2021	1.8	Y	
12/31/2020	Perm - A	1.9	Average	1/1/2021	1.9	Y	⇩

Click row to open Adj Risk Rating Override Editor

PRRMRD, PF – Risk Rating Matrix Run Detail

Risk Rating

Tools Options

Tools (Options)

- Work with Categories/Components
  - ✓ Work with Risk Rating Categories
  - ✓ Static or Dynamic
- Work with Templates
  - ✓ Create or Manage Risk Templates
  - ✓ Define Risk Components Criteria
  - ✓ Define Overall Risk Rating Criteria
- Run Risk Rating
  - ✓ Run All
  - ✓ Run by
  - ✓ Run with/without Approvals & Thresholds

Tools ⇩

Work with Categories
Work with Templates
Run Risk Rating (options)

Risk Components

- McCracken Defined Risk Indicators

- Derived much like Business Rules from Core Data within Strategy
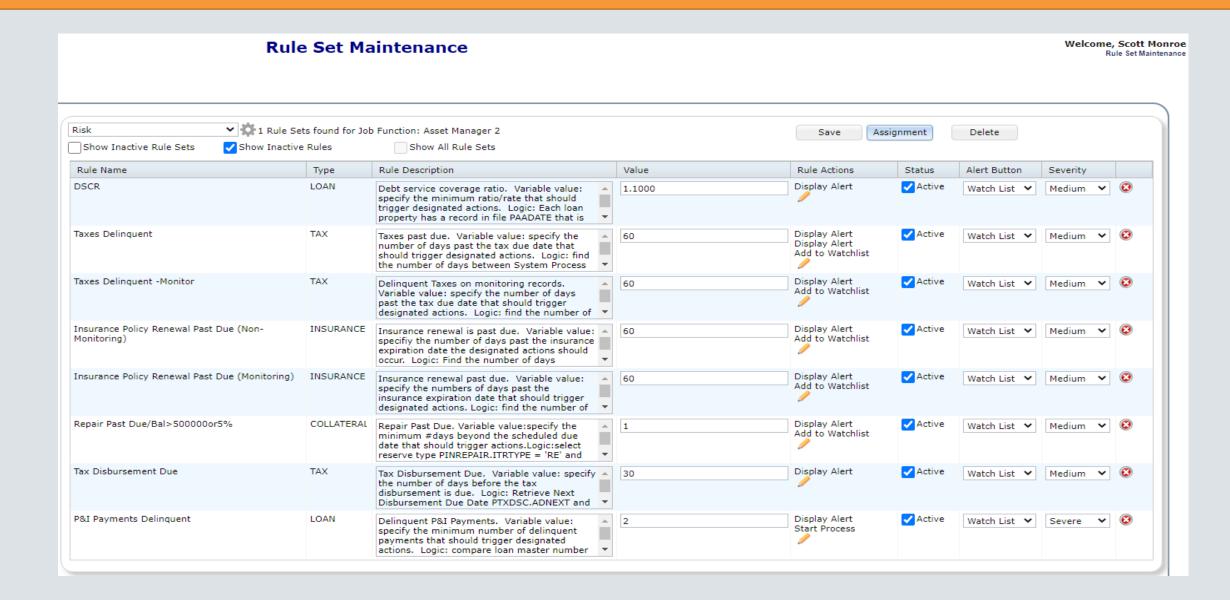
- Manually Create your own categories

- Static or Dynamic Results

Work with Categories

ID	Category Description	Static
M001	DSCR	N
M002	Historical Delinquency	N
M003	LTV/Loan Pay Off**Current Value based on most recent annual NOI	N
M004	Environmental	N
M005	Replacement Reserves	N
M006	Property Management Size	N
M007	Source of Loan Repayment	N
M008	Legal	N
M009	Borrower Current Capacity	N
M010	Loan to Cost	N
M011	Lien Position	N
M012	General Contractor Track Record	N
M013	Construction Loan Sources and Uses Balance	N
M014	Mechanics Liens	N
M015	Construction and Lease Up Schedule	N
M016	Development Phase	N
M017	Permanent Loan	N
M018	Current Delinquency Status	N
M019	Physical	N
M020	Guarantor Liquidity	N
M021	Insurance	N
M022	Property Taxes	N
M023	Sponsor Track Record	N
M024	OTHER (Manually Create)	Y

