

The BIDA

Navision Staging Area

Construction Guide

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1. AUDIENCE

The intended audiences for the BIDA Navision Construction Guide are:

- IT staff from client organisations who are involved in the support of their Microsoft Navision Implementaiton and the evaluation BI Solutions for their company.

2. PURPOSE

The purposes of the BIDA Navision Construction Guide are:

- Explain clearly and in great detail the process we use to construct the BIDA Navision Staging Area.
- To provide enough input for client Technology staff at a prospective client to determine whether they will choose to implement the BIDA Navision Staging Area.
- It is expected that Technology People from the prospective client will review this document prior to detailed discussion with BIDA Sales Staff as to the suitability of the BIDA Navision Staging Area

We have placed a lot of detailed information into this document for the purposes of review prior to investing our time into the sales cycle with prospective clients.

The main reason for this is that the deliverable of the BIDA Navision Staging Area is very straight forward and a decision to go ahead with implementing the BIDA Navision Staging Area is straight forward.

3. INTRODUCTION TO BIDA STAGING AREAS

BIDA Staff have been building data warehouses for more than 25 years now. Over those years techniques have improved by an unbelievable amount.

We recently built an entire new staging area for a Navision installed client in just 4 days. This very small amount of time to build a fully functioning staging area is simply amazing, even to us. It appears that our practice at building these staging areas is paying off with faster build times.

The staging area we created has 1,867 tables and 35,591 columns from Navision.

We were able to build the staging tables and all the SQL code needed to maintain the staging area in just 4 days.

This includes the renaming of tables and columns so that they meet the standard that no [] brackets are needed around the field names in sql.

When we build staging tables we add some columns to the tables so that:

1. The staging area is capable of hosting data from more than one Navision system and more than one navision customers.
2. The staging tables can be more easily used as input to ETL processing through to the data warehouse.

These columns, in order, are:

1. Pk_cust_number – which is a customer number allocated by BIDA to each of our customers.
2. Pk_ss_number – which is a source system number allocated to each system being sent in to the staging area.
3. Row_del_from_src_ind – This is the row deleted from source system indicator. It will be set to 1 in the event the row is detected as deleted from the source system by the delta detection processing.
4. Row_valid_ind- this is an indicator that defaults to 1 to say that the row is valid. It provides the ability to perform much more complex data validation, including across tables from different systems, prior to sending data in to the data warehouse.
5. Row_sent_to_edw_ind – This is an indicator to say that this row has been sent to the enterprise data warehouse. When a row is updated in Navision and then sent to the staging area again this indicator will be set to zero. The ETL will then notice that the row has not been sent to the EDW and it will send it.

This indicator is how we have implemented incremental update to the EDW for many years.

6. Row_sent_to_ods_ind – In cases where the client will implement an Operational Data Store we have a separate indicator to allow the different timings of data being sent to the ODS and the EDW.

So an example of the creation of a staging table is as follows:

```
CREATE TABLE [dbo].[stg_nav_acc_sched_cell_value]
(
    [pk_cust_number]           [int] NULL,
    [pk_ss_number]            [int] NULL,
    [timestamp_col]          [varbinary](255) NULL,
    [pk_schedule_name]       [varchar](10) NULL,
    [pk_row_no]              [int] NULL,
    [pk_column_no]           [int] NULL,
    [value_col]              [decimal](38, 20) NULL,
    [error_col]              [tinyint] NULL,
    [period_error]          [tinyint] NULL,
    [row_del_from_src_ind]   [smallint] NULL,
    [row_valid_ind]         [smallint] NULL,
    [row_sent_to_edw_ind]   [smallint] NULL,
    [row_sent_to_ods_ind]   [smallint] NULL
) ON [FG_XXX]
```

```

ALTER TABLE [dbo].[stg_nav_acc_sched_cell_value] ADD DEFAULT ((0)) FOR [row_del_from_src_ind]
ALTER TABLE [dbo].[stg_nav_acc_sched_cell_value] ADD DEFAULT ((1)) FOR [row_valid_ind]
ALTER TABLE [dbo].[stg_nav_acc_sched_cell_value] ADD DEFAULT ((0)) FOR [row_sent_to_edw_ind]
ALTER TABLE [dbo].[stg_nav_acc_sched_cell_value] ADD DEFAULT ((0)) FOR [row_sent_to_ods_ind]

```

In the example we are using we have allowed the columns to be nullable.

So the idea of the staging area itself is very simple.

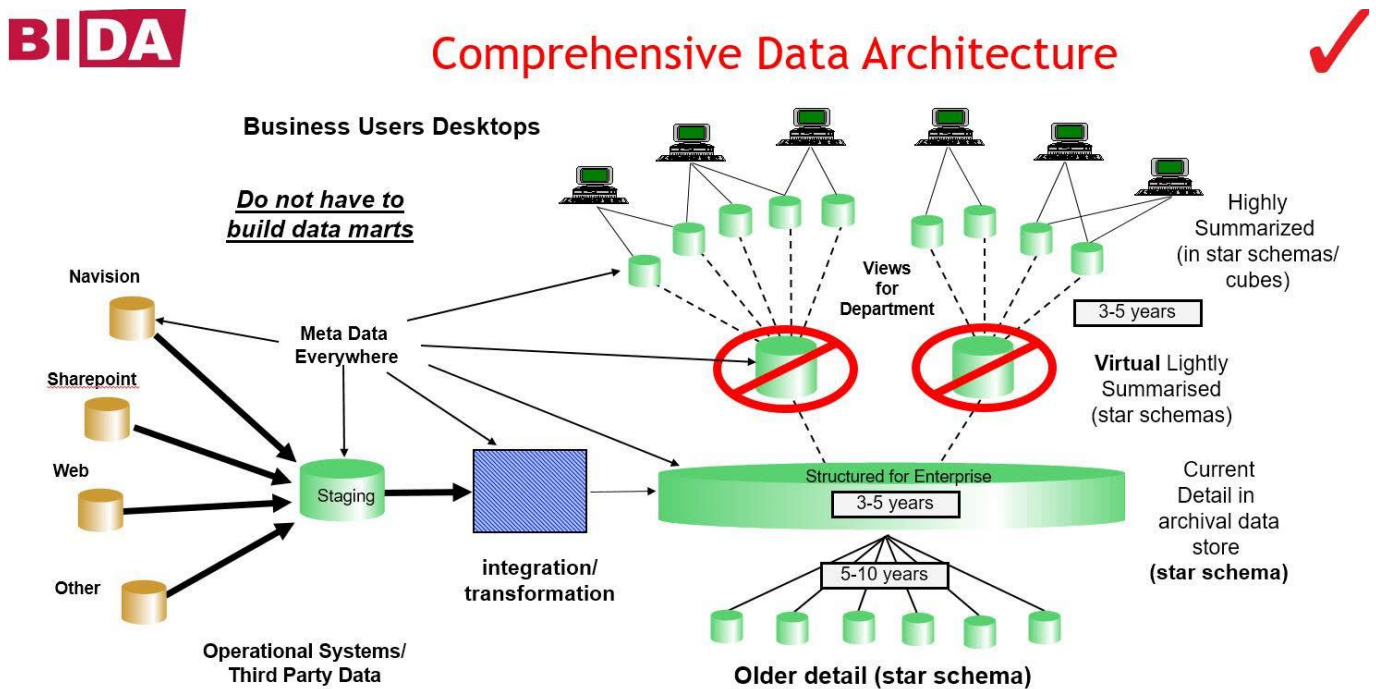
It is a place where data is sent from many systems such that it can be integrated in queries and then forwarded to the EDW as desired, usually once or twice per day on a batch schedule.

The BIDA Staging Area can also accept data from non Navision sources and integrate that data with Navision data.

For example in this particular client we integrate data from equipment maintenance records in stores with sales data so that when store coaches go to the stores to ensure compliance with internal regulations and to offer advice and guidance on the running of the store they have available to them on their tablet the records of equipment maintenance as well as sales, commissions and other data.

As shown in the diagram below data can come from Navision, Sharepoint, Web or indeed any sources.

It all makes it inn to the staging area and then an integration / transformation process occurs to send the data in to the data warehouse.



3.1. The Staging Table Update Process

Now we will include the actual generated tables and code that is used to extract a table from a production Navision system and place the data in to the staging area. This code is replicated for each table that is in the Navision system.

3.1.1. Step 01 – Extract from Navision

Firstly we create a view that will go to the remote SQL Server that Navision is running on and extract the data from Navision that has been updated since the last extract.

```
drop view dbo.[zz00_XXX_nav2009$acc_sched_cell value]
go

create view dbo.[zz00_XXX_nav2009$acc_sched_cell value]
as select
[xxx_nav2009$acc_sched_cell value].[timestamp]                [timestamp]
,[xxx_nav2009$acc_sched_cell value].[schedule name]          [schedule name]
,[xxx_nav2009$acc_sched_cell value].[row no_]                [row no_]
,[xxx_nav2009$acc_sched_cell value].[column no_]             [column no_]
,[xxx_nav2009$acc_sched_cell value].[value]                  [value]
,[xxx_nav2009$acc_sched_cell value].[error]                  [error]
,[xxx_nav2009$acc_sched_cell value].[period error]           [period error]
from bida_dw_nav_max_timestamps a with (nowait)
inner remote join [XXX-NAV2012\SQL_NAV_XXX12].[XXX_NAV2009].dbo.[xxx_nav2009$acc_sched_cell value]
on [xxx_nav2009$acc_sched_cell value].timestamp > convert (timestamp,a.max_timestamp, 0)
or a.max_timestamp is null

where 1=1 and a.current_flag = 1 and a.database_name = 'bidahs_c008_stg_prod' and a.table_owner = 'dbo' and
a.table_name = 'stg_nav_acc_sched_cell_value'
```

You can see from the view that we have a table called bida_dw_nav_max_timestamps which stores the maximum time stamp we have seen for this table. So we request rows from Navision only where the timestamp is greater than the last timestamp we have seen.

We use the inner remote join statement to make sure that we are sending the timestamp to the navision system and the scan of the table will happen in Navision.

We then run this statement in the scheduler:

```
truncate table [zz01_XXX_nav2009$acc_schedule line] ;
;
insert into [zz01_XXX_nav2009$acc_schedule line]
select * from [bidahs_c008_stg_prod].dbo.[zz00_XXX_nav2009$acc_schedule line] with(nolock) ;
;
```

The table the data is being inserted in to is as follows:

```
CREATE TABLE [dbo].[zz01_XXX_nav2009$acc_sched_cell value]
(
    [timestamp]                [varbinary](255) NULL,
    [schedule name]            [varchar](10) NULL,
    [row no_]                  [int] NULL,
    [column no_]               [int] NULL,
    [value]                    [decimal](38, 20) NULL,
    [error]                    [tinyint] NULL,
    [period error]             [tinyint] NULL
) ON [FG_XXX]
```

This table is an exact replica of the Navision table with the exception that only the updated or inserted rows are brought across. Of course, deletes are not brought across.

In the client we are using for an example they do not routinely delete rows from tables so we do not detect deletes for this reason. We have only half a dozen or so tables where we bring the whole table across to the staging area each day.

3.1.2. Step 02 – The Delta Detection Process

We also create two more tables for every Navision table coming in to the staging area. The two tables are for the “minus 1” version of the data and the deltas detected during the delta detection processing.

Here are two examples:

```
CREATE TABLE [dbo].[zxt_nav_acc_sched_cell_value_d1](
    [pk_cust_number]          [int] NULL,
    [pk_ss_number]            [int] NULL,
    [timestamp_col]           [varbinary](255) NULL,
    [pk_schedule_name]        [varchar](10) NULL,
    [pk_row_no]               [int] NULL,
    [pk_column_no]            [int] NULL,
    [value_col]                [decimal](38, 20) NULL,
    [error_col]               [tinyint] NULL,
    [period_error]            [tinyint] NULL,
    [delta_ind]               [int] NULL
) ON [FG_XXX]
```

Notice the delta indicator on the delta table which indicates the type of delta that occurred. This can be an insert, update or delete indicated by 1, 2, 3.

```
CREATE TABLE [dbo].[zxt_nav_acc_sched_cell_value_m1](
    [pk_cust_number]          [int] NULL,
    [pk_ss_number]            [int] NULL,
    [timestamp_col]           [varbinary](255) NULL,
    [pk_schedule_name]        [varchar](10) NULL,
    [pk_row_no]               [int] NULL,
    [pk_column_no]            [int] NULL,
    [value_col]                [decimal](38, 20) NULL,
    [error_col]               [tinyint] NULL,
    [period_error]            [tinyint] NULL
) ON [FG_XXX]
```

The minus 1 table is used when detecting deletes. It contains the complete copy of the table as of the prior day.

When we are not detecting deletes we use what is called the minus 2 table which is the same name and columns but is a view over the actual staging table. And the new rows in the landing table are compared to the staging area table to determine what sort of update has to be applied to the staging table to move the data forward.

We will include all steps of the generated SQL for delta detection but when we are not detecting deletes we only run steps 1, 2, 5 and 6.

```

truncate table bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value_d1
;

insert into bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value_d1
(
    pk_cust_number
    ,pk_ss_number
    ,timestamp_col
    ,pk_schedule_name
    ,pk_row_no
    ,pk_column_no
    ,value_col
    ,error_col
    ,period_error
    ,delta_ind
)
select
    zxt_nav_acc_sched_cell_value_src.pk_cust_number
    ,zxt_nav_acc_sched_cell_value_src.pk_ss_number
    ,zxt_nav_acc_sched_cell_value_src.timestamp_col
    ,zxt_nav_acc_sched_cell_value_src.pk_schedule_name
    ,zxt_nav_acc_sched_cell_value_src.pk_row_no
    ,zxt_nav_acc_sched_cell_value_src.pk_column_no
    ,zxt_nav_acc_sched_cell_value_src.value_col
    ,zxt_nav_acc_sched_cell_value_src.error_col
    ,zxt_nav_acc_sched_cell_value_src.period_error
    ,1

from bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value

                                zxt_nav_acc_sched_cell_value_src

left join bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value_m2
and zxt_nav_acc_sched_cell_value_src.pk_cust_number
and zxt_nav_acc_sched_cell_value_src.pk_ss_number
and zxt_nav_acc_sched_cell_value_src.pk_schedule_name
and zxt_nav_acc_sched_cell_value_src.pk_row_no
and zxt_nav_acc_sched_cell_value_src.pk_column_no

                                zxt_nav_acc_sched_cell_value_m2 on 1=1
                                = zxt_nav_acc_sched_cell_value_m2.pk_cust_number
                                = zxt_nav_acc_sched_cell_value_m2.pk_ss_number
                                = zxt_nav_acc_sched_cell_value_m2.pk_schedule_name
                                = zxt_nav_acc_sched_cell_value_m2.pk_row_no
                                = zxt_nav_acc_sched_cell_value_m2.pk_column_no

where
    zxt_nav_acc_sched_cell_value_m2.pk_cust_number
and zxt_nav_acc_sched_cell_value_m2.pk_ss_number
and zxt_nav_acc_sched_cell_value_m2.pk_schedule_name
and zxt_nav_acc_sched_cell_value_m2.pk_row_no
and zxt_nav_acc_sched_cell_value_m2.pk_column_no

                                is null
                                is null
                                is null
                                is null
                                is null
;

