Bonus Rate for Deposits

Application Name: PS_RATEMARGIN_DEPACCTS
Application Description: Deposit Account Bonus Rate Margin
Application: 14832
DNAapp ID b8407ec7-8271-480f-a5a1-917637d56ea4

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Overview:
This application will apply a bonus margin to an account where it has passed all qualifications.

Key Benefits:
This application allows Financial Institutions to reward their customers / members with a higher interest rate on deposit accounts, based on account and services relationship. It incents customers / Members to strengthen their products / services relationship with the Financial Institution.

Processing:
The application will select all accounts based on the Major and Account Status runtime parameter and having an associated specific Major/Minor Variable.

For Time Deposit accounts, the qualification is done on origination, a minor change or on the renewal date or always as specified by the value in the Time Deposit Qualification product variable. In addition, the Exclude Time Deposit Rate Override product variable value determines if the application will exclude time deposit accounts due to a manual rate override completed at origination or on renewal date, as specified by the value in the Time Deposit Qualification product variable. The parameter (8TTT) Use Acct Rate for Time Dep YN can be used on time deposits only to calculate the new rate by using the account level rate rather than the product level rate.

For Checking and Savings major account types, when the Exclude Rate Override variable is set to 'Y', the application does not process any accounts in the given product where the rate schedule number assigned to the account differs from the product's default rate schedule. If the product variable is set to 'N' or is null, the accounts are not excluded.

If the account passes the qualification, the Margin on the account will be updated and the new rate will be calculated.

If the account has the new updated margin and no longer qualifies, the margin is removed, and the rate is updated.

All accounts with future dated rates or interest overrides are ignored and printed on the report.

Qualifications:
The application will qualify the account in the following order.

1. When Person User Field is used and exists no other qualifications are used for these accounts
2. Minimum Aggregate Balance
3. Required Minor
4. Required Email
5. ACH

6. Debit Card Transactions
7. Delivery Methods

All disqualification reasons are printed on the report.

See runtime parameters below for descriptions of the qualifications. ACH and Debit Card qualification.

Status of Qualification:
If the account qualified i.e. has the new margin, an account user field is created. This Account User Field will hold the old margin, if any, or zeroes if none. When the account no longer qualifies, this Account User Field is deleted.

All updates are logged to the activity tables.

Margin Calculation Schedule:
The margin calculation schedule can be tiered. The balance tier is based on the qualification balance which can be the current account's balance or the balance calculated using the Roles runtime parameter (for Deposit Accounts Only)

Update Processing:
1) Account **does not** currently have the new margin and now qualifies
   a) Application gets the new calculation schedule rate associated with the Major/Minor variable. This is the new margin.
   b) Adds this new margin to an existing margin, if any, and updates the Account Rate History Record (Margin Fixed)
   c) If there is an existing Margin, creates an account user field to hold this old Margin
   d) Calculates the new account rate by adding the new margin plus the current product's rate.
   e) Prints status of update on report
2) Account **does not** currently have the new margin and does not qualify
   a) No updates, nothing changes
   b) Print status of non-update on report
3) Account **does** have the new margin and still qualifies
   a) Application checks to see if the new margin or the product's rate have changed
   b) If anything changes, if update the Margin Fixed and recalculates a new rate
   c) Prints status of update or no update on report
4) Account **does** have the new margin and no longer qualifies.
   a) Application restores the old margin, if any
   b) Recalculates the account rate by adding the old margin, if any, to the current product's rate
   c) Deletes the Account User Field
   d) Prints status of update on report

Parameters:

Parameter	Code	Description (how used)	Required	Default
Report Only	RPT	Report Only YN Y = Only produce a report, do not update the database N = Update the database and produce a report.	No	Y
Current Account Status Code	CASC	A comma-separated list of account status codes. Only accounts that have current status included in this parameter will be evaluated. If any value entered is not a valid status the application will not process.	No	ACT
Major Account type	MJCD	Comma-delimited list of major account type codes. If left blank, all applicable accounts will be included, regardless of major account type.	Yes	<No Defaults>
Report Sort Option	SORT	Controls the sort order of the data on the output report. Two options will be supported: 1 - Account Number 2 - Alphabetical by Tax Reported For	No	1
Start Date	SD	Start Date Range used for the ACH and Debit Card transactions	No	<No Defaults>
Thru Date	TD	Thru Date Range used for the ACH and Debit Card transactions	No	<No Defaults>
Minimum Aggregate Balance	8ABM	If current account's balance or the balance calculated using the Roles runtime parameter (for Deposit Accounts Only) is less than given parameter Minimum Aggregate Balance, then account will not be qualified. If this parameter value is greater than 0 then the account is considered for qualification, If zero is entered then no qualification is done	No	<No Defaults>