PRRMCAT, PF – Risk Rating Matrix Categories

Sample Tax or Insurance Delinquent

Rule Set Maintenance

Risk ▾ ⚙ 1 Rule Sets found for Job Function: Asset Manager 2   [Save] [Assignment] [Delete]

☐ Show Inactive Rule Sets   ☑ Show Inactive Rules   ☐ Show All Rule Sets

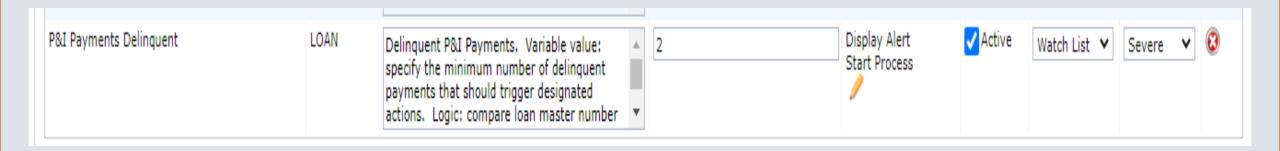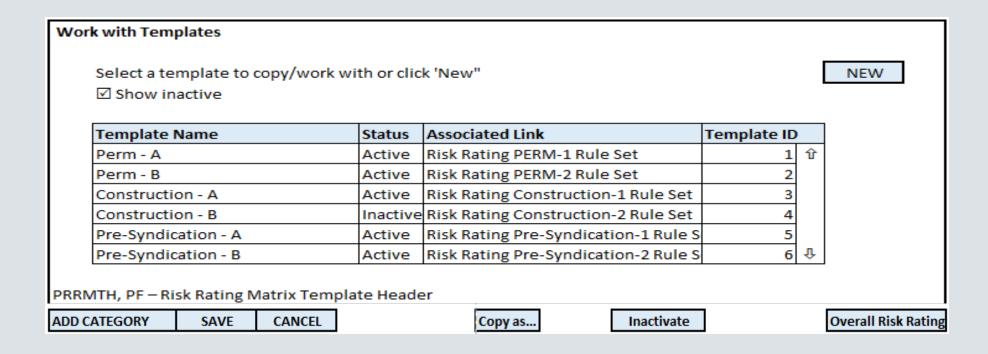| Rule Name	Type	Rule Description	Value	Rule Actions	Status	Alert Button	Severity	
DSCR	LOAN	Debt service coverage ratio. Variable value: specify the minimum ratio/rate that should trigger designated actions. Logic: Each loan property has a record in file PAADATE that is	1.1000	Display Alert ✎	☑ Active	Watch List ▾	Medium ▾	⊗
Taxes Delinquent	TAX	Taxes past due. Variable value: specify the number of days past the tax due date that should trigger designated actions. Logic: find the number of days between System Process	60	Display Alert Display Alert Add to Watchlist ✎	☑ Active	Watch List ▾	Medium ▾	⊗
Taxes Delinquent -Monitor	TAX	Delinquent Taxes on monitoring records. Variable value: specify the number of days past the tax due date that should trigger designated actions. Logic: find the number of	60	Display Alert Add to Watchlist ✎	☑ Active	Watch List ▾	Medium ▾	⊗
Insurance Policy Renewal Past Due (Non-Monitoring)	INSURANCE	Insurance renewal is past due. Variable value: specifiy the number of days past the insurance expiration date the designated actions should occur. Logic: Find the number of days	60	Display Alert Add to Watchlist ✎	☑ Active	Watch List ▾	Medium ▾	⊗
Insurance Policy Renewal Past Due (Monitoring)	INSURANCE	Insurance renewal past due. Variable value: specify the numbers of days past the insurance expiration date that should trigger designated actions. Logic: find the number of	60	Display Alert Add to Watchlist ✎	☑ Active	Watch List ▾	Medium ▾	⊗
Repair Past Due/Bal>500000or5%	COLLATERAL	Repair Past Due. Variable value:specify the minimum #days beyond the scheduled due date that should trigger actions.Logic:select reserve type PINREPAIR.ITRTYPE = 'RE' and	1	Display Alert Add to Watchlist ✎	☑ Active	Watch List ▾	Medium ▾	⊗
Tax Disbursement Due	TAX	Tax Disbursement Due. Variable value: specify the number of days before the tax disbursement is due. Logic: Retrieve Next Disbursement Due Date PTXDSC.ADNEXT and	30	Display Alert ✎	☑ Active	Watch List ▾	Medium ▾	⊗
P&I Payments Delinquent	LOAN	Delinquent P&I Payments. Variable value: specify the minimum number of delinquent payments that should trigger designated actions. Logic: compare loan master number	2	Display Alert Start Process ✎	☑ Active	Watch List ▾	Severe ▾	⊗