```



```

insert into bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value_d1
(
    pk_cust_number
, pk_ss_number
, timestamp_col
, pk_schedule_name
, pk_row_no
, pk_column_no
, value_col
, error_col
, period_error
, delta_ind
)
select
    zxt_nav_acc_sched_cell_value_src.pk_cust_number
, zxt_nav_acc_sched_cell_value_src.pk_ss_number
, zxt_nav_acc_sched_cell_value_src.timestamp_col
, zxt_nav_acc_sched_cell_value_src.pk_schedule_name
, zxt_nav_acc_sched_cell_value_src.pk_row_no
, zxt_nav_acc_sched_cell_value_src.pk_column_no
, zxt_nav_acc_sched_cell_value_src.value_col
, zxt_nav_acc_sched_cell_value_src.error_col
, zxt_nav_acc_sched_cell_value_src.period_error
, 2
from bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value          zxt_nav_acc_sched_cell_value_src
    , bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value_m2      zxt_nav_acc_sched_cell_value_m2
where 1=1
and zxt_nav_acc_sched_cell_value_src.pk_cust_number                = zxt_nav_acc_sched_cell_value_m2.pk_cust_number
and zxt_nav_acc_sched_cell_value_src.pk_ss_number                  = zxt_nav_acc_sched_cell_value_m2.pk_ss_number
and zxt_nav_acc_sched_cell_value_src.pk_schedule_name              = zxt_nav_acc_sched_cell_value_m2.pk_schedule_name
and zxt_nav_acc_sched_cell_value_src.pk_row_no                     = zxt_nav_acc_sched_cell_value_m2.pk_row_no
and zxt_nav_acc_sched_cell_value_src.pk_column_no                  = zxt_nav_acc_sched_cell_value_m2.pk_column_no
and
(
    not (zxt_nav_acc_sched_cell_value_src.timestamp_col = zxt_nav_acc_sched_cell_value_m2.timestamp_col or (
zxt_nav_acc_sched_cell_value_src.timestamp_col is null and zxt_nav_acc_sched_cell_value_m2.timestamp_col is null))
)
;

```

Not run when not detecting deletes.

```
insert into bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value_d1
(
  pk_cust_number
, pk_ss_number
, timestamp_col
, pk_schedule_name
, pk_row_no
, pk_column_no
, value_col
, error_col
, period_error
, delta_ind
)
select
  zxt_nav_acc_sched_cell_value_m2.pk_cust_number
, zxt_nav_acc_sched_cell_value_m2.pk_ss_number
, zxt_nav_acc_sched_cell_value_m2.timestamp_col
, zxt_nav_acc_sched_cell_value_m2.pk_schedule_name
, zxt_nav_acc_sched_cell_value_m2.pk_row_no
, zxt_nav_acc_sched_cell_value_m2.pk_column_no
, zxt_nav_acc_sched_cell_value_m2.value_col
, zxt_nav_acc_sched_cell_value_m2.error_col
, zxt_nav_acc_sched_cell_value_m2.period_error
, 3
from bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value_m2          zxt_nav_acc_sched_cell_value_m2

left join bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value      zxt_nav_acc_sched_cell_value_src on 1=1
and zxt_nav_acc_sched_cell_value_src.pk_cust_number                = zxt_nav_acc_sched_cell_value_m2.pk_cust_number
and zxt_nav_acc_sched_cell_value_src.pk_ss_number                  = zxt_nav_acc_sched_cell_value_m2.pk_ss_number
and zxt_nav_acc_sched_cell_value_src.pk_schedule_name              = zxt_nav_acc_sched_cell_value_m2.pk_schedule_name
and zxt_nav_acc_sched_cell_value_src.pk_row_no                     = zxt_nav_acc_sched_cell_value_m2.pk_row_no
and zxt_nav_acc_sched_cell_value_src.pk_column_no                  = zxt_nav_acc_sched_cell_value_m2.pk_column_no

where
  zxt_nav_acc_sched_cell_value_src.pk_cust_number                  is null
and zxt_nav_acc_sched_cell_value_src.pk_ss_number                  is null
and zxt_nav_acc_sched_cell_value_src.pk_schedule_name              is null
and zxt_nav_acc_sched_cell_value_src.pk_row_no                     is null
and zxt_nav_acc_sched_cell_value_src.pk_column_no                  is null
;
```

Not run when not detecting deletes.

```
truncate table bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value_m2
;

insert into bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value_m2
(
  pk_cust_number
, pk_ss_number
, timestamp_col
, pk_schedule_name
, pk_row_no
, pk_column_no
, value_col
, error_col
, period_error
)
select
  zxt_nav_acc_sched_cell_value_src.pk_cust_number
, zxt_nav_acc_sched_cell_value_src.pk_ss_number
, zxt_nav_acc_sched_cell_value_src.timestamp_col
, zxt_nav_acc_sched_cell_value_src.pk_schedule_name
, zxt_nav_acc_sched_cell_value_src.pk_row_no
, zxt_nav_acc_sched_cell_value_src.pk_column_no
, zxt_nav_acc_sched_cell_value_src.value_col
, zxt_nav_acc_sched_cell_value_src.error_col
, zxt_nav_acc_sched_cell_value_src.period_error

from bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value          zxt_nav_acc_sched_cell_value_src
;
```

```

insert into bidahs_c008_stg_prod.dbo.stg_nav_acc_sched_cell_value
(
    pk_cust_number
, pk_ss_number
, timestamp_col
, pk_schedule_name
, pk_row_no
, pk_column_no
, value_col
, error_col
, period_error
, row_del_from_src_ind
, row_valid_ind
, row_sent_to_edw_ind
, row_sent_to_ods_ind
)
select
    zxt_nav_acc_sched_cell_value_src.pk_cust_number
, zxt_nav_acc_sched_cell_value_src.pk_ss_number
, zxt_nav_acc_sched_cell_value_src.timestamp_col
, zxt_nav_acc_sched_cell_value_src.pk_schedule_name
, zxt_nav_acc_sched_cell_value_src.pk_row_no
, zxt_nav_acc_sched_cell_value_src.pk_column_no
, zxt_nav_acc_sched_cell_value_src.value_col
, zxt_nav_acc_sched_cell_value_src.error_col
, zxt_nav_acc_sched_cell_value_src.period_error
, 0
, 1
, 0
, 0

from bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value_d1          zxt_nav_acc_sched_cell_value_src

where delta_ind = 1
;

```

```

update bidahs_c008_stg_prod.dbo.stg_nav_acc_sched_cell_value set
  timestamp_col          = zxt_nav_acc_sched_cell_value_src.timestamp_col
, value_col              = zxt_nav_acc_sched_cell_value_src.value_col
, error_col              = zxt_nav_acc_sched_cell_value_src.error_col
, period_error          = zxt_nav_acc_sched_cell_value_src.period_error
, row_del_from_src_ind  = 0
, row_valid_ind         = 1
, row_sent_to_edw_ind   = 0
, row_sent_to_ods_ind   = 0

from bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value_d1          zxt_nav_acc_sched_cell_value_src

where l=1
and delta_ind = 2
and zxt_nav_acc_sched_cell_value_src.pk_cust_number                  = stg_nav_acc_sched_cell_value.pk_cust_number
and zxt_nav_acc_sched_cell_value_src.pk_ss_number                  = stg_nav_acc_sched_cell_value.pk_ss_number
and zxt_nav_acc_sched_cell_value_src.pk_schedule_name              = stg_nav_acc_sched_cell_value.pk_schedule_name
and zxt_nav_acc_sched_cell_value_src.pk_row_no                    = stg_nav_acc_sched_cell_value.pk_row_no
and zxt_nav_acc_sched_cell_value_src.pk_column_no                  = stg_nav_acc_sched_cell_value.pk_column_no
;

Not run when not detecting deletes.

update bidahs_c008_stg_prod.dbo.stg_nav_acc_sched_cell_value set
  row_del_from_src_ind    = 1
, row_valid_ind          = 1
, row_sent_to_edw_ind     = 0
, row_sent_to_ods_ind     = 0
from bidahs_c008_stg_prod.dbo.zxt_nav_acc_sched_cell_value_d1          zxt_nav_acc_sched_cell_value_src

where l=1
and delta_ind = 3
and zxt_nav_acc_sched_cell_value_src.pk_cust_number                  = stg_nav_acc_sched_cell_value.pk_cust_number
and zxt_nav_acc_sched_cell_value_src.pk_ss_number                  = stg_nav_acc_sched_cell_value.pk_ss_number
and zxt_nav_acc_sched_cell_value_src.pk_schedule_name              = stg_nav_acc_sched_cell_value.pk_schedule_name
and zxt_nav_acc_sched_cell_value_src.pk_row_no                    = stg_nav_acc_sched_cell_value.pk_row_no
and zxt_nav_acc_sched_cell_value_src.pk_column_no                  = stg_nav_acc_sched_cell_value.pk_column_no
;

```

4. SUMMARY

So just to summarise what we have shown you so far.

We build staging areas on Navision, or any system, by adding 6 columns to each source table on the target staging table.

We create a landing table which is a replica of the source table and deltas are extracted from the source system and sent to the landing table.

We create two working tables if deletes are going to be detected.

We generate the select insert from the view that sources the data from the operational system and puts it in to the landing table.

We generate 7 pieces of SQL to perform the delta detection processing from the landing table through to the staging table.

And we do all that for a Navision systems of 1,867 tables and 35,591 in 4 working days.

Certainly we can get this all done in a week even if we have to work on the weekend to get it done.

The question for your company is:

“Do we want a staging area which replicates our Navision System which is then ready to be used as input to our EDW using the extra indicators that are put on all the tables?”

If you have an existing staging area but did not bring all the data from Navision this is your chance to acquire one.

If you do not have an existing staging area and you currently have to do queries on your production navision system then this would be a very inexpensive way to have a replica of your production system that you can query.

It also then places you in the position to acquire our Navision BI Solution when it becomes available.

Even if you use other BI Solutions. If you do not have a complete staging area then you must query that data in production or you must move it to your staging area to query and not interrupt processing on your operational system.

Now, we know that when we say we can generate 4 copies of all the Navision tables, including the renaming of fields in the staging area. And we say we can generate the 7 steps of the delta detection for all 1,867 tables and 35,591 fields in a typical Navision production system. Plus generate all the indexes that go along with that?

We know you might be a little dis-believing that we can do that.

So in the remainder of this paper we are going to show you **EXACTLY** how we do this so that you can be sure we can do what we say we can do.

These ideas are useful for any DBA in any case so you are welcome to take these ideas and use them for your company even if you do not buy this staging area from us.

Please note that we have the BIDA Scheduler which can run all the sql in batches so that we can also actually run the sql through our scheduler. You do not have to figure out how to run all these sql statements. We can do that for you too.

Please also note that if you would like the manuals for our BIDA ETL Software we are more than happy to give you copies of manuals so that you can see the workbooks that are generated from the views in the remainder of this white paper.

5. DETAILS OF HOW THE STAGING AREA CODE IS GENERATED

This section provides the details of how the staging area code is generated.

This includes tables, views, and dml statements to select the data from the production Navision system and propagate it through to the staging area.

5.1. Rename Column Names

We have a function to rename column names from Navision to something that will not require [] brackets around field names in the staging area or the data warehouse.

```
CREATE FUNCTION [dbo].[ReformatFieldNames] (@FieldName AS varchar(255))
RETURNS varchar(255)
AS
BEGIN
DECLARE @ReturnFieldName varchar(255)

set @ReturnFieldName = replace (@FieldName , '(' , '' )
set @ReturnFieldName = replace (@ReturnFieldName , ')' , '' )
set @ReturnFieldName = replace (@ReturnFieldName , '-' , '_' )
set @ReturnFieldName = replace (@ReturnFieldName , ' ' , '_' )
set @ReturnFieldName = replace (@ReturnFieldName , '%' , 'Pct' )
set @ReturnFieldName = replace (@ReturnFieldName , '+' , 'And' )
set @ReturnFieldName = replace (@ReturnFieldName , '&' , 'And' )
set @ReturnFieldName = replace (@ReturnFieldName , ',' , '' )
set @ReturnFieldName = replace (@ReturnFieldName , '<>' , '_' )
set @ReturnFieldName = replace (@ReturnFieldName , '__' , '_' )
set @ReturnFieldName = replace (@ReturnFieldName , '___' , '_' )
set @ReturnFieldName = replace (@ReturnFieldName , '____' , '_' )

IF substring ( @ReturnFieldName , len(@ReturnFieldName) , 1) = '_'
BEGIN
    set @ReturnFieldName = substring ( @ReturnFieldName , 1 , len(@ReturnFieldName) - 1 )
END

if @ReturnFieldName = '>_Foreign_Currency'          set @ReturnFieldName = 'Foreign_Currency'
if @ReturnFieldName = '>_Lookup_Card_Type'         set @ReturnFieldName = 'Lookup_Card_Type'
```

```

if @ReturnFieldName = '>_Lookup_Customer_File' set @ReturnFieldName =
'Lookup_Customer_File'

if @ReturnFieldName = '_NET_Dual_Dispatch_LogFile' set @ReturnFieldName =
'NET_Dual_Dispatch_LogFile'

if @ReturnFieldName = '_NET_Dual_Dispatch_LogLevel' set @ReturnFieldName =
'NET_Dual_Display_Profile'

if @ReturnFieldName = '_NET_Dual_Display_Profile' set @ReturnFieldName =
'NET_Dual_Dispatch_LogLevel'

if @ReturnFieldName = 'Add-Curr Exch Rate - Acq_ Cost' set @ReturnFieldName =
'Add_Curr_Exch_Rate_Acq_Cost'

if @ReturnFieldName = 'Add-Curr_ Exch Rate - Custom 1' set @ReturnFieldName =
'Add_Curr_Exch_Rate_Custom_1'

if @ReturnFieldName = 'Add-Curr_ Exch_ Rate - Apprec_' set @ReturnFieldName =
'Add_Curr_Exch_Rate_Apprec'

if @ReturnFieldName = 'xmlns:xbrli' set @ReturnFieldName = 'xmlns_xbrli'

if @ReturnFieldName = 'Batch_HHT:_Type' set @ReturnFieldName =
'Batch_HHT_Type'

if @ReturnFieldName = 'Pick:_POS_Type_Value' set @ReturnFieldName =
'Pick_POS_Type_Value'

if @ReturnFieldName = 'RF:_Info_text_level' set @ReturnFieldName =
'RF_Info_Text_level'

if @ReturnFieldName = 'timestamp' set @ReturnFieldName = 'Timestamp_col'

if @ReturnFieldName = 'column' set @ReturnFieldName = 'Column_col'

if @ReturnFieldName = 'commit' set @ReturnFieldName = 'Commit_col'

if @ReturnFieldName = 'order' set @ReturnFieldName = 'Order_col'

if @ReturnFieldName = 'weight' set @ReturnFieldName = 'Weight_col'

if @ReturnFieldName = 'user_id' set @ReturnFieldName = 'user_id_col'

if @ReturnFieldName = 'description' set @ReturnFieldName = 'Description_col'

if @ReturnFieldName = 'counter' set @ReturnFieldName = 'Counter_col'

if @ReturnFieldName = '3rd_party_pos' set @ReturnFieldName = 'Third_Party_Pos'

if @ReturnFieldName = 'Name' set @ReturnFieldName = 'Name_col'

if @ReturnFieldName = 'Show' set @ReturnFieldName = 'Show_col'

if @ReturnFieldName = 'Bold' set @ReturnFieldName = 'Bold_col'

if @ReturnFieldName = 'Italic' set @ReturnFieldName = 'Italic_col'

