* Rate card representation is to show premium in spilt up wise based on params

by dynamic way of adding or removing parameters in transaction.

* Its like PLAN wise for each plan template is defined and you can select in screen,

Template is editable. you can add new params or remove in template.

Below are example models data has to represent in screen.

Example - 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| AGE BAND | BENEFIT WITHOUT MATERNITY | MALE PREM | FEMALE PREM | MATERNITY PREM |
| 0-18 | IP | 100 | 150 |  |
| 19-55 | IP | 200 | 125 | 100 |
| 56-99 | IP | 300 | 300 |  |

Example -2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| AGE BAND | MALE PREM | BENEFIT WITHOUT MATERNITY | FEMALE PREM | MATERNITY PREM | EMP/DEPENDENT |
| 0-18 | 100 | IP | 150 |  | Y |
| 19-55 | 200 | IP | 125 | 100 | Y |
| 56-99 | 300 | IP | 300 |  | Y |
| 0-18 | 100 | OP | 150 |  | N |
| 19-55 | 200 | OP | 125 | 100 | N |
| 56-99 | 300 | OP | 300 |  | N |

Example – 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| AGE BAND | MALE PREM | FEMALE PREM | BENEFIT WITHOUT MATERNITY | MATERNITY PREM | EMP/DEPENDENT |
| 0-18 | 100 | 150 | IP |  | N |
| 19-55 | 200 | 125 | IP | 200 | N |
| 56-99 | 300 | 300 | IP |  | N |
| 0-18 | 100 | 150 | OP |  | Y |
| 19-55 | 200 | 125 | OP | 200 | Y |
| 56-99 | 300 | 300 | OP |  | Y |

Example – 4

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| AGE BAND | MALE PREM | FEMALE PREM | BENEFIT WITHOUT MATENITY | MATERNITY PREM | S/L INVESTOR |  |
| 0-18 | 100 | 150 | IP |  | Y |  |
| 19-55 | 200 | 125 | IP | 200 | Y |  |
| 56-99 | 300 | 300 | IP |  | Y |  |
| 0-18 | 100 | 150 | OP |  | Y |  |
| 19-55 | 200 | 125 | OP | 200 | Y |  |
| 56-99 | 300 | 300 | OP |  | Y |  |

Structure To Add Templates :

As mention before template may be configured or dynamic.

For that we are using below master tables to define.

Master Table – 1

1. UDA\_RATING\_HDR - To define ratekey type ,product and no of params

In below attached excel contais sample data and structure.



**Master Table - 2**

1. UDS\_RATEKEY\_PARAM – Will contains the details header parameter.

|  |  |  |
| --- | --- | --- |
| URP\_PARAM\_ID | NOT NULL VARCHAR2(20) | param id user defined |
| URP\_PARAM\_DESC | VARCHAR2(100 | description |
| URP\_PARAM\_SEQ | NOT NULL NUMBER | sequence of header param |
| URP\_PARAM\_TYP | NOT NULL VARCHAR2(3) | Param data type |
| URP\_URH\_SGS\_ID | NOT NULL NUMBER | relation id to header table |
| URP\_SMD\_SGS\_ID | NUMBER | map id from sds\_md\_defn |
| URP\_PARAM\_DATA | VARCHAR2(20) | NA |
| URP\_PARAM\_DATA1 | VARCHAR2(20) | NA |
| URP\_COMP\_ID | VARCHAR2(20) | Company id |
| URP\_FLEX\_01 | VARCHAR2(50) | Use for horizontal and vertical |

May be user can add or remove fields from this template by using from parameter master.It will show all possible values of parameter list from below table.

Data Example –

Pls find above attached excel for sample data.

Master Table – 3

1. SDS\_md\_DEFN - Will contain all possible combinations of header parameters.

Pls find avove attached excel for sample data and table description.

Master Table – 3

1. UDS\_RATEKEY\_DATA - it will contain all detailed data related header parameters list.

Pls find above attached sample data for rate key data.

Same like that we have 10 number columns and 10 character columns.

Same way you can do 10 columns for character data and store respective data type wise.

**Finally then we have 2 transaction tables .**

One table will store the values of template related information like

Template name,param descritpitions,sequence like that.

Other table will have all combination of data related detailed values member count

And premium.

1.UTDS\_LEVEL\_TMPL – This table will contain detailed information

Of transaction header param list and template and plan id.

Pls find above attached excel for table description and sample data.