Sample Category

- DSCR

P&I Payments Delinquent

- Use defined results to assess & associate Risk with Rating Template

Work with Risk Templates

- Create New, Edit Existing, Inactivate or Copy Templates
- Manage Groupings, Weighting & Criteria
- Set Overall Ratings Criteria

Work with Templates

Select a template to copy/work with or click 'New'   NEW
☑ Show inactive

Template Name	Status	Associated Link	Template ID	
Perm - A	Active	Risk Rating PERM-1 Rule Set	1	⇧
Perm - B	Active	Risk Rating PERM-2 Rule Set	2	
Construction - A	Active	Risk Rating Construction-1 Rule Set	3	
Construction - B	Inactive	Risk Rating Construction-2 Rule Set	4	
Pre-Syndication - A	Active	Risk Rating Pre-Syndication-1 Rule S	5	
Pre-Syndication - B	Active	Risk Rating Pre-Syndication-2 Rule S	6	⇩

PRRMTH, PF – Risk Rating Matrix Template Header

| ADD CATEGORY | SAVE | CANCEL | | Copy as... | | Inactivate | | Overall Risk Rating |

Risk Criteria

- Manage Groupings and which Risk Components to use

Grouping: | Quantitative Factors | | NEW GROUP | This button would add a new grid which needs to add up to 100%

	Display only (from PRRMCAT.RRCADSC)	Editab	Editable	Editable		
ID	**Risk Rating Category Description**	**Static**	**Weight**	**Alternate Category Description**		
M001	DSCR	N	15%	default from PRTMCAT.RRCAADSC	⊗	⇧
M002	Historical Delinquency	N	25%		⊗	
M003	LTV	N	10%		⊗	
M008	Legal	N	10%		⊗	
M024	OTHER (Create your own)	Y	20%	My custom category	⊗	⇩
M009	Borrower Current Capacity	N	20%		⊗	⇩

Total: 100% RPRRMCAT

Grouping: | Qualitative Factors | ▢ = Overridden Value

	Display only (from PRRMCAT.RRCADSC)	Editab	Editable	Editable		
ID	**Risk Rating Category Description**	**Static**	**Weight**	**Alternate Category Description**		
M004	Environmental	N	10%		⊗	
M005	Replacement Reserves	N	20%		⊗	
M006	Property Management Size	N	10%		⊗	
M007	Source of Loan Repayment	N	20%		⊗	
M009	Borrower Current Capacity	N	20%		⊗	⇩
M025	OTHER (Create your own)	Y	20%	My custom category	⊗	⇩

