POWER BI

TECHNICAL DESIGN

AR WRITE OFF

DASHBOARD

Document Information	
Document Title	Power BI AR Write Off Dashboard
Document Purpose	This is a technical document which outlines considerations and guidance for intercompany project and developer.
Document Owner	Trakindo Utama

List of Tables in Power BI Report:		
No	**Power BI Table Name**	**Table Source**
1	ecc MT_BUSINESS_AREA	EDWMDS.EDW_MDS.ECC.MT_BUSINESS_AREA
2	rpa ARWrOExtractFormB	EDW_TOD.rpa.ARWrOExtractFormB
3	rpa ARWrORequest	EDW_TOD.rpa.ARWrORequest
4	rpa ARWrOType	EDW_TOD.rpa.ARWrOType
5	rpa ARRmdCurrentPIC	EDW_TOD.rpa.ARRmdCurrentPIC
6	rpa ARRmdHeader	EDW_TOD.rpa. ARRmdHeader
7	rpa ARWrOInject	*Imported by SQL Statement*
8	rpa ARWrOProd	*Imported by SQL Statement*
9	rpa ARWrOInjectionUnion	*Appended from ARWrOInject and ARWrOProd*
10	rpa ARWrOSLA	*Imported by SQL Statement*
11	rpa ARWrOSubType	EDW_TOD.rpa.ARWrOSubType
12	rpa Indonesian_Holiday	EDWMDS.EDW_APPS.SM.INDONESIAN_HOLIDAY

1. Import Table by SQL Statement

1.1. Table ARWrOInject

```
select
        a.RequestNo,
        a.SalesmanPIC,
        a.RequestorBranch,
        e.AREA_NAME,
        LEFT(CAST(a.ProfitCenter as INT), 4) ProfitCenter,
        a.CustomerName,
        a.Year,
        left(a.SubType, 3) as Type,
        a.SubType,
        5 as Status,
        cast(case when len(a.amountinloccur) = 0 then '0' else a.AmountInLocCur end as
decimal(10,2)) AmountInLocCur
from CR_EDW_TOD.rpa.ARWrORequestInject a
left join [EDWMDS].[EDW_MDS].[ECC].[MT_BUSINESS_AREA] e
on a.RequestorBranch = e.BUSINESS_AREA
```

1.2. Table ARWrOProd

```sql
select
       b.RequestNo,
       b.SalesmanPIC,
       a.BusinessArea RequestorBranch,
       e.AREA_NAME,
       LEFT(CAST(a.ProfitCenter as INT), 4) ProfitCenter,
       b.CustomerName,
       FORMAT(b.CreatedDate, 'yyyy') Year,
       c.Type,
       d.SubType,
       b.Status,
       cast(case when len(a.amountinloccur) = 0 then '0' else a.AmountInLocCur end as
decimal(10,2)) AmountInLocCur

from EDW_TOD.rpa.ARWrOExtractFormB a
left join EDW_TOD.rpa.ARWrORequest b on a.HreqId = b.Id
left join EDW_TOD.rpa.ARWrOType c on b.ARWrOTypeID = c.Id
left join EDW_TOD.rpa.ARWrOSubType d on b.ARWrOSubTypeID = d.Id
left join [EDWMDS].[EDW_MDS].[ECC].[MT_BUSINESS_AREA] e on a.BusinessArea = e.BUSINESS_AREA
```