2.RTDS\_RK\_DATA - IT WILL CONTAINS THE ALL COMBINATIONS OF TRANSACTION DATA

Pls find below attached excel for the table describe and sample data.

**Algorithm :**

Step 1 : Master configuration.

1. Rate card template is defined as plan wise.

For each plan we can select one template

In transaction.

To define template in master we are using 3 existing tables.

1.UDS\_RATING\_HDR

2.UDS\_RATEKEY\_PARAM

3.UDS\_RATEKEY\_DATA.

Note :- we need to get new rate key type from master team to configure rating of rate card.

We need to add 4 new columns Of flex in udsh\_ratekey\_param.

We will use 4 flex columns for below requirement.

|  |  |
| --- | --- |
| URP\_FLEX\_01 | DISP DESC |
| URP\_FLEX\_02 | DIMENSION |
| URP\_FLEX\_03 | DISP SEQ NO |
| URD\_FLEX\_04 | REQUIRED FOR WGA |

For rate card template definition.

Screen will show like below and necessary details will store in udsh\_ratekey\_param.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TEMP | TEMP-1 | | | | |
| PARAM | PARAM DESC | DISP DESC | DIMENSION | DIS SEQ | REQ FOR WGA |
|  | AGE | AGE BAND | H | 1 | Y |
|  | GENDER | GENDER | V | 2 | Y |
|  | BENEFIT | BENEFITS | V | 3 | Y |
|  | RELATION | RELATION | H | 4 | N |
|  | MARITAL | MARITAL STATUS | V | 5 | Y |

And then add necessary data in ratekey\_data table by using common method of define.

And then add 4 more columns in rate key data.

|  |  |
| --- | --- |
| URD\_FLEX\_01 | group data |
| URD\_FLEX\_01\_DESC | Group description |
| URD\_FLEX\_02 | level data |
| URD\_FLEX\_02\_DESC | level description. |

While defining data in uds\_ratekey\_data above new defined four fields should be

Editable in master screen to enter values by user to group the data and get in required

Format.

Data would be like below attached excel in uds\_ratekey\_data.



|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RATEKEY DATA |  |  |  |  |  |  |  |  |  |
| **TEMPLATE ID** | **BENEFIT** | **GENDER** | **RELATION** | **AGE** | **AGE TO** | **GROUP ID** | **LEVEL ID** | **GROUP DESC** | **LEVEL DESC** |
| TMPL1 | IP | M | PRINCIPLE | 0 | 18 | G1 | L1 | G1 - Benefits | L1 - Male |
| TMPL1 | IP | M | PRINCIPLE | 19 | 55 | G1 | L1 | G1 - Benefits | L1 - Male |
| TMPL1 | IP | M | PRINCIPLE | 56 | 99 | G1 | L1 | G1 - Benefits | L1 - Male |
| TMPL1 | OP | F | PRINCIPLE | 0 | 18 | G1 | L2 | G1 - Benefits | L2 - Female |
| TMPL1 | OP-MAT | F | PRINCIPLE | 19 | 55 | G2 | L3 | G2 - Maternity | L3 - Maternity |
| TMPL1 | IP-MAT | F | PRINCIPLE | 19 | 55 | G2 | L3 | G2 - Maternity | L3 - Maternity |
| TMPL1 | OP | F | PRINCIPLE | 56 | 99 | G1 | L2 | G1 - Benefits | L2 - Female |
| TMPL1 | IP | M | DEPENDENTS | 0 | 18 | G1 | L1 | G1 - Benefits | L1 - Male |
| TMPL1 | IP | M | DEPENDENTS | 19 | 55 | G1 | L1 | G1 - Benefits | L1 - Male |
| TMPL1 | IP | M | DEPENDENTS | 56 | 99 | G1 | L1 | G1 - Benefits | L1 - Male |
| TMPL1 | OP | F | DEPENDENTS | 0 | 18 | G1 | L2 | G1 - Benefits | L2 - Female |
| TMPL1 | OP-MAT | F | DEPENDENTS | 19 | 55 | G2 | L3 | G2 - Maternity | L3 - Maternity |
| TMPL1 | IP-MAT | F | DEPENDENTS | 19 | 55 | G2 | L3 | G2 - Maternity | L3 - Maternity |
| TMPL1 | OP | F | DEPENDENTS | 56 | 99 | G1 | L2 | G1 - Benefits | L2 - Female |

Step – 2 :

In transaction we will show for each plan all templates as drop down.