Total: 100% RPRRMCAT

Risk Criteria

- Risk Criteria and Alternate Descriptions

Template Detail Editor

SAVE   CANCEL

ID: **M001**
Rating Category: **DSCR**

Rating	Risk Rating Description	Low Operator	Low Variable	High Operator	High Variable	Risk Rating Alternate Description
1	• DSCR is at or above 1 .20x or as underwritten	GT	1.2			(A, B, C, D, F, Red, Green, Yellow, Aa, Bb, Aaa, Bbb)
2	• DSCR is between 1.00x and 1.20x	GE	1	LE	1.2	Average
3	• DSCR is between 0.90x and 0.99x	GE	0.9	LE	0.99	Marginal
4	• DSCR is between 0.85x and 0.89x	GE	0.85	LE	0.89	Moderate Risk
5	• DSCR is less than 0.85x	LT	0.85			High Risk

Operator (GT, GE, EQ, LT, LE) In (for List or Like for non-numeric)

Risk Rating Description (Free Form Description for Risk Category) - Review Length Needed

Operator (GT, GE, EQ, LT, LE)

Alternate Risk Rating Description (Free Form)

PRRMTDC, PF – Risk Rating Matrix Low/High Categories

Overall Risk Rating Criteria

Template Overall Risk Rating Editor

| | | SAVE | CANCEL | Copy From... |

Working with tem **Perm - A [1]**

	Risk Rating Description (Free Form Description for Risk Category) - Review Length Needed	Operator (GT, GE, EQ, LT, LE) In (for List or Like for non-numeric)		Operator (GT, GE, EQ, LT, LE)		Alternate Risk Rating Description (Free Form)	
Rating	**Risk Rating Description**	**Low Operator**	**Low Variable**	**High Operator**	**High Variable**	**Risk Rating Alternate Description**	**Auto Approve**
1	Strong, stable project; Not impaired, Excellent likelihood of repayment.	GE	1	LE	1.39	(A, B, C, D, F, Red, Green, Yellow, Aa, Bb, Aaa, Bbb)	Y
2	No current problems or conditions of deteriorating operational or financial conditions. Performing as expected. Good possibility of repayment.	GE	1.4	LE	2	Strong	N
3	May be under-performing compared to projections or standard real estate projections. Likely experience occasional minor weaknesses during compliance period that should be monitored, but overall presents little risk.	GT	2	LE	2.25	Average	N
4	Project exhibits signs of significant weakness or deterioration compared to similar investments. Continually performs poorly, requires constant oversight, but no imminent risk of loss.	GT	2.25	LE	3	Average W	N
5	Project exhibits signs of serious problems and requires active workout involvement. Significant uncertainty as to repayment. Possibility that some loss will be sustained.	GT	3	LT	4	Marginal	N
6	Project exhibits signs of serious problems and requires active workout involvement. Collection or liquidation, on the basis of known facts, conditions and values, is highly questionable and improbable.	GT	4	LT	5	Moderate Risk	N
7	Project is beyond serious and legal action or remediation is inevitable	GT	5			High Risk	N

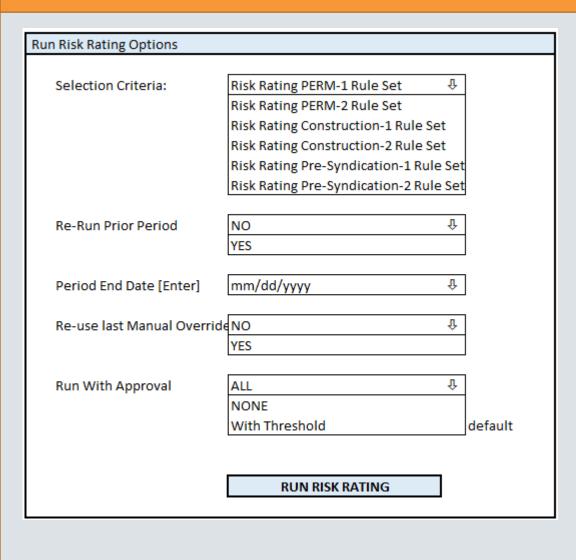PRRMTHO, PF – Risk Rating Matrix Template Overall Rating