```

```

if @ReturnFieldName = 'Underline'      set @ReturnFieldName = 'Underline_col'
if @ReturnFieldName = 'Type'           set @ReturnFieldName = 'Type_col'
if @ReturnFieldName = 'Amount'         set @ReturnFieldName = 'Amount_col'
if @ReturnFieldName = 'Value'          set @ReturnFieldName = 'Value_col'
if @ReturnFieldName = 'No'             set @ReturnFieldName = 'No_col'
if @ReturnFieldName = 'Date'           set @ReturnFieldName = 'date_col'
if @ReturnFieldName = 'Key'            set @ReturnFieldName = 'Key_col'
if @ReturnFieldName = 'Code'           set @ReturnFieldName = 'Code_col'
if @ReturnFieldName = 'Day'            set @ReturnFieldName = 'Day_col'
if @ReturnFieldName = 'Password'       set @ReturnFieldName = 'Password_col'
if @ReturnFieldName = 'Data'           set @ReturnFieldName = 'Data_col'
if @ReturnFieldName = 'GUID'           set @ReturnFieldName = 'GUID_col'
if @ReturnFieldName = 'Length'         set @ReturnFieldName = 'Length_col'
if @ReturnFieldName = 'Schema'         set @ReturnFieldName = 'Schema_col'
if @ReturnFieldName = 'Open'           set @ReturnFieldName = 'Open_col'
if @ReturnFieldName = 'Default'        set @ReturnFieldName = 'Default_col'
if @ReturnFieldName = 'Print'          set @ReturnFieldName = 'Print_col'
if @ReturnFieldName = 'Action'         set @ReturnFieldName = 'Action_col'
if @ReturnFieldName = 'View'           set @ReturnFieldName = 'View_col'
if @ReturnFieldName = 'Affects'        set @ReturnFieldName = 'Affects_col'
if @ReturnFieldName = 'After'          set @ReturnFieldName = 'After_col'
if @ReturnFieldName = 'Aggregation'    set @ReturnFieldName = 'Aggregation_col'
if @ReturnFieldName = 'Alert'          set @ReturnFieldName = 'Alert_col'
if @ReturnFieldName = 'Align'          set @ReturnFieldName = 'Align_col'
if @ReturnFieldName = 'and'            set @ReturnFieldName = 'and_col'
if @ReturnFieldName = 'Answer'         set @ReturnFieldName = 'Answer_col'
if @ReturnFieldName = 'Area'           set @ReturnFieldName = 'Area_col'
if @ReturnFieldName = 'Base'           set @ReturnFieldName = 'Base_col'
if @ReturnFieldName = 'Char'           set @ReturnFieldName = 'Char_col'
if @ReturnFieldName = 'Character'      set @ReturnFieldName = 'Character_col'
if @ReturnFieldName = 'Blob'           set @ReturnFieldName = 'Blob_col'
if @ReturnFieldName = 'Blocked'        set @ReturnFieldName = 'Blocked_col'
if @ReturnFieldName = 'Bold'           set @ReturnFieldName = 'Bold_col'

```

```
if @ReturnFieldName = 'Change'      set @ReturnFieldName = 'Change_col'
if @ReturnFieldName = 'Compressed'   set @ReturnFieldName = 'Compressed_col'
if @ReturnFieldName = 'Condition'    set @ReturnFieldName = 'Condition_col'
if @ReturnFieldName = 'Confirmed'    set @ReturnFieldName = 'Confirmed_col'
if @ReturnFieldName = 'Debug'       set @ReturnFieldName = 'Debug_col'
if @ReturnFieldName = 'Decimal'      set @ReturnFieldName = 'Decimal_col'
if @ReturnFieldName = 'Decimals'     set @ReturnFieldName = 'Decimals_col'
if @ReturnFieldName = 'Del'          set @ReturnFieldName = 'Del_col'
if @ReturnFieldName = 'Depth'        set @ReturnFieldName = 'Depth_col'
if @ReturnFieldName = 'Dif'          set @ReturnFieldName = 'Dif_col'
if @ReturnFieldName = 'Difference'    set @ReturnFieldName = 'Difference_col'
if @ReturnFieldName = 'Dimension'    set @ReturnFieldName = 'Dimension_col'
if @ReturnFieldName = 'Filter'       set @ReturnFieldName = 'Filter_col'
if @ReturnFieldName = 'Fixed'        set @ReturnFieldName = 'Fixed_col'
if @ReturnFieldName = 'Float'        set @ReturnFieldName = 'Float_col'
if @ReturnFieldName = 'Font'         set @ReturnFieldName = 'Font_col'
if @ReturnFieldName = 'From'         set @ReturnFieldName = 'From_col'
if @ReturnFieldName = 'Function'     set @ReturnFieldName = 'Function_col'
if @ReturnFieldName = 'Future'       set @ReturnFieldName = 'Future_col'
if @ReturnFieldName = 'Group'        set @ReturnFieldName = 'Group_col'
if @ReturnFieldName = 'Hidden'       set @ReturnFieldName = 'Hidden_col'
if @ReturnFieldName = 'High'         set @ReturnFieldName = 'High_col'
if @ReturnFieldName = 'ID'           set @ReturnFieldName = 'ID_col'
if @ReturnFieldName = 'Image'        set @ReturnFieldName = 'Image_col'
if @ReturnFieldName = 'Import'       set @ReturnFieldName = 'Import_col'
if @ReturnFieldName = 'Imported'     set @ReturnFieldName = 'Imported_col'
if @ReturnFieldName = 'Include'      set @ReturnFieldName = 'Include_col'
if @ReturnFieldName = 'Index'        set @ReturnFieldName = 'Index_col'
if @ReturnFieldName = 'Int1'         set @ReturnFieldName = 'Int1_col'
if @ReturnFieldName = 'Int2'         set @ReturnFieldName = 'Int2_col'
if @ReturnFieldName = 'Integer'      set @ReturnFieldName = 'Integer_col'
if @ReturnFieldName = 'Italic'       set @ReturnFieldName = 'Italic_col'
```

```

if @ReturnFieldName = 'Leaf'      set @ReturnFieldName = 'Leaf_col'
if @ReturnFieldName = 'Length'    set @ReturnFieldName = 'Length_col'
if @ReturnFieldName = 'Level'    set @ReturnFieldName = 'nav_Level_col'
if @ReturnFieldName = 'Line'     set @ReturnFieldName = 'Line_col'
if @ReturnFieldName = 'Logo'     set @ReturnFieldName = 'Logo_col'
if @ReturnFieldName = 'Look'     set @ReturnFieldName = 'Look_col'
if @ReturnFieldName = 'Menu'     set @ReturnFieldName = 'Menu_col'
if @ReturnFieldName = 'Minutes'  set @ReturnFieldName = 'Minutes_col'
if @ReturnFieldName = 'Number'   set @ReturnFieldName = 'Number_col'
if @ReturnFieldName = 'Number 2' set @ReturnFieldName = 'Number_col_2'
if @ReturnFieldName = 'Number 3' set @ReturnFieldName = 'Number_col_3'
if @ReturnFieldName = 'Option'   set @ReturnFieldName = 'Option_col'
if @ReturnFieldName = 'Path'     set @ReturnFieldName = 'Path_col'
if @ReturnFieldName = 'Picture'  set @ReturnFieldName = 'Picture_col'
if @ReturnFieldName = 'Port'     set @ReturnFieldName = 'Port_col'
if @ReturnFieldName = 'Precision' set @ReturnFieldName = 'Precision_col'
if @ReturnFieldName = 'Primary Key' set @ReturnFieldName = 'Primary_Key_Col'
if @ReturnFieldName = 'Primay Key' set @ReturnFieldName = 'Primary_Key_Col'
if @ReturnFieldName = 'Prompt'   set @ReturnFieldName = 'Prompt_col'
if @ReturnFieldName = 'Range'    set @ReturnFieldName = 'Range_col'
if @ReturnFieldName = 'return'   set @ReturnFieldName = 'Return_col'
if @ReturnFieldName = 'Root'     set @ReturnFieldName = 'Root_col'
if @ReturnFieldName = 'Row'      set @ReturnFieldName = 'Row_col'
if @ReturnFieldName = 'Selected' set @ReturnFieldName = 'Selected_col'
if @ReturnFieldName = 'Selection' set @ReturnFieldName = 'Selection_col'
if @ReturnFieldName = 'Sequence' set @ReturnFieldName = 'Sequence_col'
if @ReturnFieldName = 'Sign'     set @ReturnFieldName = 'Sign_col'
if @ReturnFieldName = 'Source'   set @ReturnFieldName = 'Source_col'
if @ReturnFieldName = 'sss'     set @ReturnFieldName = 'sss_col'
if @ReturnFieldName = 'Stage'    set @ReturnFieldName = 'Stage_col'
if @ReturnFieldName = 'start_date' set @ReturnFieldName = 'Start_Date'
if @ReturnFieldName = 'Started'  set @ReturnFieldName = 'Started_col'
if @ReturnFieldName = 'Status'   set @ReturnFieldName = 'Status_col'

```

```
if @ReturnFieldName = 'System'          set @ReturnFieldName = 'System_col'
if @ReturnFieldName = 'Table'          set @ReturnFieldName = 'Table_col'
if @ReturnFieldName = 'Tag'            set @ReturnFieldName = 'Tag_col'
if @ReturnFieldName = 'Temp'           set @ReturnFieldName = 'Temp_col'
if @ReturnFieldName = 'Template'        set @ReturnFieldName = 'Template'
if @ReturnFieldName = 'Text'           set @ReturnFieldName = 'Text_col'
if @ReturnFieldName = 'Time'           set @ReturnFieldName = 'Time_col'
if @ReturnFieldName = 'To'              set @ReturnFieldName = 'To_col'
if @ReturnFieldName = 'Total'          set @ReturnFieldName = 'Total_Col'
if @ReturnFieldName = 'URL'            set @ReturnFieldName = 'URL_col'
if @ReturnFieldName = 'Used'           set @ReturnFieldName = 'Used_col'
if @ReturnFieldName = 'User'           set @ReturnFieldName = 'User_col'
if @ReturnFieldName = 'val'            set @ReturnFieldName = 'Val_col'
if @ReturnFieldName = 'Valid'          set @ReturnFieldName = 'Valid_col'
if @ReturnFieldName = 'Version'        set @ReturnFieldName = 'Version_col'
if @ReturnFieldName = 'Wide'           set @ReturnFieldName = 'Wide_col'
if @ReturnFieldName = 'Width'          set @ReturnFieldName = 'Width_col'
if @ReturnFieldName = 'Word'           set @ReturnFieldName = 'Word_col'
if @ReturnFieldName = 'XML'            set @ReturnFieldName = 'XML_col'
if @ReturnFieldName = 'XSD'            set @ReturnFieldName = 'XSD_col'
if @ReturnFieldName = 'Error'          set @ReturnFieldName = 'Error_col'
if @ReturnFieldName = 'Field'          set @ReturnFieldName = 'Field_col'
```

```
RETURN @ReturnFieldName
```

```
END
```

5.2. Rename Table Names

We also have a function that renames tables so that the table name will be useable in the staging area without the [] brackets.

```
CREATE FUNCTION [dbo].[ReformatTableNames] (@TableName AS varchar(255))
RETURNS varchar(255)
AS
BEGIN
DECLARE @ReturnTableName varchar(255)
set @ReturnTableName = @TableName
set @ReturnTableName = replace (@ReturnTableName , 'XXX_Nav2009$' , 'nav_' )
set @ReturnTableName = replace (@ReturnTableName , '(' , '' )
set @ReturnTableName = replace (@ReturnTableName , ')' , '' )
set @ReturnTableName = replace (@ReturnTableName , '-' , '_' )
set @ReturnTableName = replace (@ReturnTableName , ' ' , '_' )
set @ReturnTableName = replace (@ReturnTableName , '%' , 'pct' )
set @ReturnTableName = replace (@ReturnTableName , '+' , 'and' )
set @ReturnTableName = replace (@ReturnTableName , '&' , 'and' )
set @ReturnTableName = replace (@ReturnTableName , ',' , '' )
set @ReturnTableName = replace (@ReturnTableName , '__' , '_' )
set @ReturnTableName = replace (@ReturnTableName , '_ ' , '_' )
set @ReturnTableName = replace (@ReturnTableName , ' _' , '_' )
IF substring ( @ReturnTableName , len(@ReturnTableName) , 1) = '_'
BEGIN
    set @ReturnTableName = substring ( @ReturnTableName , 1 , len(@ReturnTableName) - 1 )
END
RETURN @ReturnTableName
END
```

5.3. Retrieve Dictionary from Navision SQL Server

We get the information about the Navision system from the SQL Server dictionary.

This is done with such statements as these.

```
truncate table [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_syscolumns] ;
insert into [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_syscolumns] select * from [XXX-NAV2012\SQL_NAV_XXX12].[XXX_NAV2009].dbo.syscolumns ;
```

```
truncate table [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_sysindex_columns] ;
insert into [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_sysindex_columns] select * from [XXX-NAV2012\SQL_NAV_XXX12].[XXX_NAV2009].sys.index_columns ;
```

```
truncate table [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_sysindexes] ;
insert into [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_sysindexes] select * from [XXX-NAV2012\SQL_NAV_XXX12].[XXX_NAV2009].dbo.sysindexes ;
```

```
truncate table [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_sysobjects] ;
insert into [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_sysobjects] select * from [XXX-NAV2012\SQL_NAV_XXX12].[XXX_NAV2009].dbo.sysobjects ;
```

```
truncate table [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_systypes] ;
insert into [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_systypes] select * from [XXX-NAV2012\SQL_NAV_XXX12].[XXX_NAV2009].dbo.systypes ;
```

```
truncate table [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_sysusers] ;
insert into [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_sysusers] select * from [XXX-NAV2012\SQL_NAV_XXX12].[XXX_NAV2009].dbo.sysusers ;
```

```
select * into [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_sys_indexes] from [XXX-NAV2012\SQL_NAV_XXX12].[XXX_NAV2009].sys.indexes ;
```

```
select * into [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_sys_indexes] from [XXX-NAV2012\SQL_NAV_XXX12].[XXX_NAV2009].sys.indexes ;
```

```
select * into [BIDAHS_C008_STG_PROD].[dbo].[zz99_prod_nav_sys_objects] from [XXX-NAV2012\SQL_NAV_XXX12].[XXX_NAV2009].sys.objects ;
```

And we create a view over the copy of the dictionary tables to expose the navision dictionary in a way that is useful.

```
create view [dbo].[z01_select_columns_prod_nav_01]
as

select
  a.name          owner
, b.name          tablename
, c.name          column_name
, lower ('stg_' + [dbo].[ReformatTableNames] (b.name)) newTableName
, lower ([dbo].[ReformatFieldNames] (c.name))   new_column_name
, c.colorder     column_order
, case d.name
when 'tinyint' then 'tinyint'
when 'smallint' then 'smallint'
when 'int' then 'integer'
when 'bigint' then 'bigint'
when 'money' then 'money'
when 'text' then 'nvarchar' + '(' + cast(c.length as varchar(255)) + ')'
when 'varchar' then 'varchar' + '(' + cast(c.prec as varchar(255)) + ')'
when 'nvarchar' then 'nvarchar' + '(' + cast(c.prec as varchar(255)) + ')'
when 'char' then 'char' + '(' + cast(c.prec as varchar(255)) + ')'
when 'decimal' then 'decimal' + '(' + cast(c.prec as varchar(255)) + ',' + cast(c.scale as
varchar(255)) + ')'
when 'uniqueidentifier' then 'nvarchar' + '(' + cast((c.length * 4) as varchar(255)) + ')'
when 'bit' then 'bit'
when 'datetime' then 'datetime'
when 'smalldatetime' then 'smalldatetime'
when 'image' then 'image'
when 'float' then 'float'
when 'ntext' then 'nvarchar (4000)'
when 'timestamp' then 'varbinary(255)'
when 'varbinary' then 'varbinary' + '(' + cast(c.prec as varchar(255)) + ')'
else
'unknown'
end as datatype_deploy

, case d.name
when 'tinyint' then 'tinyint'
when 'smallint' then 'smallint'
when 'int' then 'integer'
when 'bigint' then 'bigint'
when 'money' then 'money'
when 'text' then 'nvarchar' + '(' + cast(c.length as varchar(255)) + ')'
when 'varchar' then 'varchar' + '(' + cast(c.prec as varchar(255)) + ')'
when 'nvarchar' then 'nvarchar' + '(' + cast(c.prec as varchar(255)) + ')'
when 'char' then 'char' + '(' + cast(c.prec as varchar(255)) + ')'
when 'decimal' then 'decimal' + '(' + cast(c.prec as varchar(255)) + ',' + cast(c.scale as
varchar(255)) + ')'
when 'uniqueidentifier' then 'nvarchar' + '(' + cast((c.length * 4) as varchar(255)) + ')'
when 'bit' then 'bit'
when 'datetime' then 'datetime'
when 'smalldatetime' then 'smalldatetime'
when 'image' then 'image'
when 'float' then 'float'
when 'ntext' then 'nvarchar (4000)'
when 'timestamp' then 'varbinary(255)'
when 'varbinary' then 'varbinary' + '(' + cast(c.prec as varchar(255)) + ')'
else
'unknown'
end as datatype_documentation
```

```
, ' ' null_clause_deploy
, ' ' null_clause_documentation
, ' ' other_clause
,d.name          datatype_name
,c.length        length
,c.prec          precision
,c.scale         scale
,c.isnullable    nullable
,c.type          type_col

from
  zz99_prod_nav_sysusers          a
,zz99_prod_nav_sysobjects        b
,zz99_prod_nav_syscolumns        c
,zz99_prod_nav_systypes          d
where 1=1
and a.uid      = b.uid
/*and a.name = 'M1'*/
and b.xtype    = 'U'
and c.id       = b.id
and d.xtype    = c.xtype
and not (d.name = 'sysname')
```