1.3. Table ARWrOSLA

```sql
select
       *
from (
       select
       a.*,
       b.CreatedDate CreatedDateRequest,
       CASE
       WHEN a.ARWrOLevel = 1 THEN b.CreatedDate
       WHEN SignerName = '-' THEN a.CreatedDate
       WHEN a.ARWrOLevel > a.LevelReject THEN a.CreatedDate
       WHEN a.LagStatus < 0 THEN a.CreatedDate
       WHEN a.Status = -1 THEN LagDate
       WHEN (a.Status >= 0 AND Dateapprove IS NOT NULL) THEN LagDate
       WHEN (a.Status >= 0 AND Dateapprove IS NULL) THEN LagDate END AS PreviousLevelDate,
       CASE
       WHEN a.ARWrOLevel = 1 THEN a.Dateapprove
       WHEN SignerName = '-' THEN a.LastModifiedDate
       WHEN a.ARWrOLevel > a.LevelReject THEN a.CreatedDate
       WHEN a.LagStatus < 0 THEN a.CreatedDate
       WHEN a.Status = -1 THEN GETDATE()
```

```sql
       WHEN (a.Status >= 0 AND Dateapprove IS NOT NULL) THEN Dateapprove
       WHEN (a.Status >= 0 AND Dateapprove IS NULL) THEN a.LastModifiedDate
       END AS CurrentLevelDate,
       b.AREA_NAME,
       b.CustomerName,
       CASE when a.SignerName is null then b.SalesmanPIC else a.SignerName end Approver,
              b.RequestNo,
              b.Status as Status_Request
       from (
       select * from (
              select
              *,
       LAG(LastModifiedDate,1) OVER(PARTITION BY HreqID ORDER BY HreqID, ARWrOLevel,
       LastModifiedDate) AS LagDate,
       LAG(Status,1) OVER(PARTITION BY HreqID ORDER BY HreqID, ARWrOLevel, Status) AS
       LagStatus
       from EDW_TOD.rpa.ARWrOApprovalDetail
       where SignerName <> '-' and PositionName not like 'Additional%'
       union
       select
       *,
       LastModifiedDate AS LagDate,
       Status AS LagStatus
from EDW_TOD.rpa.ARWrOApprovalDetail where SignerName = '-'
) aa
left join (select HReqID idHeader, ARWrOLevel LevelReject from
EDW_TOD.rpa.ARWrOApprovalDetail where Status = 0) b on aa.HReqID = b.idHeader
) a
       full join (
       select a.*, e.AREA_NAME
       from EDW_TOD.rpa.ARWrORequest a
       left join [EDWMDS].[EDW_MDS].[ECC].[MT_BUSINESS_AREA] e
       on a.RequestorBranch = e.BUSINESS_AREA
       ) b on a.HReqID = b.Id
       left join (
              select ARWrOLevel, count(*) as count_request
              from EDW_TOD.rpa.ARWrOApprovalDetail aa
              where status < 3
              group by ARWrOLevel
       ) c on a.ARWrOLevel = c.ARWrOLevel
) a
```

2. Calculated Columns

2.1. AR Write Off Report

2.1.1. Customer Payer

```
customer_payer =

VAR cust = 'rpa ARWrOInjectionUnion'[PayerID] & " - " & 'rpa
ARWrOInjectionUnion'[CustomerName]

RETURN

IF(AND(ISBLANK('rpa ARWrOInjectionUnion'[PayerID]), ISBLANK('rpa
ARWrOInjectionUnion'[CustomerName])), BLANK(),cust)
```

2.1.2. Profit Center Description

```
Profit_Center_Desc =
var cat =
 IF(LEFT('rpa ARWrOInjectionUnion'[ProfitCenter],4)="1010", "Machine",
 if(LEFT('rpa ARWrOInjectionUnion'[ProfitCenter],4)= "1090", "Rental",
 if(LEFT('rpa ARWrOInjectionUnion'[ProfitCenter],4)= "1030", "Parts",
 if(LEFT('rpa ARWrOInjectionUnion'[ProfitCenter],4)= "1050", "Used Equipment",
 if(LEFT('rpa ARWrOInjectionUnion'[ProfitCenter],4)= "1020", "Engine",
 if(LEFT('rpa ARWrOInjectionUnion'[ProfitCenter],4)= "1040", "CSA Parts",
 if(LEFT('rpa ARWrOInjectionUnion'[ProfitCenter],4)= "1080", "CSA Service",
 if(LEFT('rpa ARWrOInjectionUnion'[ProfitCenter],4)= "1070", "MARC",
 if(LEFT('rpa ARWrOInjectionUnion'[ProfitCenter],4)= "1999", "Others",
 if(LEFT('rpa ARWrOInjectionUnion'[ProfitCenter],4)= "1060", "Service", " "
 ))))))))))
return
(left('rpa ARWrOInjectionUnion'[ProfitCenter],4)) & " - " & cat
```