Link Risk Rating Templates using Loan Sets

- Display Options for Linking Rule Set to Risk Rating Template
- Create a Loan Set to Link various Risk Templates the Loans

✓Construction Loan

✓Perm Loan

✓Bridge Loan

✓Other Loan

Risk Rating Run Options

Run Risk Rating Options

Selection Criteria:	Risk Rating PERM-1 Rule Set ⇩
	Risk Rating PERM-2 Rule Set
	Risk Rating Construction-1 Rule Set
	Risk Rating Construction-2 Rule Set
	Risk Rating Pre-Syndication-1 Rule Set
	Risk Rating Pre-Syndication-2 Rule Set

| Re-Run Prior Period | NO ⇩ |
| | YES |

| Period End Date [Enter] | mm/dd/yyyy ⇩ |

| Re-use last Manual Override | NO ⇩ |
| | YES |

Run With Approval	ALL ⇩
	NONE
	With Threshold default

RUN RISK RATING

- Select Data Set(s)
- Re-Run Option Y/N
- Period End Date
- Re-Use Last Override Y/N
- Run with Approvals
  - ✓ ALL
  - ✓ None
  - ✓ Approvals with Threshold

Risk Rating Run Approval Options

- Display and discuss: Approve All, NONE or with Threshold

Template Overall Risk Rating Editor

Working with templat **Perm - A [1]**

| SAVE | CANCEL | Copy From... |

Rating	Risk Rating Description	Low Operator	Low Variable	High Operator	High Variable	Risk Rating Alternate Description	Auto Approve
1	Strong, stable project; Not impaired, Excellent likelihood of repayment.	GE	1	LE	1.39	(A, B, C, D, F, Red, Green, Yellow, Aa, Bb, Aaa, Bbb)	Y
2	No current problems or conditions of deteriorating operational or financial conditions. Performing as expected. Good possibility of repayment.	GE	1.4	LE	2	Strong	N
3	May be under-performing compared to projections or standard real estate projections. Likely experience occasional minor weaknesses during compliance period that should be monitored, but overall presents little risk.	GT	2	LE	2.25	Average	N
4	Project exhibits signs of significant weakness or deterioration compared to similar investments. Continually performs poorly, requires constant oversight, but no imminent risk of loss.	GT	2.25	LE	3	Average W	N
5	Project exhibits signs of serious problems and requires active workout involvement. Significant uncertainty as to repayment. Possibility that some loss will be sustained.	GT	3	LT	4	Marginal	N
6	Project exhibits signs of serious problems and requires active workout involvement. Collection or liquidation, on the basis of known facts, conditions and values, is highly questionable and improbable.	GT	4	LT	5	Moderate Risk	N
7	Project is beynond serious and legal action or remediation is inevitable	GT	5			High Risk	N

Column header notes (above table):
- Risk Rating Description (Free Form Description for Risk Category) - Review Length Needed
- Operator (GT, GE, EQ, LT, LE) In (for List or Like for non-numeric)
- Operator (GT, GE, EQ, LT, LE)
- Alternate Risk Rating Description (Free Form)

PRRMTHO, PF – Risk Rating Matrix Template Overall Rating

Work Risk Rating Output

- Review System Calculations
- Override System Calculation (if needed)
- Note Reason for Override
- Approval & Finalize
- Export Results