We then load up the BIDA dictionary tables for source columns, source tables, and source indexes with the following three statements.

```
truncate table bida_src_column_defs
go
```

```
insert into bida_src_column_defs
(
  pk_spreadsheet_name
, pk_spreadsheet_version
, pk_int_key
, process_ind
, database_name
, owner_name
, table_name
, source_column_number
, column_name
, src_col_data_type_script
, src_col_data_type
, src_col_length
, src_col_precision
, src_col_scale
, src_col_null
, src_col_required
, primary_key_ind
, delta_test_ind
, description
, user_col_01
, user_col_02
, user_col_03
, user_col_04
, user_col_05
, user_col_06
, user_col_07
, user_col_08
, user_col_09
, user_col_10
, notes1
, notes2
, notes3
, notes4
, notes5
)
```

```
select
```

```
  'pk_spreadsheet_name'
, 'pk_spreadsheet_version'
, row_number() over ( partition by bida_month_control.high_value_date order by
bida_month_control.high_value_date)
, 'Y'
, 'XXX_Nav2009'
, 'dbo'
, tablename
, column_order
, a.column_name
, datatype_deploy
, datatype_deploy
, length
, precision
, scale
```

```

,
case
  when nullable = 1 then 'Y' else 'N'
end
, 'src_col_required'
,
case
  when bida_src_index_defs.primary_key_ind = 'Y' then 'Y'
  else 'N'
end
, 'Y'
, 'description'
, 'user_col_01'
, 'user_col_02'
, 'user_col_03'
, 'user_col_04'
, 'user_col_05'
, 'user_col_06'
, 'user_col_07'
, 'user_col_08'
, 'user_col_09'
, 'user_col_10'
, 'notes1'
, 'notes2'
, 'notes3'
, 'notes4'
, 'notes5'

from z01_select_columns_prod_nav_01 a
left outer join bida_month_control on 1=1

left join bida_src_index_defs bida_src_index_defs on 1=1
and a.owner = bida_src_index_defs.owner_name COLLATE DATABASE_DEFAULT
and a.tablename = bida_src_index_defs.table_name COLLATE DATABASE_DEFAULT
and a.column_name = bida_src_index_defs.column_name COLLATE DATABASE_DEFAULT
and bida_src_index_defs.primary_key_ind = 'Y'

where 1=1
--and a.tablename like 'XXX_Nav2009%'

order by tablename , column_order

```

```

insert into dbo.bida_src_table_defs
(
  pk_spreadsheet_name
, pk_spreadsheet_version
, pk_int_key
, process_ind
, database_name
, owner_name
, table_name
, description
, user_col_01
, user_col_02
, user_col_03
, user_col_04
, user_col_05
, user_col_06
, user_col_07
, user_col_08
, user_col_09
, user_col_10
, notes1
, notes2
, notes3
, notes4
, notes5
)
select
  'pk_spreadsheet_name'
, 'pk_spreadsheet_version'
, row_number() over ( partition by bida_month_control.high_value_date order by
bida_month_control.high_value_date)
, 'Y'
, 'XXX_Nav2009'
, 'dbo'
, tablename
, 'description'
, 'user_col_01'
, 'user_col_02'
, 'user_col_03'
, 'user_col_04'
, 'user_col_05'
, 'user_col_06'
, 'user_col_07'
, 'user_col_08'
, 'user_col_09'
, 'user_col_10'
, 'notes1'
, 'notes2'
, 'notes3'
, 'notes4'
, 'notes5'

from [z01_select_nav_tables]
left outer join bida_month_control on 1=1

where 1=1
and tablename like 'XXX_Nav2009%'

order by tablename

```

```
insert into bida_src_index_defs
```

```
(
  pk_spreadsheet_name
, pk_spreadsheet_version
, pk_int_key
, process_ind
, database_name
, owner_name
, table_name
, index_name
, source_column_number
, column_name
, primary_key_ind
, unique_index_ind
, clustered_index_ind
, description
, user_col_01
, user_col_02
, user_col_03
, user_col_04
, user_col_05
, user_col_06
, user_col_07
, user_col_08
, user_col_09
, user_col_10
, notes1
, notes2
, notes3
, notes4
, notes5
)
```

```
select
```

```
  'pk_spreadsheet_name'
, 'pk_spreadsheet_version'
, row_number() over ( partition by bida_month_control.high_value_date order by
bida_month_control.high_value_date)
, 'Y'
, 'XXX_Nav2009'
, SchemaName
, tablename

, IndexName
, key_ordinal
, ColumnName
,
case
  when is_primary_key = 1 then 'Y'
  else 'N'
end
, 'unique_index_ind'
, 'clustered_index_ind'
, 'description'
, 'user_col_01'
, 'user_col_02'
, 'user_col_03'
, 'user_col_04'
, 'user_col_05'
, 'user_col_06'
, 'user_col_07'
```

```
, 'user_col_08'  
, 'user_col_09'  
, 'user_col_10'  
, 'notes1'  
, 'notes2'  
, 'notes3'  
, 'notes4'  
, 'notes5'
```

```
from z01_select_indexes_01  
left outer join bida_month_control on 1=1
```

```
where 1=1  
and not (SchemaName = 'sys')  
and tablename like 'XXX_Nav2009%'
```

```
order by SchemaName , tablename , IndexName , key_ordinal
```

```
go
```

```
create view [dbo].[z01_select_indexes_01]  
as
```

```
SELECT i.name AS IndexName  
      ,ic.key_ordinal  
      ,o1.schema_id SchemaID  
      ,SCHEMA_NAME(o1.schema_id) AS SchemaName  
      ,o1.name AS TableName  
      ,ic.column_id ColumnID  
      ,sc.column_name ColumnName  
      ,i.is_primary_key
```

```
FROM zz99_prod_nav_sys_indexes AS i
```

```
INNER JOIN zz99_prod_nav_sysindex_columns AS ic ON 1=1  
and i.object_id = ic.object_id  
AND i.index_id = ic.index_id
```

```
INNER JOIN [zz99_prod_nav_sys_objects] o1 ON 1=1  
and i.object_id = o1.object_id
```

```
inner join [dbo].[z01_select_columns_prod_nav_01] as sc on 1=1  
and o1.name = sc.tablename  
and ic.column_id = sc.column_order
```

```
WHERE 1=1
```

And finally, these three tables are used to create an SQL statement that allows us to map the source columns to the staging columns and put that data in to a table. This table is then used to be queried to build the sql needed to create the entire staging area.

```
truncate table dbo.bida_src_to_stg_defs
```

```
go
```

```
insert into dbo.bida_src_to_stg_defs
```

```
(  
  pk_spreadsheet_name  
, pk_spreadsheet_version  
, pk_int_key  
, process_ind  
, src_database_name  
, src_owner_name  
, src_table_name  
, src_column_number  
, src_column_name  
, src_col_data_type_script  
, src_col_data_type  
, src_col_length  
, src_col_precision  
, src_col_scale  
, src_col_null  
, src_col_required  
, src_primary_key_ind  
, tgt_database_name  
, tgt_owner_name  
, zin_view_name  
, zxt_view_name  
, tgt_table_name  
, tgt_column_name  
, tgt_col_data_type_script  
, tgt_col_data_type  
, tgt_col_length  
, tgt_col_precision  
, tgt_col_scale  
, tgt_col_null  
, tgt_col_required  
, tgt_primary_key_ind  
, delta_test_ind  
, description  
, user_col_01  
, user_col_02  
, user_col_03  
, user_col_04  
, user_col_05  
, user_col_06  
, user_col_07  
, user_col_08  
, user_col_09  
, user_col_10  
, notes1  
, notes2  
, notes3  
, notes4  
, notes5  
)
```

```
select
```

```

    'pk_spreadsheet_name'
  , 'pk_spreadsheet_version'
  , row_number() over ( partition by bida_month_control.high_value_date order by
bida_month_control.high_value_date)
  , 'Y'
  , lower(bida_src_column_defs.database_name)
  , bida_src_column_defs.owner_name
  , lower(bida_src_column_defs.table_name)
  , bida_src_column_defs.source_column_number
  , lower(bida_src_column_defs.column_name)
  , bida_src_column_defs.src_col_data_type_script
  , bida_src_column_defs.src_col_data_type
  , bida_src_column_defs.src_col_length
  , bida_src_column_defs.src_col_precision
  , bida_src_column_defs.src_col_scale
  , bida_src_column_defs.src_col_null
  , bida_src_column_defs.src_col_required
  , bida_src_column_defs.primary_key_ind
  , 'bidahs_c008_stg_prod'
  , 'dbo'
  , lower( 'zin_' + dbo.ReformatTableNames(bida_src_column_defs.table_name) )
  , lower( 'zxt_' + dbo.ReformatTableNames(bida_src_column_defs.table_name) )
  , lower( dbo.ReformatTableNames(bida_src_column_defs.table_name) )
  , lower( dbo.ReformatFieldNames(bida_src_column_defs.column_name) )
  , bida_src_column_defs.src_col_data_type_script
  , bida_src_column_defs.src_col_data_type
  , bida_src_column_defs.src_col_length
  , bida_src_column_defs.src_col_precision
  , bida_src_column_defs.src_col_scale
  , bida_src_column_defs.src_col_null
  , bida_src_column_defs.src_col_required
  , bida_src_column_defs.primary_key_ind

  , case
-- when bida_src_column_defs.src_col_data_type_script = 'image' then 'N'
  when bida_src_column_defs.column_name = 'timestamp' then 'Y'
  else 'N'
end

  , 'description'
  , 'user_col_01'
  , 'user_col_02'
  , 'user_col_03'
  , 'user_col_04'
  , 'user_col_05'
  , 'user_col_06'
  , 'user_col_07'
  , 'user_col_08'
  , 'user_col_09'
  , 'user_col_10'
  , 'notes1'
  , 'notes2'
  , 'notes3'
  , 'notes4'
  , 'notes5'

from
  bida_src_column_defs bida_src_column_defs

left outer join bida_month_control on 1=1

```

where 1=1

and table_name like 'XXX_Nav2009%'

order by

 bida_src_column_defs.database_name
, bida_src_column_defs.owner_name
, bida_src_column_defs.table_name
, bida_src_column_defs.source_column_number

5.4. Views To Generate Workbook Input

Now that the `bida_src_to_stg_defs` table is populated we can use views to create data that can be placed in to the BIDA Workbooks to generate the SQL to build the staging area.

What we have is a whole series of views that generate each set of data needed to place in to the BIDA Excel Workbooks and then the workbooks are processed to generate the create views, create tables, create indexes, and create the SQL DML needed for the generation of the delta detection processing.

With each of the views they contain a table name of some sort and a "sort_key". And when the data is actually selected from the view you sort by table name and sort key and then cut and past the data in to the workbook that it is intended for.

As we offered above. If you would like the manuals for the BIDA ETL Software so that you can see the definitions of these workbooks we would be pleased to share them with you.

Further, we have some example workbooks for the client we are working with. These sample workbooks have had all client identifying information removed and we can share them with you in discussion so that you can determine for your self that what we say about building a Navision Staging area in a week or so is true.

5.4.1. Input Views to Select Data From Nav Production

```
create view [dbo].[z01_in_views_wb_01]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, bida_src_to_stg_defs.pk_int_key
, bida_src_to_stg_defs.src_column_number + 0
, 'Y'
, 'm'
, bida_src_to_stg_defs.src_owner_name
, '[' + lower(bida_src_to_stg_defs.[src_table_name]) + ']'
, '[' + lower(bida_src_to_stg_defs.[src_column_name]) + ']'
, bida_src_to_stg_defs.tgt_owner_name
, '[zz00_' + lower(bida_src_to_stg_defs.[src_table_name]) + ']'
, '[' + lower(bida_src_to_stg_defs.[src_column_name]) + ']'
from
  bida_src_to_stg_defs bida_src_to_stg_defs
```

sort_key
use_column
pk_row_type_1
table_owner
table_name
table_column_name
view_owner
view_name
view_name_view

```

create view [dbo].[z01_in_views_wb_02]
as
select
    bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, 0
, 9998
, 'Y'
, 'f'
, bida_src_to_stg_defs.src_owner_name
, '[' + lower(bida_src_to_stg_defs.[src_table_name]) + ']'
, ' bida_dw_nav_max_timestamps a with (nowait) inner remote join '
+ '####SourceDatabaseName####.####SourceTableOwnerName####.[' +
lower(bida_src_to_stg_defs.[src_table_name]) + ']' on '
+ '[' + lower(bida_src_to_stg_defs.[src_table_name]) + ']'
+ '.timestamp > convert (timestamp,a.max_timestamp, 0) or a.max_timestamp is null'
table_column_name

, 'na'
, 'na'
, 'na'
from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
, pk_spreadsheet_version
, bida_src_to_stg_defs.src_owner_name
, tgt_owner_name
, bida_src_to_stg_defs.[src_table_name]

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
table_owner
table_name
view_owner
view_name
view_column_name

```

```

create view [dbo].[z01_in_views_wb_03]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, 0
, 9999
, 'Y'
, 'w'
, bida_src_to_stg_defs.src_owner_name
, '[' + lower(bida_src_to_stg_defs.[src_table_name]) + ']'
, '1=1 and a.current_flag = 1 and a.database_name = 'bidahs_c008_stg_prod' and a.table_owner =
'dbo' and a.table_name = '' + 'stg_' + lower(bida_src_to_stg_defs.[tgt_table_name]) + ''
table_column_name

, 'na'
, 'na'
, 'na'
from bida_src_to_stg_defs
where 1=1
group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, bida_src_to_stg_defs.src_owner_name
, tgt_owner_name
, bida_src_to_stg_defs.[src_table_name]
, bida_src_to_stg_defs.[tgt_table_name]
pk_int_key
sort_key
use_column
pk_row_type_1
table_owner
table_name
view_owner
view_name
view_column_name

```

```

create view [dbo].[z01_in_views_wb_03]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, 0
, 9999
, 'Y'
, 'w'
, bida_src_to_stg_defs.src_owner_name
, '[' + lower(bida_src_to_stg_defs.[src_table_name]) + ']'
, '1=1 and a.current_flag = 1 and a.database_name = 'bidahs_c008_stg_prod' and a.table_owner =
'dbo' and a.table_name = '' + 'stg_' + lower(bida_src_to_stg_defs.[tgt_table_name]) + ''
table_column_name
, 'na'
, 'na'
, 'na'
from bida_src_to_stg_defs
where 1=1
group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, bida_src_to_stg_defs.src_owner_name
, tgt_owner_name
, bida_src_to_stg_defs.[src_table_name]
, bida_src_to_stg_defs.[tgt_table_name]

```

And this all view then brings together each of the three prior views to create the create view statements.

```

create view [dbo].[z01_in_views_wb_all]
as
select * from z01_in_views_wb_01
union all
select * from z01_in_views_wb_02
union all
select * from z01_in_views_wb_03