Parameter	Code	Description (how used)	Required	Default
Relationship Role Codes	RRC	Role Codes, deposit Accounts Only If used the qualification extends by roles only if not met as a tax owner	No	<No Defaults>
Active Minors Required	8AMR	If this parameter is used, then the owner of the account must have at least one other minor.	No	<No Defaults>
Check for Email Address	8CEM	If used, check for any email address	No	N
Amount of ACH trans	8ATA	A minimum amount is specified through this parameter which will be considered for account qualification. If zero is entered then no qualification is done.	No	<No Defaults>
ACH Dep Qual Single/ Aggregate	8DSA	If this is parameter is set to (S)ingle, then one or more individual ACH deposits must exceed the “8ATA” minimum amount. If this parameter is set to (A)ggregate, then the total amount of ACH deposits must exceed the “8ATA” minimum amount.	No	<No Defaults>
# Debit Card Trans to Qualify	8DTQ	A minimum number of transactions are specified through this parameter which will be considered for account qualification. If zero is entered then no qualification is done.	No	<No Defaults>
Debit Sig(S), Pinned(P), Both(B)	8SPB	If set to “P”, count pinned only If set to “S”, count signature only If set to “B” count both Note: the PinnedYn transaction flag must be filled in by switch properly, select by (P) or (S)	No	B
Delivery Method Code(s)	8DMC	Delivery Method Codes	No	WWW,EML

Parameter	Code	Description (how used)	Required	Default
eStatement User Field Values	8EUV	Comma-separated list of values associate with the “STDL” variable which indicate eStatement enrollment	No	<No Defaults>
e-Statement Qualification Meth	8EQM	Method used to determine if tax owner has signed up to receive eStatements. Valid values are: **(D)elivery Method Code** – the application will use the Delivery Method Code.This option uses the “8DMC” (Delivery Method Code) parameter. **(U)ser Field** – Pers/Org User Field “STDL” (Statement Delivery Method) used to determine eStatement enrollment. This option uses the “8EUV” (eStatement User Field Values) parameter. **(C)ycles** – This option is used when eStatement enrollment is determined by which statement account cycle	No	D
eStatement Cycle Codes	8ECC	Comma-separated list of statement (#360) Account Cycle Codes which are used to indicate eStatement enrollment. This parameter is only used when the “8EQM” parameter is set to “C” (Cycles). If this method is selected and this parameter is blank, then an error will be generated and no accounts will be processed.	No	<No Defaults>
Use Acct Rate for Time Dep Y/N	8TTT	When ‘Y’ – Use account level rate for Time deposit accounts , When ‘N’ or blank use product level rate for time deposits.	No	<No Defaults>
Pers User Field Code	8PUF	When this is populated with a value the TRO person’s accounts are considered qualified when the person user field exists.	No	<Blank>

Variables:

The following variables are defined at the minor product level, under the variable type and category of ‘Bonus Rates’ (8BR).

Calculation Category	Code
Bonus Rates	8BR

Calculation Type	Code
Bonus Rates	8BR

Variable	Code	Description (how used)	Data Type	Default
Calculation Schedule Number	SCHD	New Calculation Schedule	NUM	Null
Time Deposit Qualification	8TDQ	When set to O, at Opening, the application includes time deposit accounts on their contract date in the qualification process. When set to R, at Renewal, the application includes time deposit accounts on their renewal date in the qualification process. When set to B, Both - Opening and Renewal, the application includes time deposit accounts on their contract date and on their renewal date in the qualification process. When set to A, always include time deposits in the qualification process. Account level overrides of this product variable are not reviewed by the application.	CHAR	B

Variable	Code	Description (how used)	Data Type	Default
Exclude TD Rate Override	8ERO	Yes/No variable that controls if activity is reviewed to determine if a rate change was processed at opening and/or renewal (as specified by the Time Deposit Qualification variable). If set to Yes – When a rate change is processed at opening and/or renewal (as specified by the Time Deposit Qualification variable) the account is excluded from the qualification process. If set to No – When a rate change is processed at opening and/or renewal (as specified by the Time Deposit Qualification variable) the account is not excluded from the qualification process. Account level overrides of this product variable are not reviewed by the application.	YN	N
Exclude Rate Override	8ERV	Y = When a rate schedule override is present at the account level, exclude the account from processing by this application N = Do not exclude accounts from processing when a rate schedule override exists This variable is defined at the minor product level for Checking and Savings accounts. Account level overrides are not reviewed by the application.	YN	N

User Field:

Description	Code	Description (how used)	Data Type	Default
Old Account Margin	8OAM	Holds Old Account Margin	RATE	Blank

Non-Transaction Updating Applications

This application updates activity, using the following Activity Category and Activity Type.