		Editable	Calculated	Calculated	Calculated	Editable	Editable
Category	Weight	Override Risk Rating	System Risk Rating	Results	Risk Category Weight Rating	Override Y/N	Latest Note
DSCR	20%	1	1	1.33	0.2000		
Current Delinquency Status	10%	1	1		0.1000		
Historical Delinquency	5%	1	1		0.0500		
LTV/Loan	15%	1	1	70%	0.1500		
Physical	10%	1	1	No	0.1000		
Environmental	5%	1	1	Y	0.0500		
Replacement Reserves	5%	2	1		0.1000	Y	Note required on override.
Guarantor Liquidity	15%	1	1	1.5	0.1500		
Property Management Size	5%	1	1	10,000.00	0.0500		
Insurance	5%	1	1	Y	0.0500		
Property Taxes	5%	1	1	Y	0.0500		
Total (Group 1)	100%	1.05	1		1.0500		<--Display only, cannot override this Risk Rating
DSCR	20%	1	1	1.33	0.2000		
Current Delinquency Status	10%	1	1		0.1000		
Historical Delinquency	5%	1	1		0.0500		
LTV/Loan	15%	1	1	70%	0.1500		
Physical	10%	1	1	No	0.1000		
Environmental	5%	1	1	Y	0.0500		
Replacement Reserves	5%	2	1		0.1000	Y	Note required on override.
Guarantor Liquidity	15%	1	1	1.5	0.1500		
Property Management Size	5%	1	1	10,000.00	0.0500		
Insurance	5%	1	1	Y	0.0500		
Property Taxes	5%	1	1	Y	0.0500		
Total (Group 2)	300%	1.05	1		1.0500		<--Display only, cannot override this Risk Rating
Overall Total	100%	1.06	1		1.0500	Y	Note required if override.

	Editable			Editable	Editable
OVERALL Narrative Comment on Risk Rating:	This would show on the Output-LoanSummary Tab PRRMRD. RDDCPOAN				

Risk Rating Run Review

- Review, Overrides, Approval and Finalize

Category	Weight	Override Risk Rating	System Risk Rating	Results	Risk Category Weight Rating	Override Y/N	Note
DSCR	20%	1	1	1.33	0.2000	N	⇧
Current Delinquency Status	10%	1	1		0.1000	N	
Historical Delinquency	5%	1	1		0.0500	N	
LTV/Loan	15%	1	1	70%	0.1500	N	
Physical	10%	1	1	No	0.1000	N	
Environmental	5%	1	1	Y	0.0500	N	
Replacement Reserves	5%	1	1		0.0500	N	
Guarantor Liquidity	15%	1	1	1.5	0.1500	N	
Property Management Size	5%	1	1	10,000.00	0.0500	N	
Insurance	5%	1	1	Y	0.0500	N	
Property Taxes	5%	1	1	Y	0.0500	N	⇩
Total (Group 1)	100%	1.00	1		1.0000	N	
DSCR	20%	1	1	1.33	0.2000	N	⇧
Current Delinquency Status	10%	1	1		0.1000	N	
Historical Delinquency	5%	1	1		0.0500	N	
LTV/Loan	15%	1	1	70%	0.1500	N	
Physical	10%	1	1	No	0.1000	N	
Environmental	5%	1	1	Y	0.0500	N	
Replacement Reserves	5%	1	1		0.0500	N	
Guarantor Liquidity	15%	1	1	1.5	0.1500	N	
Property Management Size	5%	1	1	10,000.00	0.0500	N	
Insurance	5%	1	1	Y	0.0500	N	
Property Taxes	5%	1	1	Y	0.0500	N	⇩
Total (Group 2)	100%	1.05	1		1.0000	N	
Overall Total	100%	1.05	1		1.0000	N	
OVERALL Narrative Comment on Risk Rating:							