```

5.4.1. Views to Create ZZ Landing Tables

```
create view [dbo].[z01_zz_tables_wb_02]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, bida_src_to_stg_defs.pk_int_key
, bida_src_to_stg_defs.src_column_number + 0
, 'Y'
, 'tab'
, 'b'
, bida_src_to_stg_defs.tgt_owner_name
, '[' + bida_src_to_stg_defs.[src_table_name] + ']'
, '[' + bida_src_to_stg_defs.[src_column_name] + ']'
, cast(bida_src_to_stg_defs.src_column_number + 0 as varchar(255))
, bida_src_to_stg_defs.tgt_col_data_type_script
, bida_src_to_stg_defs.tgt_col_data_type_script
, ''
, ''
, ''
, ''
from
  bida_src_to_stg_defs bida_src_to_stg_defs
, z01_zz_tables_wb_99 z01_zz_tables_wb_99
where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_zz_tables_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_zz_tables_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_zz_tables_wb_99.table_owner
and bida_src_to_stg_defs.zxt_view_name = z01_zz_tables_wb_99.table_name
and not(bida_src_to_stg_defs.src_column_number = z01_zz_tables_wb_99.last_col_number)
and bida_src_to_stg_defs.src_column_number = 1
```

```

create view [dbo].[z01_zz_tables_wb_03]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, bida_src_to_stg_defs.pk_int_key
, bida_src_to_stg_defs.src_column_number + 0
, 'Y'
, 'tab'
, 'm'
, bida_src_to_stg_defs.tgt_owner_name
, '[' + bida_src_to_stg_defs.[src_table_name] + ']'
, '[' + bida_src_to_stg_defs.[src_column_name] + ']'
, cast(bida_src_to_stg_defs.src_column_number + 0 as varchar(255))
, bida_src_to_stg_defs.tgt_col_data_type_script
, bida_src_to_stg_defs.tgt_col_data_type_script
, ''
, ''
, ''
, ''
from
  bida_src_to_stg_defs bida_src_to_stg_defs
, z01_zz_tables_wb_99 z01_zz_tables_wb_99
where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_zz_tables_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_zz_tables_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_zz_tables_wb_99.table_owner
and bida_src_to_stg_defs.zxt_view_name = z01_zz_tables_wb_99.table_name
and not(bida_src_to_stg_defs.src_column_number = z01_zz_tables_wb_99.last_col_number)
and bida_src_to_stg_defs.src_column_number > 1

```

```

create view [dbo].[z01_zz_tables_wb_04]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, bida_src_to_stg_defs.pk_int_key
, bida_src_to_stg_defs.src_column_number + 0
, 'Y'
, 'tab'
, 'n'
, bida_src_to_stg_defs.tgt_owner_name
, '[' + bida_src_to_stg_defs.[src_table_name] + ']'
, '[' + bida_src_to_stg_defs.[src_column_name] + ']'
, cast(bida_src_to_stg_defs.src_column_number + 2 as varchar(255))
, bida_src_to_stg_defs.tgt_col_data_type_script
, bida_src_to_stg_defs.tgt_col_data_type_script
, ''
, ''
, ''
, ''
from
  bida_src_to_stg_defs bida_src_to_stg_defs
, z01_zz_tables_wb_99 z01_zz_tables_wb_99
where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_zz_tables_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_zz_tables_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_zz_tables_wb_99.table_owner
and bida_src_to_stg_defs.zxt_view_name = z01_zz_tables_wb_99.table_name
and bida_src_to_stg_defs.src_column_number = z01_zz_tables_wb_99.last_col_number

```

```

create view [dbo].[z01_zz_tables_wb_05]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   999991
,   999991
,   'Y'
,   'tab'
,   's'
,   tgt_owner_name
,   '[zz01_' + bida_src_to_stg_defs.[src_table_name] + ']'
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   'on [fg_bidahs_c008_stg_nav_01_prod]'

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   bida_src_to_stg_defs.[src_table_name]

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses

```



```

create view [dbo].[z01_zz_tables_wb_06]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   999992
,   999992
,   'Y'
,   'tab'
,   'e'
,   tgt_owner_name
,   '[zz01_' + bida_src_to_stg_defs.[src_table_name] + ']'
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   bida_src_to_stg_defs.[src_table_name]

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses

```

```

create view [dbo].[z01_zz_tables_wb_07]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   999993
,   999993
,   'N'
,   'tab'
,   'x'
,   tgt_owner_name
,   '[zz01_' + bida_src_to_stg_defs.[src_table_name] + ']'
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   bida_src_to_stg_defs.[src_table_name]

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses

```

```

create view [dbo].[z01_zz_tables_wb_99]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name
,   max(src_column_number)
                                table_owner
                                table_name
                                last_col_number

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

create view [dbo].[z01_zz_tables_wb_all]
as
-- select * from z01_zz_tables_wb_01
-- union
select * from z01_zz_tables_wb_02
union
select * from z01_zz_tables_wb_03
union
select * from z01_zz_tables_wb_04
union
select * from z01_zz_tables_wb_05
union
select * from z01_zz_tables_wb_06
union
select * from z01_zz_tables_wb_07

```

5.4.1. Views to Create D1 Delta Working Tables

```
select
  pk_spreadsheet_name
, pk_spreadsheet_version
, 0
, 1
, 'Y'
, 'tab'
, 'b'
, tgt_owner_name
, zxt_view_name + '_d1'
, 'pk_cust_number'
, '1'
, 'integer'
, 'integer'
, ''
, ''
, ''
, ''

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses
```

```
from bida_src_to_stg_defs
where 1=1
```

```
group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, zxt_view_name
```

```
create view [dbo].[z01_d1_tables_wb_02]
as
```

```
select
  pk_spreadsheet_name
, pk_spreadsheet_version
, 0
, 2
, 'Y'
, 'tab'
, 'm'
, tgt_owner_name
, zxt_view_name + '_d1'
, 'pk_ss_number'
, '2'
, 'integer'
, 'integer'
, ''
, ''
, ''
, ''

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses
```

```
from bida_src_to_stg_defs
where 1=1
```

```
group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, zxt_view_name
```

```

create view [dbo].[z01_d1_tables_wb_03]
as

select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, 0
, z01_d1_tables_wb_99.last_col_number + 3
, 'Y'
, 'tab'
, 'n'
, bida_src_to_stg_defs.tgt_owner_name
, bida_src_to_stg_defs.zxt_view_name + '_d1'
, 'delta_ind'
, cast(z01_d1_tables_wb_99.last_col_number + 3 as varchar(255))
, 'integer'
, 'integer'
, ''
, ''
, ''
, ''
, ''

from
  bida_src_to_stg_defs bida_src_to_stg_defs
, z01_d1_tables_wb_99 z01_d1_tables_wb_99

where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_d1_tables_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_d1_tables_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_d1_tables_wb_99.table_owner
and bida_src_to_stg_defs.zxt_view_name = z01_d1_tables_wb_99.table_name

group by
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, bida_src_to_stg_defs.tgt_owner_name
, bida_src_to_stg_defs.zxt_view_name
, z01_d1_tables_wb_99.last_col_number

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses

```

```

create view [dbo].[z01_d1_tables_wb_04]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, bida_src_to_stg_defs.pk_int_key
, bida_src_to_stg_defs.src_column_number + 2
, 'Y'
, 'tab'
, 'm'
, bida_src_to_stg_defs.tgt_owner_name
, bida_src_to_stg_defs.zxt_view_name + '_d1'
,
case
  when bida_src_to_stg_defs.tgt_primary_key_ind = 'Y' then
    'pk_' + bida_src_to_stg_defs.tgt_column_name
  else bida_src_to_stg_defs.tgt_column_name
end column_name
, cast(bida_src_to_stg_defs.src_column_number + 2 as varchar(255))
, bida_src_to_stg_defs.tgt_col_data_type_script
, bida_src_to_stg_defs.tgt_col_data_type_script
, ''
, ''
, ''
, ''
from
  bida_src_to_stg_defs bida_src_to_stg_defs
, z01_d1_tables_wb_99 z01_d1_tables_wb_99

where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_d1_tables_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_d1_tables_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_d1_tables_wb_99.table_owner
and bida_src_to_stg_defs.zxt_view_name = z01_d1_tables_wb_99.table_name

```

```

create view [dbo].[z01_d1_tables_wb_05]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   999991
,   999991
,   'Y'
,   'tab'
,   's'
,   tgt_owner_name
,   zxt_view_name + '_d1'
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   'on [fg_bidahs_c008_stg_prod_tmp]'

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

    pk_int_key
    sort_key
    use_column
    pk_row_type_1
    pk_row_type_2
    table_owner
    table_name
    column_name
    column_number
    data_type_deploy
    data_type_doc
    null_clause_deploy
    null_clause_doc
    other_clauses

```

```

create view [dbo].[z01_d1_tables_wb_06]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   999992
,   999992
,   'Y'
,   'tab'
,   'e'
,   tgt_owner_name
,   zxt_view_name + '_d1'
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses

```

```

create view [dbo].[z01_d1_tables_wb_07]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   999993
,   999993
,   'N'
,   'tab'
,   'x'
,   tgt_owner_name
,   zxt_view_name + '_d1'
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses

```



```

create view [dbo].[z01_d1_tables_wb_99]
as
select
    pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, zxt_view_name
, max(src_column_number)
                                table_owner
                                table_name
                                last_col_number

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, zxt_view_name

```

```

create view [dbo].[z01_d1_tables_wb_all]

```

```

as

```

```

select * from z01_d1_tables_wb_01
union
select * from z01_d1_tables_wb_02
union
select * from z01_d1_tables_wb_03
union
select * from z01_d1_tables_wb_04
union
select * from z01_d1_tables_wb_05
union
select * from z01_d1_tables_wb_06
union
select * from z01_d1_tables_wb_07

```

5.4.2. Views to Create M1 Delta Working Tables

```
create view [dbo].[z01_m1_tables_wb_01]
as
```

```
select
```

```
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   1
,   'Y'
,   'tab'
,   'b'
,   tgt_owner_name
,   zxt_view_name + '_m1'
,   'pk_cust_number'
,   '1'
,   'integer'
,   'integer'
,   ''
,   ''
,   ''
```

```
pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses
```

```
from bida_src_to_stg_defs
where 1=1
```

```
group by
```

```
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name
```

```
create view [dbo].[z01_m1_tables_wb_02]
as
```

```
select
```

```
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   2
,   'Y'
,   'tab'
,   'm'
,   tgt_owner_name
,   zxt_view_name + '_m1'
,   'pk_ss_number'
,   '2'
,   'integer'
,   'integer'
,   ''
,   ''
,   ''
```

```
pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses
```

```
from bida_src_to_stg_defs
```

```
where 1=1
```

```
group by
```

```
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name
```

```

create view [dbo].[z01_m1_tables_wb_03]
as
select
    bida_src_to_stg_defs.pk_spreadsheet_name
,   bida_src_to_stg_defs.pk_spreadsheet_version
,   bida_src_to_stg_defs.pk_int_key
,   bida_src_to_stg_defs.src_column_number + 2                                sort_key
,   'Y'                                                                    use_column
,   'tab'                                                                    pk_row_type_1
,   'm'                                                                    pk_row_type_2
,   bida_src_to_stg_defs.tgt_owner_name                                    table_owner
,   bida_src_to_stg_defs.zxt_view_name + '_m1'                            table_name
,
case
    when bida_src_to_stg_defs.tgt_primary_key_ind = 'Y' then
        'pk_' + bida_src_to_stg_defs.tgt_column_name
    else bida_src_to_stg_defs.tgt_column_name
end column_name
,   cast(bida_src_to_stg_defs.src_column_number + 2 as varchar(255))        column_number
,   bida_src_to_stg_defs.tgt_col_data_type_script                          data_type_deploy
,   bida_src_to_stg_defs.tgt_col_data_type_script                          data_type_doc
,   ''                                                                      null_clause_deploy
,   ''                                                                      null_clause_doc
,   ''                                                                      other_clauses
from
    bida_src_to_stg_defs bida_src_to_stg_defs
,   z01_m1_tables_wb_99 z01_m1_tables_wb_99

where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_m1_tables_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_m1_tables_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_m1_tables_wb_99.table_owner
and bida_src_to_stg_defs.zxt_view_name = z01_m1_tables_wb_99.table_name
and not(bida_src_to_stg_defs.src_column_number = z01_m1_tables_wb_99.last_col_number)

```

```

create view [dbo].[z01_m1_tables_wb_04]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, bida_src_to_stg_defs.pk_int_key
, bida_src_to_stg_defs.src_column_number + 2
, 'Y'
, 'tab'
, 'n'
, bida_src_to_stg_defs.tgt_owner_name
, bida_src_to_stg_defs.zxt_view_name + '_m1'
,
case
  when bida_src_to_stg_defs.tgt_primary_key_ind = 'Y' then
    'pk_' + bida_src_to_stg_defs.tgt_column_name
  else bida_src_to_stg_defs.tgt_column_name
end column_name
, cast(bida_src_to_stg_defs.src_column_number + 2 as varchar(255))
, bida_src_to_stg_defs.tgt_col_data_type_script
, bida_src_to_stg_defs.tgt_col_data_type_script
, ''
, ''
, ''
, ''
from
  bida_src_to_stg_defs bida_src_to_stg_defs
, z01_m1_tables_wb_99 z01_m1_tables_wb_99

where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_m1_tables_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_m1_tables_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_m1_tables_wb_99.table_owner
and bida_src_to_stg_defs.zxt_view_name = z01_m1_tables_wb_99.table_name
and bida_src_to_stg_defs.src_column_number = z01_m1_tables_wb_99.last_col_number

```

```

create view [dbo].[z01_m1_tables_wb_05]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   999991
,   999991
,   'Y'
,   'tab'
,   's'
,   tgt_owner_name
,   zxt_view_name + '_m1'
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   'on [fg_BIDAhs_c008_stg_prod_tmp]'

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses

```

```

create view [dbo].[z01_m1_tables_wb_06]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   999992
,   999992
,   'Y'
,   'tab'
,   'e'
,   tgt_owner_name
,   zxt_view_name + '_m1'
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses

```

```

create view [dbo].[z01_m1_tables_wb_07]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   999993
,   999993
,   'N'
,   'tab'
,   'x'
,   tgt_owner_name
,   zxt_view_name + '_m1'
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses

```

```

create view [dbo].[z01_m1_tables_wb_99]
as
select
    pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, zxt_view_name
, max(src_column_number)
                                table_owner
                                table_name
                                last_col_number

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, zxt_view_name

```

```

create view [dbo].[z01_m1_tables_wb_all]
as

select * from z01_m1_tables_wb_01
union
select * from z01_m1_tables_wb_02
union
select * from z01_m1_tables_wb_03
union
select * from z01_m1_tables_wb_04
union
select * from z01_m1_tables_wb_05
union
select * from z01_m1_tables_wb_06
union
select * from z01_m1_tables_wb_07