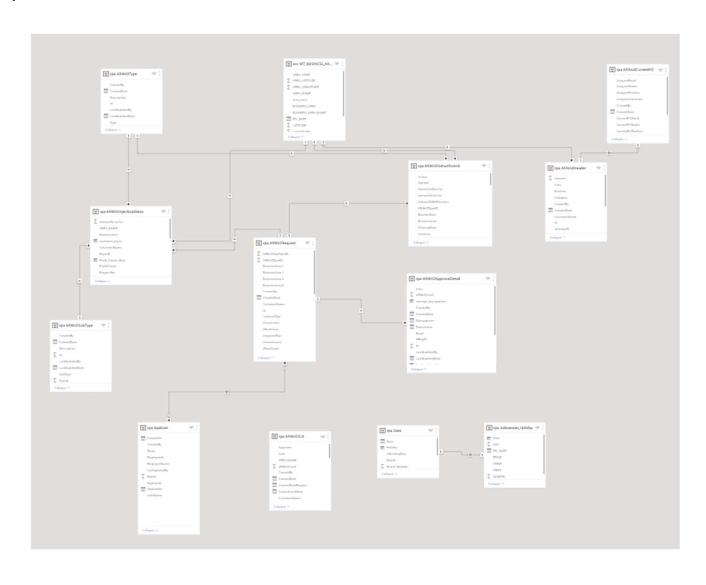### 2.1.3. Status Description

```
Status Desc = SWITCH('rpa ARWrOInjectionUnion'[Status],
0, "New Request",
1, "Incompleted",
3, "Inprogress",
4, "Approved",
5, "Completed",
6, "Rejected",
"None")
```

2.2. AR Write Off Status Report

2.2.1. Summary Position

```
working_days =
CALCULATE(
    COUNTROWS('rpa Date'),
    DATESBETWEEN('rpa Date'[Date], 'rpa ARWrOSLA'[PreviousLevelDate], 'rpa
ARWrOSLA'[CurrentLevelDate] - 1),
    'rpa Date'[WorkingDay] = TRUE(),
    ALL('rpa Date')
)
```

3. Relationship Model

Active	From: Table (Column)	To: Table (Column)
Yes	rpa ARRmdCurrentPIC (Hid)	rpa ARRmdHeader (Id)
Yes	rpa ARRmdHeader (BusArea)	ecc MT_BUSINESS_AREA (BUSINESS_AREA)
Yes	rpa ARWrOApprovalDetail (HreqID)	rpa ARWrORequest (Id)
Yes	rpa ARWrOExtractFormB (ARWrOTypeID)	rpa ARWrOType (Id)
Yes	rpa ARWrOExtractFormB (BusinessArea)	ecc MT_BUSINESS_AREA (BUSINESS_AREA)
Yes	rpa ARWrOExtractFormB (HreqId)	rpa ARWrORequest (Id)
Yes	rpa ARWrOInjectionUnion (RequestNo)	rpa ARWrORequest (RequestNo)
Yes	rpa ARWrOInjectionUnion (RequestorBranch)	ecc MT_BUSINESS_AREA (BUSINESS_AREA)
Yes	rpa ARWrOInjectionUnion (SubType)	rpa ARWrOSubType (SubType)
Yes	rpa ARWrOInjectionUnion (Type)	rpa ARWrOType (Type)
Yes	rpa Indonesian_Holiday (Date)	rpa Date (Date)
Yes	rpa RpaUser (UserName)	rpa ARWrORequest (SalesmanPIC)