Risk Rating Overrides

- Shows System Risk ⬇ Rating & Allows ⬇ for overrides

RRDOHD (hidden)	Category	Weight	Override Risk Rating	System Risk Rating	Results	Risk Category Weight Rating	Override Y/N	Latest Note
2	DSCR	20%	1	1	1.33	0.2000		⇧
2	Current Delinquency Status	10%	1	1		0.1000		
2	Historical Delinquency	5%	1	1		0.0500		
2	LTV/Loan	15%	1	1	70%	0.1500		
2	Physical	10%	1	1	No	0.1000		
2	Environmental	5%	1	1	Y	0.0500		
2	Replacement Reserves	5%	2	1		0.1000	Y	Note required on override. Standard note functionality
2	Guarantor Liquidity	15%	1	1	1.5	0.1500		
2	Property Management Size	5%	1	1	10,000.00	0.0500		
2	Insurance	5%	1	1	Y	0.0500		
2	Property Taxes	5%	1	1	Y	0.0500		⇩
0	**Overall Total**	100%	1.06	1		1.0500	Y	Note required if override. Standard Note functionality
			Editable				Editable	Editable
	OVERALL Narrative Comment on Risk Rating:	This would show on the Output-LoanSummary Tab						
		PRRMRD. RDDCPOAN						

	= Overridden Value

Risk Rating Approval

- Review and Approve

Run By:	USERID – NAME	
Reviewed By:	USERID – NAME	
Approved By:	*AUTO or Userid + name	(Depending on Run Option)

Risk Rating Report Output

- ## General Information Header
  - Loan Name
  - Template Being Used
  - Additional MCA/Loan Detail

- ## Risk Categories
  - Risk Category Components
  - Calculation Results & Weighting %
  - Override Calculation Column
  - Summary Information
  - Notes for Overrides
  - Last Period Calculation
  - Last Period Notes
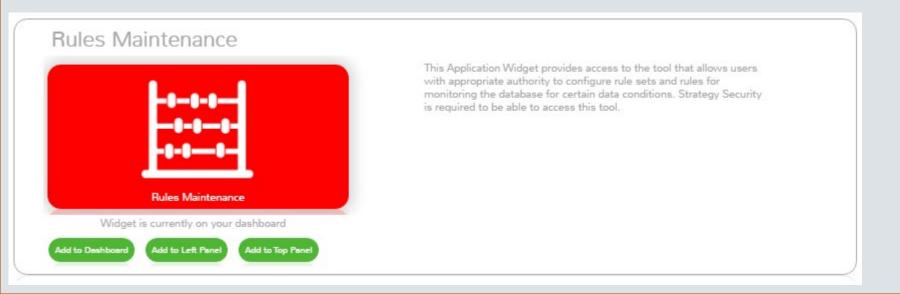
- ## Overall Risk Rating Results
  - Calculated Results
  - Alternate Rating Descriptions
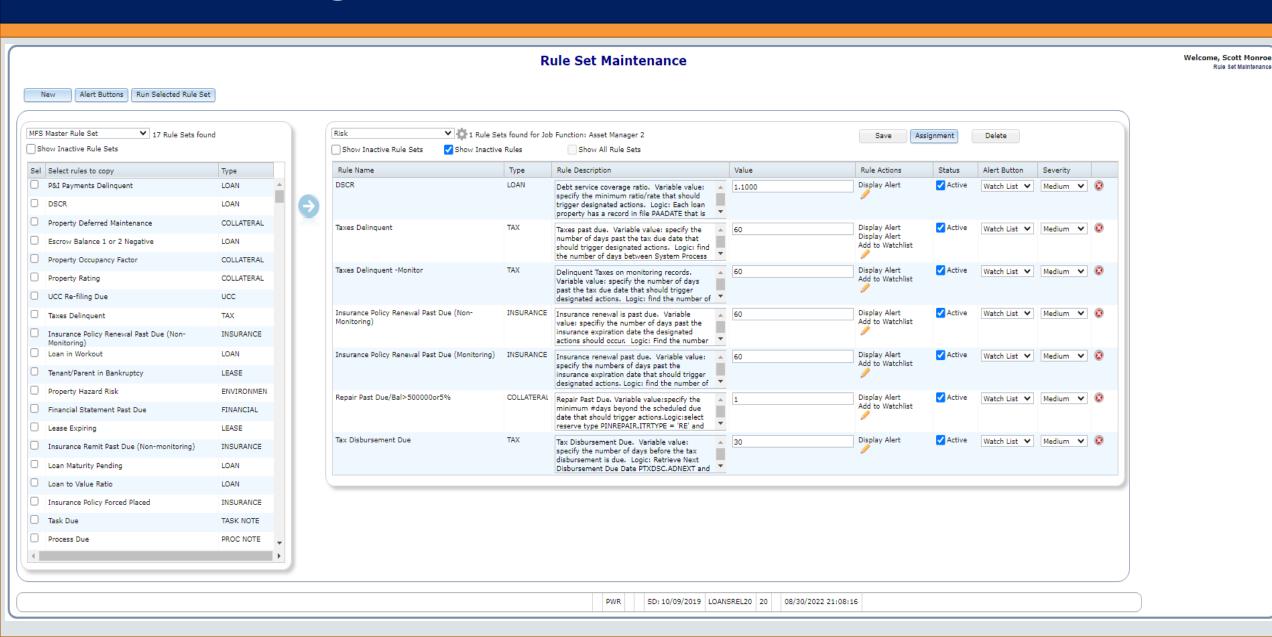 - Approval Information and Summary Notes