Fig 1:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| DROP DOWN | DROP DOWN |  |  |  |  |  |
| PLAN1 | TEMP-1 | PARAMETERS | DISP DESC | DIMENSION | DIS SEQ | REQ FOR WGA |
|  |  | AGE | AGE BAND | H | 1 | Y |
|  |  | GENDER | GENDER | V | 2 | Y |
|  |  | RELATION | RELATION | V | 3 | N |
|  |  |  |  |  |  |  |
| PLAN2 | TEMP-2 | AGE | AGE BAND | H | 1 | Y |
|  |  | GENDER | GENDER | V | 2 | Y |
|  |  | RELATION | RELATION | V | 3 | N |
|  |  | BNEFIT | BENEFIT | V | 4 | Y |

Add 4 columns in rtds\_rk\_data whatever added in rate key data table to capture information.

|  |  |
| --- | --- |
| RRD\_FLEX\_01 | group data |
| RRD\_FLEX\_01\_DESC | Group description |
| RRD\_FLEX\_02 | level data |
| RRD\_FLEX\_02\_DESC | level description. |

Once you selected template respective template ID will take from uds\_ratekey\_data for template and then insert data into rtds\_rk\_data.

Once inserted in rtds\_rk\_data. we will calculate the WGA based param selected flag

Yes/no (URD\_FLEX\_06 in uds\_ratekey\_param).

For Example:

Suppose in template 1 parameters age is required for calculation of weighted average then

Flag is yes then required not required means no.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ULRC\_PLAN\_ID | RRD\_DATA\_1 | RRD\_DATA\_2 | RRD\_DATA\_3 | RRD\_DATA\_4 | RRD\_DATA\_5 | RRD\_RATE | rrd\_mem\_cnt | RRD\_FLEX\_01 | RRD\_FLEX\_01\_DESC | RRD\_FLEX\_02 | RRD\_FLEX\_02\_DESC |
| PLAN1 | 0 | 18 | IP | M | PRINCIPLE | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G1 | L1 | G1 - Benefits | L1 - Male |
| PLAN1 | 19 | 55 | IP | M | PRINCIPLE | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G1 | L1 | G1 - Benefits | L1 - Male |
| PLAN1 | 56 | 99 | IP | M | PRINCIPLE | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G1 | L1 | G1 - Benefits | L1 – Male |
| PLAN1 | 0 | 18 | OP | F | PRINCIPLE | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G1 | L2 | G1 - Benefits | L2 – Female |
| PLAN1 | 19 | 55 | OP-MAT | F | PRINCIPLE | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G2 | L3 | G2 - Maternity | L3 – Maternity |
| PLAN1 | 19 | 55 | IP-MAT | F | PRINCIPLE | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G2 | L3 | G2 - Maternity | L3 – Maternity |
| PLAN1 | 56 | 99 | OP | F | PRINCIPLE | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G1 | L2 | G1 - Benefits | L2 – Female |
| PLAN1 | 0 | 18 | IP | M | DEPENDENTS | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G1 | L1 | G1 - Benefits | L1 – Male |
| PLAN1 | 19 | 55 | IP | M | DEPENDENTS | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G1 | L1 | G1 - Benefits | L1 – Male |
| PLAN1 | 56 | 99 | IP | M | DEPENDENTS | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G1 | L1 | G1 - Benefits | L1 - Male |
| PLAN1 | 0 | 18 | OP | F | DEPENDENTS | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G1 | L2 | G1 - Benefits | L2 – Female |
| PLAN1 | 19 | 55 | OP-MAT | F | DEPENDENTS | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G2 | L3 | G2 - Maternity | L3 – Maternity |
| PLAN1 | 19 | 55 | IP-MAT | F | DEPENDENTS | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G2 | L3 | G2 - Maternity | L3 – Maternity |
| PLAN1 | 56 | 99 | OP | F | DEPENDENTS | WGA FORMULA TO BE APPLIED | MEMBER COUNT | G1 | L2 | G1 - Benefits | L2 – Female |

By using above data we can formulate the template in required format.

1. **Group Id**

To get below format divided benefits into 2 groups .maternity benefit into group -1

other benefits into group-2 and store description in group description column to

like below example.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| TEMPLATE | BENEFIT | GENDER | RELATION | AGE FM | AGE TO | GROUP | GROUP DESC |
| TMPL1 | IP | M | PRINCIPLE | 0 | 18 | G1 | G1 - Benefits |
| TMPL1 | IP | M | PRINCIPLE | 19 | 55 | G1 | G1 - Benefits |
| TMPL1 | IP | M | PRINCIPLE | 56 | 99 | G1 | G1 - Benefits |
| TMPL1 | OP | F | PRINCIPLE | 0 | 18 | G1 | G1 - Benefits |
| TMPL1 | OP-MAT | F | PRINCIPLE | 19 | 55 | G2 | G2 - Maternity |

1. **LEVEL**

Level column will store the values like above.

