

# Data Warehouse: Finding & Using Indexes

Last Updated: February 1, 2005

## Finding Indexes in Data Warehouse Tables

Indexes will be created in the Data Warehouse environment on an as needed basis.

Use the view `EDW.V_INDEX_COLUMN` to obtain a list of columns included in EDW and Data Mart indexes. This view contains the following information:

INDEX_NAME	The name of the index.
TBL_OWN	The schema or owner of the table being indexed. This will be 'EDW' for EDW and 'DM_STU' for Data Mart tables.
TBL_NAME	The name of the table being indexed.
COLUMN_NAME	The name of a column included in the index.
COLUMN_POSN	The position of the column in the index.

Executing the following query from a SQL Plus environment will provide the most current indexes created in the Data Warehouse environment:

```
select * from EDW.V_INDEX_COLUMN
where TBL_NAME= 'T_PERS_HIST'
order by INDEX_NAME, COLUMN_POSN;
```

## Using Indexes

COLUMN\_POSN can be important for queries that do not constrain on all columns in an index. If a query contains a constraint for the column in the  $n^{\text{th}}$  position in the index, the index will only be used if all columns having position less than  $n$  are constrained as well. For example, there is an index in the EDW on table `T_PAYR_ACCTG_DETL` (which is the source for the commonly used view `V_PAYR_ACCTG_DETL`) with the following columns:

```
PAYR_YR      1
PAYR_ID      2
PAYR_NBR     3
PAYR_SEQ_NBR 4
```

This query, which constrains on columns 1 and 3, will not use the index:

```
select sum(PAYR_ACCTG_EXPS_AMT)
  from V_PAYR_ACCTG_DETL
 where PAYR_YR='2005'
       and PAYR_NBR=1
```

To use the index, add a constraint for column 2 as follows:

```
select sum(PAYR_ACCTG_EXPS_AMT)
  from V_PAYR_ACCTG_DETL
 where PAYR_YR='2005'
       and PAYR_ID='BW'
       and PAYR_NBR=1
```