```

5.4.3. Views to Create Staging Tables

```
create view [dbo].[z01_stg_tables_wb_01]
as
```

```
select
```

```
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   1
,   'Y'
,   'tab'
,   'b'
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   'pk_cust_number'
,   '1'
,   'integer'
,   'integer'
,   ''
,   ''
,   ''
```

```
pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses
```

```
from bida_src_to_stg_defs
where 1=1
```

```
group by
```

```
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name
```

```
create view [dbo].[z01_stg_tables_wb_02]
as
```

```
select
```

```
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   2
,   'Y'
,   'tab'
,   'm'
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   'pk_ss_number'
,   '2'
,   'integer'
,   'integer'
,   ''
,   ''
,   ''
```

```
pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses
```

```
from bida_src_to_stg_defs
where 1=1
```

```
group by
```

```
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name
```

```
create view [dbo].[z01_stg_tables_wb_03]
as

select
    bida_src_to_stg_defs.pk_spreadsheet_name
  , bida_src_to_stg_defs.pk_spreadsheet_version
  , 0
  , z01_stg_tables_wb_99.last_col_number + 3
  , 'Y'
  , 'tab'
  , 'm'
  , bida_src_to_stg_defs.tgt_owner_name
  , 'stg_' + bida_src_to_stg_defs.tgt_table_name
  , 'row_del_from_src_ind'
  , cast(z01_stg_tables_wb_99.last_col_number + 3 as varchar(255))
  , 'smallint'
  , 'smallint'
  , 'default 0'
  , 'default 0'
  , ''
  , ''
          pk_int_key
          sort_key
          use_column
          pk_row_type_1
          pk_row_type_2
          table_owner
          table_name
          column_name
          column_number
          data_type_deploy
          data_type_doc
          null_clause_deploy
          null_clause_doc
          other_clauses

from
    bida_src_to_stg_defs bida_src_to_stg_defs
  , z01_stg_tables_wb_99 z01_stg_tables_wb_99

where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_stg_tables_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_stg_tables_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_stg_tables_wb_99.table_owner
and bida_src_to_stg_defs.tgt_table_name = z01_stg_tables_wb_99.table_name

group by
    bida_src_to_stg_defs.pk_spreadsheet_name
  , bida_src_to_stg_defs.pk_spreadsheet_version
  , bida_src_to_stg_defs.tgt_owner_name
  , bida_src_to_stg_defs.tgt_table_name
  , z01_stg_tables_wb_99.last_col_number
```

```

create view [dbo].[z01_stg_tables_wb_04]
as

select
    bida_src_to_stg_defs.pk_spreadsheet_name
  , bida_src_to_stg_defs.pk_spreadsheet_version
  , 0
  , z01_stg_tables_wb_99.last_col_number + 4
  , 'Y'
  , 'tab'
  , 'm'
  , bida_src_to_stg_defs.tgt_owner_name
  , 'stg_' + bida_src_to_stg_defs.tgt_table_name
  , 'row_valid_ind'
  , cast(z01_stg_tables_wb_99.last_col_number + 4 as varchar(255))
  , 'smallint'
  , 'smallint'
  , 'default 1'
  , 'default 1'
  , ''
  , ''

from
    bida_src_to_stg_defs bida_src_to_stg_defs
  , z01_stg_tables_wb_99 z01_stg_tables_wb_99

where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_stg_tables_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_stg_tables_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_stg_tables_wb_99.table_owner
and bida_src_to_stg_defs.tgt_table_name = z01_stg_tables_wb_99.table_name

group by
    bida_src_to_stg_defs.pk_spreadsheet_name
  , bida_src_to_stg_defs.pk_spreadsheet_version
  , bida_src_to_stg_defs.tgt_owner_name
  , bida_src_to_stg_defs.tgt_table_name
  , z01_stg_tables_wb_99.last_col_number

```

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses

```

create view [dbo].[z01_stg_tables_wb_05]
as

select
    bida_src_to_stg_defs.pk_spreadsheet_name
,    bida_src_to_stg_defs.pk_spreadsheet_version
,    0
,    z01_stg_tables_wb_99.last_col_number + 5
,    'Y'
,    'tab'
,    'm'
,    bida_src_to_stg_defs.tgt_owner_name
,    'stg_' + bida_src_to_stg_defs.tgt_table_name
,    'row_sent_to_edw_ind'
,    cast(z01_stg_tables_wb_99.last_col_number + 5 as varchar(255))
,    'smallint'
,    'smallint'
,    'default 0'
,    'default 0'
,    ''
,
    pk_int_key
,    sort_key
,    use_column
,    pk_row_type_1
,    pk_row_type_2
,    table_owner
,    table_name
,    column_name
,    column_number
,    data_type_deploy
,    data_type_doc
,    null_clause_deploy
,    null_clause_doc
,    other_clauses

from
    bida_src_to_stg_defs bida_src_to_stg_defs
,    z01_stg_tables_wb_99 z01_stg_tables_wb_99

where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_stg_tables_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_stg_tables_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_stg_tables_wb_99.table_owner
and bida_src_to_stg_defs.tgt_table_name = z01_stg_tables_wb_99.table_name

group by
    bida_src_to_stg_defs.pk_spreadsheet_name
,    bida_src_to_stg_defs.pk_spreadsheet_version
,    bida_src_to_stg_defs.tgt_owner_name
,    bida_src_to_stg_defs.tgt_table_name
,    z01_stg_tables_wb_99.last_col_number

```

```

create view [dbo].[z01_stg_tables_wb_06]
as

select
    bida_src_to_stg_defs.pk_spreadsheet_name
  , bida_src_to_stg_defs.pk_spreadsheet_version
  , 0
  , z01_stg_tables_wb_99.last_col_number + 6
  , 'Y'
  , 'tab'
  , 'n'
  , bida_src_to_stg_defs.tgt_owner_name
  , 'stg_' + bida_src_to_stg_defs.tgt_table_name
  , 'row_sent_to_ods_ind'
  , cast(z01_stg_tables_wb_99.last_col_number + 6 as varchar(255))
  , 'smallint'
  , 'smallint'
  , 'default 0'
  , 'default 0'
  , ''
                                     pk_int_key
                                     sort_key
                                     use_column
                                     pk_row_type_1
                                     pk_row_type_2
                                     table_owner
                                     table_name
                                     column_name
                                     column_number
                                     data_type_deploy
                                     data_type_doc
                                     null_clause_deploy
                                     null_clause_doc
                                     other_clauses

from
    bida_src_to_stg_defs bida_src_to_stg_defs
  , z01_stg_tables_wb_99 z01_stg_tables_wb_99

where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_stg_tables_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_stg_tables_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_stg_tables_wb_99.table_owner
and bida_src_to_stg_defs.tgt_table_name = z01_stg_tables_wb_99.table_name

group by
    bida_src_to_stg_defs.pk_spreadsheet_name
  , bida_src_to_stg_defs.pk_spreadsheet_version
  , bida_src_to_stg_defs.tgt_owner_name
  , bida_src_to_stg_defs.tgt_table_name
  , z01_stg_tables_wb_99.last_col_number

```

```

create view [dbo].[z01_stg_tables_wb_07]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, bida_src_to_stg_defs.pk_int_key
, bida_src_to_stg_defs.src_column_number + 2                                sort_key
, 'Y'                                                                      use_column
, 'tab'                                                                    pk_row_type_1
, 'm'                                                                      pk_row_type_2
, bida_src_to_stg_defs.tgt_owner_name                                    table_owner
, 'stg_' + bida_src_to_stg_defs.tgt_table_name                          table_name
,
case
  when bida_src_to_stg_defs.tgt_primary_key_ind = 'Y' then
    'pk_' + bida_src_to_stg_defs.tgt_column_name
  else bida_src_to_stg_defs.tgt_column_name
end column_name
, cast(bida_src_to_stg_defs.src_column_number + 2 as varchar(255))        column_number
, bida_src_to_stg_defs.tgt_col_data_type_script                          data_type_deploy
, bida_src_to_stg_defs.tgt_col_data_type_script                          data_type_doc
, ''                                                                       null_clause_deploy
, ''                                                                       null_clause_doc
, ''                                                                       other_clauses
,
from
  bida_src_to_stg_defs bida_src_to_stg_defs
, z01_stg_tables_wb_99 z01_stg_tables_wb_99

where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_stg_tables_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_stg_tables_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_stg_tables_wb_99.table_owner
and bida_src_to_stg_defs.tgt_table_name = z01_stg_tables_wb_99.table_name

```

```

create view [dbo].[z01_stg_tables_wb_08]
as
select
  pk_spreadsheet_name
, pk_spreadsheet_version
, 999991                                                                    pk_int_key
, 999991                                                                    sort_key
, 'Y'                                                                      use_column
, 'tab'                                                                    pk_row_type_1
, 's'                                                                      pk_row_type_2
, tgt_owner_name                                    table_owner
, 'stg_' + tgt_table_name                          table_name
, ''                                                                       column_name
, ''                                                                       column_number
, ''                                                                       data_type_deploy
, ''                                                                       data_type_doc
, ''                                                                       null_clause_deploy
, ''                                                                       null_clause_doc
,
case
  when tgt_table_name = 'nav_avg_cost_adjmt_entry_point'
  then 'on [fg_stg_nav_avg_cost_adjmt_entry_point_tab]'

  when tgt_table_name = 'nav_document_dimension'
  then 'on [fg_stg_nav_document_dimension_tab]'

```

```

when tgt_table_name = 'nav_g_l_entry'
then 'on [fg_stg_nav_g_l_entry_tab]'

when tgt_table_name = 'nav_g_l_item_ledger_relation'
then 'on [fg_stg_nav_g_l_item_ledger_relation_tab]'

when tgt_table_name = 'nav_instore_line'
then 'on [fg_stg_nav_instore_line_tab]'

when tgt_table_name = 'nav_item_application_entry'
then 'on [fg_stg_nav_item_application_entry_tab]'

when tgt_table_name = 'nav_item_ledger_entry'
then 'on [fg_stg_nav_item_ledger_entry_tab]'

when tgt_table_name = 'nav_ledger_entry_dimension'
then 'on [fg_stg_nav_ledger_entry_dimension_tab]'

when tgt_table_name = 'nav_posted_document_dimension'
then 'on [fg_stg_nav_posted_document_dimension_tab]'

when tgt_table_name = 'nav_retail_ict_lines'
then 'on [fg_stg_nav_retail_ict_lines_tab]'

when tgt_table_name = 'nav_sales_statistics'
then 'on [fg_stg_nav_sales_statistics_tab]'

when tgt_table_name = 'nav_store_item_ledger_entry'
then 'on [fg_stg_nav_store_item_ledger_entry_tab]'

when tgt_table_name = 'nav_trans_payment_entry'
then 'on [fg_stg_nav_trans_payment_entry_tab]'

when tgt_table_name = 'nav_trans_sales_entry_status'
then 'on [fg_stg_nav_trans_sales_entry_status_tab]'

when tgt_table_name = 'nav_trans_sales_entry'
then 'on [fg_stg_nav_trans_sales_entry_tab]'

when tgt_table_name = 'nav_transaction_header_tab'
then 'on [fg_stg_nav_transaction_header_tab]'

when tgt_table_name = 'nav_transaction_status'
then 'on [fg_stg_nav_transaction_status_tab]'

when tgt_table_name = 'nav_value_entry'
then 'on [fg_stg_nav_value_entry_tab]'

else 'on [fg_bidahs_c008_stg_stg_01_prod]'
end

```

other_clauses

```

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, tgt_table_name

```

```

create view [dbo].[z01_stg_tables_wb_09]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   999992
,   999992
,   'Y'
,   'tab'
,   'e'
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses

```

```

create view [dbo].[z01_stg_tables_wb_10]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   999993
,   999993
,   'N'
,   'tab'
,   'x'
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
pk_row_type_2
table_owner
table_name
column_name
column_number
data_type_deploy
data_type_doc
null_clause_deploy
null_clause_doc
other_clauses

```

```

create view [dbo].[z01_stg_tables_wb_99]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name
,   max(src_column_number)
                                     table_owner
                                     table_name
                                     last_col_number

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name

```

```

create view [dbo].[z01_stg_tables_wb_all]
as

select * from z01_stg_tables_wb_01
union
select * from z01_stg_tables_wb_02
union
select * from z01_stg_tables_wb_03
union
select * from z01_stg_tables_wb_04
union
select * from z01_stg_tables_wb_05
union
select * from z01_stg_tables_wb_06
union
select * from z01_stg_tables_wb_07
union
select * from z01_stg_tables_wb_08
union
select * from z01_stg_tables_wb_09
union
select * from z01_stg_tables_wb_10

```

5.4.4. Views to Create Extract Views

```
create view [dbo].[z01_ext_views_wb_01]
as

select
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , lower(zin_view_name)
  , 0
  , 1
  , 'Y'
  , 'd'
  , src_owner_name
  , lower(zin_view_name)
  , '7'
  , tgt_owner_name
  , lower(zxt_view_name)
  , 'pk_cust_number'
                                zin_view_name
                                pk_int_key
                                sort_key
                                use_column
                                pk_row_type_1
                                table_owner
                                table_name
                                column_name
                                view_owner
                                view_name
                                view_column

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , src_owner_name
  , zin_view_name
  , tgt_owner_name
  , zxt_view_name

create view [dbo].[z01_ext_views_wb_02]
as

select
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , lower(zin_view_name)
  , 0
  , 2
  , 'Y'
  , 'd'
  , src_owner_name
  , lower(zin_view_name)
  , '1'
  , tgt_owner_name
  , lower(zxt_view_name)
  , 'pk_ss_number'
                                zin_view_name
                                pk_int_key
                                sort_key
                                use_column
                                pk_row_type_1
                                table_owner
                                table_name
                                column_name
                                view_owner
                                view_name
                                view_column

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , src_owner_name
  , zin_view_name
  , tgt_owner_name
  , zxt_view_name
```

```

create view [dbo].[z01_ext_views_wb_03]
as
select
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , lower(zin_view_name)
  , 0
  , 997
  , 'Y'
  , 'd'
  , src_owner_name
  , lower(zin_view_name)
  , '[timestamp]'
  , tgt_owner_name
  , lower(zxt_view_name)
  , 'timestamp_col'

    zin_view_name
    pk_int_key
    sort_key
    use_column
    pk_row_type_1
    table_owner
    table_name
    column_name
    view_owner
    view_name
    view_column

from bida_src_to_stg_defs
where 1=1
and src_column_name = 'timestamp'

create view [dbo].[z01_ext_views_wb_04]
as

select
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , lower(zin_view_name)
  , 0
  , src_column_number + 2
  , 'Y'
  , 'm'
  , src_owner_name
  , lower(zin_view_name)
  , lower('[' + src_column_name + ']')
  , tgt_owner_name
  , lower(zxt_view_name)

    zin_view_name
    pk_int_key
    sort_key
    use_column
    pk_row_type_1
    table_owner
    table_name
    column_name
    view_owner
    view_name

,
case
    when bida_src_to_stg_defs.tgt_primary_key_ind = 'Y' then lower('pk_' + tgt_column_name)
    else lower(tgt_column_name)
end view_column

from bida_src_to_stg_defs
where 1=1
and not (src_column_name = 'timestamp')

```

```

create view [dbo].[z01_ext_views_wb_05]
as

select
  pk_spreadsheet_name
, pk_spreadsheet_version
, lower(zin_view_name)
, 0
, 998
, 'Y'
, 'f'
, src_owner_name
, lower(zin_view_name)
, lower(zin_view_name)
, ''
, ''
, ''
, ''

from bida_src_to_stg_defs
where 1=1

group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, src_owner_name
, zin_view_name

```

```

zin_view_name
pk_int_key
sort_key
use_column
pk_row_type_1
table_owner
table_name
column_name
view_owner
view_name
view_column

```

```

create view [dbo].[z01_ext_views_wb_06]
as

select
  pk_spreadsheet_name
, pk_spreadsheet_version
, lower(zin_view_name)
, 0
, 999
, 'N'
, ''
, ''
, ''
, ''
, ''
, ''
, ''
, ''
, ''

from bida_src_to_stg_defs
where 1=1

group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, zin_view_name

```

```

zin_view_name
pk_int_key
sort_key
use_column
pk_row_type_1
table_owner
table_name
column_name
view_owner
view_name
view_column

```

```
create view [dbo].[z01_ext_views_wb_all]
```

```
as
```

```
select * from z01_ext_views_wb_01
union
select * from z01_ext_views_wb_02
union
select * from z01_ext_views_wb_03
union
select * from z01_ext_views_wb_04
union
select * from z01_ext_views_wb_05
union
select * from z01_ext_views_wb_06
```

5.4.5. Views to Create Emulation Views

In the processing we also set up a set of views to emulate the exact table names and column names from production over the top of the staging tables.