To get the below output assigning level to combination of columns.

Like to combine gender and benefit assigned levels to combination entries and

Get required output.

*Example like*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| TEMPLATE | BENEFIT | GENDER | RELATION | AGE FM | AGE TO | LEVEL | LEVEL DESC |
| TMPL1 | IP | M | PRINCIPLE | 0 | 18 | G1 - Benefits | L1 - Male |
| TMPL1 | IP | M | PRINCIPLE | 19 | 55 | G1 - Benefits | L1 - Male |
| TMPL1 | IP | M | PRINCIPLE | 56 | 99 | G1 - Benefits | L1 - Male |
| TMPL1 | OP | F | PRINCIPLE | 0 | 18 | G1 - Benefits | L2 - Female |
| TMPL1 | OP-MAT | F | PRINCIPLE | 19 | 55 | G2 - Maternity | L3 - Maternity |

*Use above group and level columns in group and get the below format output. refer attached*

*Excel sheet for detailed understand.*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age** | **Male Premium** | **Female Premium**  **without Maternity** | **Female Premium with Maternity** |  | **Age** | **Males** | **Females without Maternity** | **Females with Maternity** |
| [0-15] |  |  |  |  | [0-15] |  |  |  |
| [16-20] |  |  |  |  | [16-20] |  |  |  |
| [21-25] |  |  |  |  | [21-25] |  |  |  |
| [26-30] |  |  |  |  | [26-30] |  |  |  |
| [31-35] |  |  |  |  | [31-35] |  |  |  |
| [36-40] |  |  |  |  | [36-40] |  |  |  |
| [41-45] |  |  |  |  | [41-45] |  |  |  |
| [46-50] |  |  |  |  | [46-50] |  |  |  |
| [51-55] |  |  |  |  | [51-55] |  |  |  |
| [56-60] |  |  |  |  | [56-60] |  |  |  |
| [61-65] |  |  |  |  | [61-65] |  |  |  |
| [66-99] |  |  |  |  | [66-99] |  |  |  |

**\**

**Ex-2 for level**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **TEMPLATE - 2** | **BENEFIT** | **GENDER** | **RELATION** | **AGE FM** | **AGE TO** | **LEVEL** | **LEVEL DESC** |
| TMPL-2 | IP | M | PRINCIPLE | 0 | 18 | L1 | L1 - CHILDREN |
| TMPL-2 | IP | M | PRINCIPLE | 19 | 55 | L2 | L2 - MALE |
| TMPL-2 | IP | M | PRINCIPLE | 56 | 99 | L4 | L4 - SENIOR |
| TMPL-2 | OP | F | PRINCIPLE | 0 | 18 | L1 | L1 - CHILDREN |
| TMPL-2 | OP-MAT | F | PRINCIPLE | 19 | 55 | L3 | L3 - FEMALE |
| TMPL-2 | IP-MAT | F | PRINCIPLE | 19 | 55 | L3 | L3 - FEMALE |
| TMPL-2 | OP | F | PRINCIPLE | 56 | 99 | L4 | L4 - SENIOR |
| TMPL-2 | IP | M | DEPENDENTS | 0 | 18 | L1 | L1 - CHILDREN |
| TMPL-2 | IP | M | DEPENDENTS | 19 | 55 | L2 | L2 - MALE |
| TMPL-2 | IP | M | DEPENDENTS | 56 | 99 | L4 | L4 - SENIOR |
| TMPL-2 | OP | F | DEPENDENTS | 19 | 55 | L3 | L3 - FEMALE |
| TMPL-2 | IP | F | DEPENDENTS | 56 | 99 | L4 | L4 - SENIOR |

By using above data in level column we can able to achieve below required by using in group by.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Age** | **Premium** | **Member** | **Total Premium** |
| **Children** | **[0-15]** |  |  |  |
| **Male** | **[16-65]** |  |  |  |
| **Female** | **[16-65]** |  |  |  |
| **Senior** | **[66-99]** |  |  |  |
| **Grand Total** | | |  |  |

Pls refer below excel for sample data representation.