Activity:

Activity Category	Code	Activity Type	Code	Activity Subject
Account Maintenance	AMNT	Account	ACCT	Account

Sample Report:

```
Bank:    0001 Test Institution                  Deposit Account Bonus Rate Margin                    Run Date:  01-11-2023
Report:  PS_RATEMARGIN_DEPACCTS                                                                      Post Date:  01-11-2023
                                                                                                         Page:  3 of 4

                                                                    Qualification    Bonus      Old      New
Account Owner             Account Number  Major/Minor/Status              Balance     Rate     Rate     Rate   Notes

Tvcww, Ymrief                 7225668796  TD    PL05  ACT                 0.00           .010000            eStatement Meth Failed
                                                                                                             Not Qualified New

Tvcww, Ymrief                 7200062740  TD    PL05  ACT                 0.00           .010000  .030000   eStatement Meth Failed
                                                                                                             Not Qualified New

Ufwiw, Mtcaybzijr             7200115249  TD    PL05  ACT                 0.00                               Future Changes Scheduled

Uuukl, Anngqr                 3539500051  TD    PL05  ACT                 0.00                               Future Changes Scheduled

Vkelkiqm, Vrgi                3914400052  TD    PL05  ACT                 0.00                               Future Changes Scheduled

Washington, Ronnie            7227534739  TD    PL05  ACT                 0.00                               Future Changes Scheduled

Xebyqcfywp, Tkjaaa            5521200051  TD    PL05  ACT                 0.00                               Future Changes Scheduled

Xydrt, Wyeue                   969600051  TD    PL05  ACT                 0.00           .010000  .030000   eStatement Meth Failed
                                                                                                             Not Qualified New

Yefwbjkg, Frbkrgx             7200041850  TD    PL05  ACT                 0.00                               Future Changes Scheduled

Yhki, Enotwfm                 1346700501  TD    PL05  ACT                 0.00  .011000  .010000  .041000   Qualified Same

Zjmnd, Cipmqm                 7227533096  TD    PL05  ACT                 0.00                               Future Changes Scheduled

Zocufgc, Gmuqb                5732100051  TD    PL05  ACT                 0.00                               Future Changes Scheduled
```

```
Bank:    0001 Test Institution                  Deposit Account Bonus Rate Margin                    Run Date:  01-11-2023
Report:  PS_RATEMARGIN_DEPACCTS                                                                      Post Date:  01-11-2023
                                                                                                         Page:  4 of 4

Totals ----------------------------
Accounts Qualified New:           0
Accounts Qualified Same:          5   Rates Changed:         5
Accounts Not Qualified New:       9
Accounts Not Qualified Same:      0

Future Changes Scheduled:        35

* Includes Additional Account Margin


                Calc
Major  Minor  Schedule  Error
TD     PL05        536


    Calc  Tier  Effective                Begin                End
Schedule        Date                   Balance            Balance  Rate
     536     1  02-26-2014                0.00             100.00  0.01100000
     536     2  02-26-2014              100.01             500.00  0.00200000
     536     3  02-26-2014              500.01           1,000.00  0.00300000
     536     4  02-26-2014            1,000.01           2,000.00  0.00400000
     536     5  02-26-2014            2,000.01     999,999,999.00  0.00500000
```

Exclusions:

- The application does not consider future effective dated manual interest rate overrides. Any time deposit rate change recorded in activity on the eligible Time Deposit Qualification value will be considered a rate change for qualification eligibility purposes.
- The Exclude TD Rate Override (8ERO) variable only controls if the application should review activity to determine if a rate change was processed. The application does not validate that the rate change recorded in activity is the account's current rate.
- Account level overrides of product variables Time Deposit Qualification (8TDQ) and Exclude TD Rate Override (8ERO) are not reviewed by the application.
- Account level interest parameter overrides are not reviewed by the application for qualification eligibility purposes.
- Accounts are excluded in advance from this process through the uses of standard DNA Exclude Application functionality.