This set of views are used to create the emulation views.

```
create view [dbo].[z01_emulate_views_wb_01]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, bida_src_to_stg_defs.pk_int_key
, bida_src_to_stg_defs.src_column_number + 0
, 'Y'
, 'm'
, bida_src_to_stg_defs.src_owner_name
, 'stg_' + bida_src_to_stg_defs.[tgt_table_name]
,
case
  when bida_src_to_stg_defs.tgt_primary_key_ind = 'Y' then
    'pk_' + bida_src_to_stg_defs.tgt_column_name
  else bida_src_to_stg_defs.tgt_column_name
end table_column_name

, bida_src_to_stg_defs.tgt_owner_name
, '[' + bida_src_to_stg_defs.[src_column_name] + ']'
, ' [zz99_emulate_' + substring(bida_src_to_stg_defs.[src_table_name] , 2 , 255) + ']'
,
from
  bida_src_to_stg_defs bida_src_to_stg_defs

create view [dbo].[z01_emulate_views_wb_02]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, 0
, 9998
, 'Y'
, 'f'
, bida_src_to_stg_defs.src_owner_name
, 'stg_' + bida_src_to_stg_defs.[tgt_table_name]
, 'stg_' + bida_src_to_stg_defs.[tgt_table_name]
,
from bida_src_to_stg_defs
where 1=1
group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, bida_src_to_stg_defs.src_owner_name
, tgt_owner_name
, bida_src_to_stg_defs.[tgt_table_name]
```

```

create view [dbo].[z01_emulate_views_wb_03]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, 0
, 9999
, 'Y'
, 'w'
, bida_src_to_stg_defs.src_owner_name
, 'stg_' + bida_src_to_stg_defs.[tgt_table_name]
, '1=1 '
, 'na'
, 'na'
, 'na'
from bida_src_to_stg_defs
where 1=1
group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, bida_src_to_stg_defs.src_owner_name
, tgt_owner_name
, bida_src_to_stg_defs.[src_table_name]
, bida_src_to_stg_defs.[tgt_table_name]

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
table_owner
table_name
table_column_name

view_owner
view_name
view_column_name

```

```

create view [dbo].[z01_emulate_views_wb_04]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, 0
, 9996
, 'Y'
, 'm'
, bida_src_to_stg_defs.src_owner_name
, 'stg_' + bida_src_to_stg_defs.[tgt_table_name]
, '[row_sent_to_edw_ind]'
, bida_src_to_stg_defs.tgt_owner_name
, '[zz99_emulate_' + substring(bida_src_to_stg_defs.[src_table_name] , 2 , 255) + ']'
, '[row_sent_to_edw_ind]'
from bida_src_to_stg_defs
where 1=1
group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, bida_src_to_stg_defs.src_owner_name
, bida_src_to_stg_defs.[src_table_name]
, tgt_owner_name
, bida_src_to_stg_defs.[tgt_table_name]

```

```

pk_int_key
sort_key
use_column
pk_row_type_1
table_owner
table_name
table_column_name

view_owner
view_name
view_column_name

```

```

create view [dbo].[z01_emulate_views_wb_05]
as
select
  bida_src_to_stg_defs.pk_spreadsheet_name
, bida_src_to_stg_defs.pk_spreadsheet_version
, 0
, 9997
, 'Y'
, 'm'
, bida_src_to_stg_defs.src_owner_name
, 'stg_' + bida_src_to_stg_defs.[tgt_table_name]
, '[row_valid_ind]'

, bida_src_to_stg_defs.tgt_owner_name
, '[zz99_emulate_' + substring(bida_src_to_stg_defs.[src_table_name] , 2 , 255) + ']'
, '[row_valid_ind]'
from bida_src_to_stg_defs
where 1=1
group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, bida_src_to_stg_defs.src_owner_name
, bida_src_to_stg_defs.[src_table_name]
, tgt_owner_name
, bida_src_to_stg_defs.[tgt_table_name]

                                pk_int_key
                                sort_key
                                use_column
                                pk_row_type_1
                                table_owner
                                table_name
                                table_column_name

                                view_owner
                                view_name
                                view_column_name

```

```

create view [dbo].[z01_emulate_views_wb_all]
as
select * from z01_emulate_views_wb_01
union all
select * from z01_emulate_views_wb_02
union all
select * from z01_emulate_views_wb_03
union all
select * from z01_emulate_views_wb_04
union all
select * from z01_emulate_views_wb_05

```



```

create view [dbo].[z01_delta_detection_wb_02]
as

select
  pk_spreadsheet_name
, pk_spreadsheet_version
, 0
, 2
, 'Y'
, 'm'
, '####SourceFirstQualifyingName####'
, '####SourceSecondQualifyingName####'
, lower(zxt_view_name)
, '2'
, 'pk_ss_number'
, '####TargetFirstQualifyingName####'
, '####TargetSecondQualifyingName####'
, 'stg_' + lower(tgt_table_name)
, 'pk_ss_number'
, '2'
, 'Y'
, 'N'
, ''
, ''
, ''
, ''
, ''
, ''
, ''
, ''
, ''
, ''
, ''
, ''
, ''
, ''
, ''
, ''
, 0
, 1
, 0
, 0

                                pk_int_key
                                sort_key
                                use_column
                                pk_row_type_1
                                src_database_name
                                src_owner
                                src_table_name
                                src_column_number
                                src_column_name
                                tgt_database_name
                                tgt_owner
                                tgt_table_name
                                tgt_column_name
                                tgt_column_number
                                key_field_ind
                                test_field_ind
                                user_col_01
                                user_col_02
                                user_col_03
                                user_col_04
                                user_col_05
                                user_col_06
                                user_col_07
                                user_col_08
                                user_col_09
                                user_col_10
                                row_del_from_src_ind
                                row_valid_ind
                                row_sent_to_edw_ind
                                row_sent_to_ods_ind

from bida_src_to_stg_defs
where 1=1

group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, zxt_view_name
, tgt_table_name

```



```

create view [dbo].[z01_delta_detection_wb_04]
as
select
    bida_src_to_stg_defs.pk_spreadsheet_name
,   bida_src_to_stg_defs.pk_spreadsheet_version
,   bida_src_to_stg_defs.pk_int_key
,   bida_src_to_stg_defs.src_column_number + 2
,   'Y'
,   'n'
,   '####SourceFirstQualifyingName####'
,   '####SourceSecondQualifyingName####'
,   lower(zxt_view_name)
,   cast(bida_src_to_stg_defs.src_column_number + 2 as varchar(255))
,   case
    when bida_src_to_stg_defs.tgt_primary_key_ind = 'Y' then
        'pk_' + lower(bida_src_to_stg_defs.tgt_column_name)
    else lower(bida_src_to_stg_defs.tgt_column_name)
end
,   '####TargetFirstQualifyingName####'
,   '####TargetSecondQualifyingName####'
,   'stg_' + lower(tgt_table_name)
,   case
    when bida_src_to_stg_defs.tgt_primary_key_ind = 'Y' then
        'pk_' + lower(bida_src_to_stg_defs.tgt_column_name)
    else lower(bida_src_to_stg_defs.tgt_column_name)
end
,   cast(bida_src_to_stg_defs.src_column_number + 2 as varchar(255))
,   case
    when bida_src_to_stg_defs.tgt_primary_key_ind = 'Y' then
        'Y'
    else 'N'
end
,   case
    when bida_src_to_stg_defs.tgt_column_name = 'timestamp_col' then
        'Y'
    else 'N'
end
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''
,   0
,   1
,   0
,   0
,   0
from
    bida_src_to_stg_defs bida_src_to_stg_defs
,   z01_delta_detection_wb_99 z01_delta_detection_wb_99
where 1=1
and bida_src_to_stg_defs.pk_spreadsheet_name = z01_delta_detection_wb_99.pk_spreadsheet_name
and bida_src_to_stg_defs.pk_spreadsheet_version = z01_delta_detection_wb_99.pk_spreadsheet_version
and bida_src_to_stg_defs.tgt_owner_name = z01_delta_detection_wb_99.table_owner
and bida_src_to_stg_defs.zxt_view_name = z01_delta_detection_wb_99.table_name
and bida_src_to_stg_defs.src_column_number = z01_delta_detection_wb_99.last_col_number

```

```

sort_key
use_column
pk_row_type_1
src_database_name
src_owner
src_table_name
src_column_number

src_column_name
tgt_database_name
tgt_owner
tgt_table_name

tgt_column_name
tgt_column_number

key_field_ind

test_field_ind
user_col_01
user_col_02
user_col_03
user_col_04
user_col_05
user_col_06
user_col_07
user_col_08
user_col_09
user_col_10
row_del_from_src_in
row_valid_ind
row_sent_to_edw_ind
row_sent_to_ods_ind

```

```

create view [dbo].[z01_delta_detection_wb_05]
as

select
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , 999991
  , 999991
  , 'Y'
  , 'e'
  , '###SourceFirstQualifyingName###'
  , '###SourceSecondQualifyingName###'
  , lower(zxt_view_name)
  , ''
  , ''
  , ''
  , ''
  , 'stg_' + lower(tgt_table_name)
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , 0
  , 1
  , 0
  , 0
from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , tgt_owner_name
  , zxt_view_name
  , tgt_table_name

    pk_int_key
    sort_key
    use_column
    pk_row_type_1
    src_database_name
    src_owner
    src_table_name
    src_column_number
    src_column_name
    tgt_database_name
    tgt_owner
    tgt_table_name
    tgt_column_name
    tgt_column_number
    key_field_ind
    test_field_ind
    user_col_01
    user_col_02
    user_col_03
    user_col_04
    user_col_05
    user_col_06
    user_col_07
    user_col_08
    user_col_09
    user_col_10
    row_del_from_src_ind
    row_valid_ind
    row_sent_to_edw_ind
    row_sent_to_ods_ind

```

```

create view [dbo].[z01_delta_detection_wb_06]
as

select
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , 999992
  , 999992
  , 'N'
  , 'x'
  , '###SourceFirstQualifyingName###'
  , '###SourceSecondQualifyingName###'
  , lower(zxt_view_name)
  , ''
  , ''
  , ''
  , ''
  , 'stg_' + lower(tgt_table_name)
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , ''
  , 0
  , 1
  , 0
  , 0

  , pk_int_key
  , sort_key
  , use_column
  , pk_row_type_1
  , src_database_name
  , src_owner
  , src_table_name
  , src_column_number
  , src_column_name
  , tgt_database_name
  , tgt_owner
  , tgt_table_name
  , tgt_column_name
  , tgt_column_number
  , key_field_ind
  , test_field_ind
  , user_col_01
  , user_col_02
  , user_col_03
  , user_col_04
  , user_col_05
  , user_col_06
  , user_col_07
  , user_col_08
  , user_col_09
  , user_col_10
  , row_del_from_src_ind
  , row_valid_ind
  , row_sent_to_edw_ind
  , row_sent_to_ods_ind

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , tgt_owner_name
  , zxt_view_name
  , tgt_table_name

```

```

create view [dbo].[z01_delta_detection_wb_99]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   lower(zxt_view_name)
,   max(src_column_number)
                                     table_owner
                                     table_name
                                     last_col_number

from bida_src_to_stg_defs
where 1=1
group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

create view [dbo].[z01_delta_detection_wb_all]
as
select * from z01_delta_detection_wb_01
union
select * from z01_delta_detection_wb_02
union
select * from z01_delta_detection_wb_03
union
select * from z01_delta_detection_wb_04
union
select * from z01_delta_detection_wb_05
union
select * from z01_delta_detection_wb_06

```

5.4.7. Views to Create Indexes

```
create view [dbo].[z01_create_indexes_01]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name + '_d1'
,   1
,   'Y'
,   'b'

,   pk_int_key
,   table_owner
,   tgt_table_name
,   sort_key
,   use_column
,   pk_row_type_1

,   'create index pk_' + zxt_view_name + '_d1 on dbo.' + zxt_view_name + '_d1 ( '
,   ''
,   ''
,   ''
,   ''
,   create_index_text_01
,   create_index_text_02
,   create_index_text_03
,   create_index_text_04

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name
```

```
create view [dbo].[z01_create_indexes_02]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name + '_m1'
,   1
,   'Y'
,   'b'

,   pk_int_key
,   table_owner
,   tgt_table_name
,   sort_key
,   use_column
,   pk_row_type_1

,   'create index pk_' + zxt_view_name + '_m1 on dbo.' + zxt_view_name + '_m1 ( '
,   ''
,   ''
,   ''
,   ''
,   create_index_text_01
,   create_index_text_02
,   create_index_text_03
,   create_index_text_04

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name
```



```

create view [dbo].[z01_create_indexes_03]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   1
,   'Y'
,   'b'
,   'create index pk_stg_' + tgt_table_name + ' on dbo.stg_' + tgt_table_name + ' ( '
,   ''
,   ''
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1
create_index_text_01
create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_04]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name + '_d1'
,   99
,   'Y'
,   'b'
,   ' ) on [fg_bidahs_c008_stg_prod_idx] ; '
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1
create_index_text_01
create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_05]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name + '_m1'
,   99
,   'Y'
,   'b'

,   ' ) on [fg_bidahs_c008_stg_prod_idx] ; '

,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

                                pk_int_key
                                table_owner
                                tgt_table_name
                                sort_key
                                use_column
                                pk_row_type_1
                                create_index_text_01
                                create_index_text_02
                                create_index_text_03
                                create_index_text_04

```

```

create view [dbo].[z01_create_indexes_06]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   99
,   'Y'
,   'b'

                                pk_int_key
                                table_owner
                                tgt_table_name
                                sort_key
                                use_column
                                pk_row_type_1

,

case
    when tgt_table_name = 'nav_avg_cost_adjmt_entry_point'
    then ') on [fg_stg_nav_avg_cost_adjmt_entry_point_idx] ;'

    when tgt_table_name = 'nav_document_dimension'
    then ') on [fg_stg_nav_document_dimension_idx] ;'

    when tgt_table_name = 'nav_g_l_entry'
    then ') on [fg_stg_nav_g_l_entry_idx] ;'

    when tgt_table_name = 'nav_g_l_item_ledger_relation'
    then ') on [fg_stg_nav_g_l_item_ledger_relation_idx] ;'

    when tgt_table_name = 'nav_instore_line'
    then ') on [fg_stg_nav_instore_line_idx] ;'

    when tgt_table_name = 'nav_item_application_entry'
    then ') on [fg_stg_nav_item_application_entry_idx] ;'

    when tgt_table_name = 'nav_item_ledger_entry'
    then ') on [fg_stg_nav_item_ledger_entry_idx] ;'

    when tgt_table_name = 'nav_ledger_entry_dimension'
    then ') on [fg_stg_nav_ledger_entry_dimension_idx] ;'

    when tgt_table_name = 'nav_posted_document_dimension'
    then ') on [fg_stg_nav_posted_document_dimension_idx] ;'

    when tgt_table_name = 'nav_retail_ict_lines'
    then ') on [fg_stg_nav_retail_ict_lines_idx] ;'

    when tgt_table_name = 'nav_sales_statistics'
    then ') on [fg_stg_nav_sales_statistics_idx] ;'

    when tgt_table_name = 'nav_store_item_ledger_entry'
    then ') on [fg_stg_nav_store_item_ledger_entry_idx] ;'

    when tgt_table_name = 'nav_trans_payment_entry'
    then ') on [fg_stg_nav_trans_payment_entry_idx] ;'

    when tgt_table_name = 'nav_trans_sales_entry_status'
    then ') on [fg_stg_nav_trans_sales_entry_status_idx] ;'

    when tgt_table_name = 'nav_trans_sales_entry'
    then ') on [fg_stg_nav_trans_sales_entry_idx] ;'

    when tgt_table_name = 'nav_transaction_header_tab'
    then ') on [fg_stg_nav_transaction_header_idx] ;'

```

```

        when tgt_table_name = 'nav_transaction_status'
        then ') on [fg_stg_nav_transaction_status_idx] ;'

        when tgt_table_name = 'nav_value_entry'
        then ') on [fg_stg_nav_value_entry_idx] ;'
else ' ) on [fg_bidahs_c008_stg_prod_idx] ;'
end create_index_text_01

, ''
, ''
, ''
, ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, tgt_table_name

create view [dbo].[z01_create_indexes_07]
as

select
    pk_spreadsheet_name
, pk_spreadsheet_version
, 0
, tgt_owner_name
, zxt_view_name + '_d1'
, 98
, 'Y'
, 'b'

, ' ,timestamp_col '

, ''
, ''
, ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, zxt_view_name