Risk Rating Rules

- Rules and Strategy's Intelligence Engine at Work
  - ✓ Overall Risk Rating Threshold (3.5) *insert your threshold*
  - ✓ Change in Overall Risk Rating (1.0)
  - ✓ Risk Rating Factor (4.0)
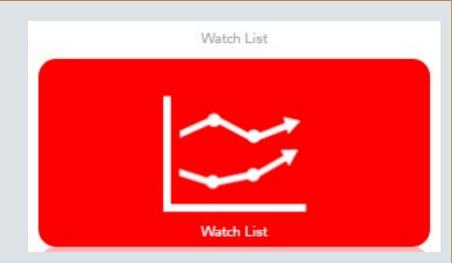 - ✓ Change in Risk Rating Factor (1.0)

Rules Maintenance

This Application Widget provides access to the tool that allows users with appropriate authority to configure rule sets and rules for monitoring the database for certain data conditions. Strategy Security is required to be able to access this tool.

Rules Maintenance

Widget is currently on your dashboard

Add to Dashboard   Add to Left Panel   Add to Top Panel

Risk Rating Rules

Risk Rating Watchlist

- Create Risk Rating Watchlist Item and Add to Watchlist if Overall Risk Rating or Change in Overall Risk Rating meet or exceeds threshold

Watch List

Risk Rating New Tables

- Additional New Files/Tables for Risk Rating

PRRMCAT	Risk Rating Matrix Categories
PRRMRD	Risk Rating Matrix Run Detail
PRRMTD	Risk Rating Matrix Template Detail
PRRMTCD	Risk Rating Matrix Low/High Categories
PRRMTDCV	Risk Rating Matrix Low/High Overall Rating
PRRMTH	Risk Rating Matrix Template Header
PRRMTHO	Risk Rating Matrix Overall Template

Risk Rating Recap

✓ Identify Key Factors to Rate Risk

✓ Identify Risk Categories for your Portfolio Types to determine # of templates needed by:

Investor, Loan Types, Property Types, Asset/Portfolio Manager

✓ Setup Templates with Key Risk Categories

✓ Set Criteria or Rating Scale for Key Risk Components

✓ Set Criteria or Rating Scale for Risk Components

Risk Rating Recap

- ✓ Define Overall Ratings
- ✓ Set Criteria Overall Rating Scale
- ✓ Associate templates to Loans using a Data Set
- ✓ RUN…..Review, Report, Relax….knowing your portfolio is effectively evaluated

Questions?