Configuration Checklist:

Please review the items indicated in the checklist below and ensure that all items have been properly setup before running this application.

Item	Test Environment	Production Environment
Parameters		
Variables		

Installation:

Note: If you obtained this application from the AppMarket, please disregard the installation instructions below. If you did not obtain this application from the AppMarket, please complete the installation instructions below.

- Copy PS_RATEMARGIN_DEPACCTS.SQT to the Batch Process to the PS batch application directory; the location specified in the PS Batch Report Directory 'BATP' Institution Option.

- This application includes custom stored procedures that need to be loaded on the database. As with any stored procedure, please do not load it while the system is in ONLINE mode, or while batch is running. To load the stored procedures please use the Oracle Object Manager in the SAF Resource Kit.

  To download Resource Kit: On Extranet, go to Core --> SAF --> SAF Resource Kit Releases --> 'latest release' --> Download File. This will install the resource kit.

  To run the utilities: Start --> All Programs --> Open Solutions Resource Kit will open windows explorer showing various utilities. Open OracleObjectManager and launch OSI.SafRk.OracleObjectManager.exe.

The SAF Resource Kit tools use Oracle client and therefore should preferably be run from App Server -- or at least from a machine that has Oracle client installed on it.

It is important that the following steps be performed in the exact order as follows.

The following stored procedures must be loaded first:

- PACK_PS_COMMON_PACK_WRAP.SQL
- PACK_PS_COMMON_PBOD_WRAP.SQL

- This application requires the running of the script PS_RATEMARGIN_DEPACCTS_INSTALL.SQL(Setup Script), PS_RATEMARGIN_DEPACCTS_INIT.SQL: Copy this file to any directory accessible to the applicable SQL application (SQL Developer, PL/SQL Developer, etc.) You need to run the setup script to register the application.

- This application requires an Authorization Key. After the primary installation instructions have been completed, you must apply the supplied Authorization Key for this application.

  To enter the Authorization Key, go to Services >> System >> Institution >> Applications >> Application Manager.

Revisions:

Date	App Version #	Change
11/2023	1.0.1.1	Removed hardcoded parameters in uninstall script and applnbr in install script.
10/2023	1.0.1.0	Added Pers User Field Code parameter.
09/2023	1.0.0.9	Modified code for the account level exclusion
07/2023	1.0.0.8	Updated Exclude Rate Override process for Checking and Savings.
07/2023	1.0.0.7	Updated the Old Rate to keep the current account rate.
05/2023	1.0.0.6	Added Exclude Rate Override variable. Updated document according to standards and install script parameters definition.
03/2023	1.0.0.5	Corrected description of ‘8AMR’ and ‘RRC’ parameters.
01/2023	1.0.0.5	Modified the code to pick the correct rate
05/2022	1.0.0.4	Additional Test for future dated rates and interest overrides
05/2022	1.0.0.3	Correct application where parameter “Use Acct Rate for Time Dep YN (8TTT)” = “Y” to initially remove user field if the account renewed effective the current date, so it can be evaluated and a new rate applied, if qualified
10/2021	1.0.0.2	Correct placement where the new parameter is read
10/2021	1.0.0.1	Added parameter to determine if using account level rates on time deposits or product level.
09/2021	1.0.0.0	Changed reference to AppMarket

Date	App Version #	Change
11/2020	1.0.0.0	EXTN folder created, single set up script for Batch/App.
08/2020	1.0.0.0	Changed label to Fiserv Confidential
06/2020	1.0.0.0	Support for migration of delivery method code to account” in revision history
04/2020	1.0.0.0	Added Option A to variable 8TDQ to always include Time Deposit accounts in qualification.
11/2019	1.0.0.0	Documentation update – consolidated parameters to a single grid and added column for qualification category
03/2018	1.0.0.0	Documentation update - Added Fiserv Confidential Label
01/2016	1.0.0.0	Added product variables Time Deposit Qualification and Exclude Time Deposit Manual Rate Overrides
06/2015	1.0.0.0	Application name change from PS_BONUS_RATES
01/2015	1.0.0.0	Added Role Codes to ACH and Debit Card Qualification Added Major/Minor Account Application Exclusions to the qualifications for ACH and Debit Card
11/2014	1.0.0.0	Corrected Documentation, added missing parameters
09/2014	1.0.0.0	Documentation Format Updated
02/2013	1.0.0.0	Application Created