```

```

create_index_text_02
create_index_text_03
create_index_text_04

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

create_index_text_01
create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_08]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name + '_m1'
,   98
,   'Y'
,   'b'

,   ',timestamp_col '

,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

create_index_text_01

create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_09]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   98
,   'Y'
,   'b'

,   ',timestamp_col '

,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

create_index_text_01

create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_10]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name      + '_d1'
,   src_column_number + 3
,   'Y'
,   'b'

,   ',pk_' + tgt_column_name

,   ''
,   ''
,   ''

from    bida_src_to_stg_defs
where  1=1
and    tgt_primary_key_ind = 'Y'
and    src_column_number < 14

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

create_index_text_01

create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_11]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name      + '_m1'
,   src_column_number + 3
,   'Y'
,   'b'

,   ',pk_' + tgt_column_name

,   ''
,   ''
,   ''

from    bida_src_to_stg_defs
where  1=1
and    tgt_primary_key_ind = 'Y'
and    src_column_number < 14

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

create_index_text_01

create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_12]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   src_column_number + 3
,   'Y'
,   'b'

,   ',pk_' + tgt_column_name

,   ''
,   ''
,   ''

from    bida_src_to_stg_defs
where  1=1
and    tgt_primary_key_ind = 'Y'
and    src_column_number < 14

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

create_index_text_01

create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_13]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name + '_d1'
,   2
,   'Y'
,   'b'

,   ' pk_cust_number'

,   ''
,   ''
,   ''

from    bida_src_to_stg_defs
where  1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

create_index_text_01

create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_14]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name + '_m1'
,   2
,   'Y'
,   'b'
,   ' pk_cust_number'
,   ''
,   ''
,   ''
,   ''

from    bida_src_to_stg_defs
where  1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1
create_index_text_01
create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_15]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   2
,   'Y'
,   'b'
,   ' pk_cust_number'
,   ''
,   ''
,   ''
,   ''

from    bida_src_to_stg_defs
where  1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1
create_index_text_01
create_index_text_02
create_index_text_03
create_index_text_04

```



```

create view [dbo].[z01_create_indexes_16]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name      + '_d1'
,   3
,   'Y'
,   'b'

,   ',pk_ss_number'

,   ''
,   ''
,   ''

from    bida_src_to_stg_defs
where  1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

create_index_text_01

create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_17]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name      + '_m1'
,   3
,   'Y'
,   'b'

,   ',pk_ss_number'

,   ''
,   ''
,   ''

from    bida_src_to_stg_defs
where  1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

create_index_text_01

create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_18]
as
select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   3
,   'Y'
,   'b'
,   ',pk_ss_number'
,   ''
,   ''
,   ''
,   ''

from    bida_src_to_stg_defs
where  1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1
create_index_text_01
create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_19]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name + '_d1'
,   0
,   'Y'
,   'b'
,   'drop index pk_' + zxt_view_name + '_d1 on dbo.' + zxt_view_name + '_d1 ; '
,   ''
,   ''
,   ''
,   ''

from    bida_src_to_stg_defs
where  1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1
create_index_text_01
create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_20]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   zxt_view_name + '_m1'
,   0
,   'Y'
,   'b'
,   'drop index pk_' + zxt_view_name + '_m1 on dbo.' + zxt_view_name + '_m1 ; '
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   zxt_view_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1
create_index_text_01
create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_indexes_21]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   0
,   'Y'
,   'b'
,   'drop index pk_stg_' + tgt_table_name + ' on dbo.stg_' + tgt_table_name + ' ; '
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name

```

```
create view [dbo].[z01_create_indexes_all]
```

```
as
```

```
select * from z01_create_indexes_01
union
select * from z01_create_indexes_02
union
select * from z01_create_indexes_03
union
select * from z01_create_indexes_04
union
select * from z01_create_indexes_05
union
select * from z01_create_indexes_06
union
select * from z01_create_indexes_07
union
select * from z01_create_indexes_08
union
select * from z01_create_indexes_09
union
select * from z01_create_indexes_10
union
select * from z01_create_indexes_11
union
select * from z01_create_indexes_12
union
select * from z01_create_indexes_13
union
select * from z01_create_indexes_14
union
select * from z01_create_indexes_15
union
select * from z01_create_indexes_16
union
select * from z01_create_indexes_17
union
select * from z01_create_indexes_18
union
select * from z01_create_indexes_19
union
select * from z01_create_indexes_20
union
select * from z01_create_indexes_21
```

```

create view [dbo].[z01_create_indexes_on_bida_01]
as

select
    tablename                                table_name
, 1                                          sort_key
, 'drop index pk_' + tablename + '_idx01 on dbo.' + tablename + ';'
, ''                                        create_index_text_01
, ''                                        create_index_text_02
, ''                                        create_index_text_03
, ''                                        create_index_text_04

from [z01_select_columns_02]
where 1=1
and tablename like 'bida%'

group by
    tablename

create view [dbo].[z01_create_indexes_on_bida_02]
as

select
    tablename                                table_name
, 2                                          sort_key
, 'create index pk_' + tablename + '_idx01 on dbo.' + tablename + ' ('
, ''                                        create_index_text_01
, ''                                        create_index_text_02
, ''                                        create_index_text_03
, ''                                        create_index_text_04

from [z01_select_columns_02]
where 1=1
and tablename like 'bida%'

group by
    tablename

create view [dbo].[z01_create_indexes_on_bida_03]
as

select
    tablename                                table_name
, 3                                          sort_key
, '' + column_name                          create_index_text_01
, ''                                        create_index_text_02
, ''                                        create_index_text_03
, ''                                        create_index_text_04

from [z01_select_columns_02]
where 1=1
and tablename like 'bida%'
and column_order = 1
and column_name like 'pk_%'

```

```
create view [dbo].[z01_create_indexes_on_bida_04]
as
```

```
select
  tablename                                table_name
, 4 + column_order                        sort_key
, '' + column_name                        create_index_text_01
, ''                                       create_index_text_02
, ''                                       create_index_text_03
, ''                                       create_index_text_04

from [z01_select_columns_02]
where 1=1
and tablename like 'bida%'
and column_order > 1
and column_name like 'pk_%'
```

```
create view [dbo].[z01_create_indexes_on_bida_05]
as
```

```
select
  tablename                                table_name
, 99                                        sort_key
, ' ) on [FG_BIDAHS_C008_STG_PROD_IDX] ; ' create_index_text_01
, ''                                       create_index_text_02
, ''                                       create_index_text_03
, ''                                       create_index_text_04

from [z01_select_columns_02]
where 1=1
and tablename like 'bida%'

group by
  tablename
```

```
create view [dbo].[z01_create_indexes_on_bida_06]
as
```

```
select
  tablename                                table_name
, 100                                       sort_key
, ' -- '                                    create_index_text_01
, ''                                       create_index_text_02
, ''                                       create_index_text_03
, ''                                       create_index_text_04

from [z01_select_columns_02]
where 1=1
and tablename like 'bida%'

group by
  tablename
```

```
create view [dbo].[z01_create_indexes_on_bida_all]
```

```
as
```

```
select * from z01_create_indexes_on_bida_01
union
select * from z01_create_indexes_on_bida_02
union
select * from z01_create_indexes_on_bida_03
union
select * from z01_create_indexes_on_bida_04
union
select * from z01_create_indexes_on_bida_05
union
select * from z01_create_indexes_on_bida_06
```



```

create view [dbo].[z01_create_stg_02_indexes_01]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   1
,   'Y'
,   'b'
,   'create index stg_' + tgt_table_name + '_idx99 on dbo.stg_' + tgt_table_name + ' ( '
,   ''
,   ''
,   ''
,   ''
from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1
create_index_text_01
create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_stg_02_indexes_02]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   99
,   'Y'
,   'b'
,
case
    when tgt_table_name = 'nav_avg_cost_adjmt_entry_point'
    then ') on [fg_stg_nav_avg_cost_adjmt_entry_point_idx] ;'

    when tgt_table_name = 'nav_document_dimension'
    then ') on [fg_stg_nav_document_dimension_idx] ;'

    when tgt_table_name = 'nav_g_l_entry'
    then ') on [fg_stg_nav_g_l_entry_idx] ;'

    when tgt_table_name = 'nav_g_l_item_ledger_relation'
    then ') on [fg_stg_nav_g_l_item_ledger_relation_idx] ;'

    when tgt_table_name = 'nav_instore_line'
    then ') on [fg_stg_nav_instore_line_idx] ;'

    when tgt_table_name = 'nav_item_application_entry'
    then ') on [fg_stg_nav_item_application_entry_idx] ;'

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

```

```

when tgt_table_name = 'nav_item_ledger_entry'
then ') on [fg_stg_nav_item_ledger_entry_idx] ;'

when tgt_table_name = 'nav_ledger_entry_dimension'
then ') on [fg_stg_nav_ledger_entry_dimension_idx] ;'

when tgt_table_name = 'nav_posted_document_dimension'
then ') on [fg_stg_nav_posted_document_dimension_idx] ;'

when tgt_table_name = 'nav_retail_ict_lines'
then ') on [fg_stg_nav_retail_ict_lines_idx] ;'

when tgt_table_name = 'nav_sales_statistics'
then ') on [fg_stg_nav_sales_statistics_idx] ;'

when tgt_table_name = 'nav_store_item_ledger_entry'
then ') on [fg_stg_nav_store_item_ledger_entry_idx] ;'

when tgt_table_name = 'nav_trans_payment_entry'
then ') on [fg_stg_nav_trans_payment_entry_idx] ;'

when tgt_table_name = 'nav_trans_sales_entry_status'
then ') on [fg_stg_nav_trans_sales_entry_status_idx] ;'

when tgt_table_name = 'nav_trans_sales_entry'
then ') on [fg_stg_nav_trans_sales_entry_idx] ;'

when tgt_table_name = 'nav_transaction_header_tab'
then ') on [fg_stg_nav_transaction_header_idx] ;'

when tgt_table_name = 'nav_transaction_status'
then ') on [fg_stg_nav_transaction_status_idx] ;'

when tgt_table_name = 'nav_value_entry'
then ') on [fg_stg_nav_value_entry_idx] ;'
else ' ) on [fg_bidahs_c008_stg_prod_idx] ;'
end create_index_text_01

, ''
, ''
, ''
                                create_index_text_02
                                create_index_text_03
                                create_index_text_04

from bida_src_to_stg_defs
where 1=1

group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, tgt_table_name

```

```

create view [dbo].[z01_create_stg_02_indexes_03]
as

select
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , 0
  , tgt_owner_name
  , 'stg_' + tgt_table_name
  , 98
  , 'Y'
  , 'b'

  , ' timestamp_col '

  , ''
  , ''
  , ''
  , ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , tgt_owner_name
  , tgt_table_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

create_index_text_01

create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_stg_02_indexes_04]
as

select
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , 0
  , tgt_owner_name
  , 'stg_' + tgt_table_name
  , 0
  , 'Y'
  , 'b'
  , 'drop index stg_' + tgt_table_name + '_idx99 on dbo.stg_' + tgt_table_name + ' ; '

  , ''
  , ''
  , ''
  , ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
  , pk_spreadsheet_version
  , tgt_owner_name
  , tgt_table_name

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

create_index_text_01
create_index_text_02
create_index_text_03
create_index_text_04

```

```
create view [dbo].[z01_create_stg_02_indexes_all]
```

```
as
```

```
select * from z01_create_stg_02_indexes_01  
union  
select * from z01_create_stg_02_indexes_02  
union  
select * from z01_create_stg_02_indexes_03  
union  
select * from z01_create_stg_02_indexes_04
```

```

create view [dbo].[z01_create_stg_03_indexes_01]
as

select
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   0
,   tgt_owner_name
,   'stg_' + tgt_table_name
,   1
,   'Y'
,   'b'
,   'create index stg_' + tgt_table_name + '_idx98 on dbo.stg_' + tgt_table_name + ' ( '
,   ''
,   ''
,   ''
,   ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
,   pk_spreadsheet_version
,   tgt_owner_name
,   tgt_table_name

```

```

create view [dbo].[z01_create_stg_03_indexes_02]
as

select
  pk_spreadsheet_name
, pk_spreadsheet_version
, 0
, tgt_owner_name
, 'stg_' + tgt_table_name
, 99
, 'Y'
, 'b'
,

case
  when tgt_table_name = 'nav_avg_cost_adjmt_entry_point'
  then ') on [fg_stg_nav_avg_cost_adjmt_entry_point_idx] ;'

  when tgt_table_name = 'nav_document_dimension'
  then ') on [fg_stg_nav_document_dimension_idx] ;'

  when tgt_table_name = 'nav_g_l_entry'
  then ') on [fg_stg_nav_g_l_entry_idx] ;'

  when tgt_table_name = 'nav_g_l_item_ledger_relation'
  then ') on [fg_stg_nav_g_l_item_ledger_relation_idx] ;'

  when tgt_table_name = 'nav_instore_line'
  then ') on [fg_stg_nav_instore_line_idx] ;'

  when tgt_table_name = 'nav_item_application_entry'
  then ') on [fg_stg_nav_item_application_entry_idx] ;'

  when tgt_table_name = 'nav_item_ledger_entry'
  then ') on [fg_stg_nav_item_ledger_entry_idx] ;'

  when tgt_table_name = 'nav_ledger_entry_dimension'
  then ') on [fg_stg_nav_ledger_entry_dimension_idx] ;'

  when tgt_table_name = 'nav_posted_document_dimension'
  then ') on [fg_stg_nav_posted_document_dimension_idx] ;'

  when tgt_table_name = 'nav_retail_ict_lines'
  then ') on [fg_stg_nav_retail_ict_lines_idx] ;'

  when tgt_table_name = 'nav_sales_statistics'
  then ') on [fg_stg_nav_sales_statistics_idx] ;'

  when tgt_table_name = 'nav_store_item_ledger_entry'
  then ') on [fg_stg_nav_store_item_ledger_entry_idx] ;'

  when tgt_table_name = 'nav_trans_payment_entry'
  then ') on [fg_stg_nav_trans_payment_entry_idx] ;'

  when tgt_table_name = 'nav_trans_sales_entry_status'
  then ') on [fg_stg_nav_trans_sales_entry_status_idx] ;'

  when tgt_table_name = 'nav_trans_sales_entry'
  then ') on [fg_stg_nav_trans_sales_entry_idx] ;'

  when tgt_table_name = 'nav_transaction_header_tab'
  then ') on [fg_stg_nav_transaction_header_idx] ;'

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

```

```

        when tgt_table_name = 'nav_transaction_status'
        then ') on [fg_stg_nav_transaction_status_idx] ;'

        when tgt_table_name = 'nav_value_entry'
        then ') on [fg_stg_nav_value_entry_idx] ;'
else ' ) on [fg_bidahs_c008_stg_prod_idx] ;'
end create_index_text_01

, ''
, ''
, ''
, ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, tgt_table_name

create view [dbo].[z01_create_stg_03_indexes_03]
as

select
    pk_spreadsheet_name
, pk_spreadsheet_version
, 0
, tgt_owner_name
, 'stg_' + tgt_table_name
, 98
, 'Y'
, 'b'

, ' row_sent_to_edw_ind , row_valid_ind '

, ''
, ''
, ''

from bida_src_to_stg_defs
where 1=1

group by
    pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, tgt_table_name

```

```

create_index_text_02
create_index_text_03
create_index_text_04

```

```

pk_int_key
table_owner
tgt_table_name
sort_key
use_column
pk_row_type_1

create_index_text_01
create_index_text_02
create_index_text_03
create_index_text_04

```

```

create view [dbo].[z01_create_stg_03_indexes_04]
as

select
  pk_spreadsheet_name
, pk_spreadsheet_version
, 0
, tgt_owner_name
, 'stg_' + tgt_table_name
, 0
, 'Y'
, 'b'
, 'drop index stg_' + tgt_table_name + '_idx98 on dbo.stg_' + tgt_table_name + ';'
, ''
, ''
, ''
, ''

from bida_src_to_stg_defs
where 1=1

group by
  pk_spreadsheet_name
, pk_spreadsheet_version
, tgt_owner_name
, tgt_table_name

```

```

create view [dbo].[z01_create_stg_03_indexes_all]
as

select * from z01_create_stg_03_indexes_01
union
select * from z01_create_stg_03_indexes_02
union
select * from z01_create_stg_03_indexes_03
union
select * from z01_create_stg_03_indexes_04

```