

SQL FIRST / LAST functions

- **Article Type:** General
- **Product:** Aleph
- **Product Version:** 20

Description:

How can the SQL FIRST and LAST functions be used?

Resolution:

[From Mike Rogers, U. Tennessee - Knoxville, on the Global Aleph Users list;]

I thought I'd pass along this tidbit to those of you who use SQL in Aleph. It is the FIRST/LAST function and it can be used in a variety of ways. The use I found for it was in reporting, if you only want to display the first and last items of a data set.

For example, we started an inventory project in Aleph using the "Inventory Marking" tool in the Cataloging module. Forty-six books were inventoried on the first test of our Juvenile fiction collection. Our staff wanted a report listing the call number range of the books that had been inventoried for a particular day or range of dates, along with a total count of books inventoried for each day.

I knew that items scanned by Inventory Marking received an updated date in Z30_ON_SHELF_DATE, but couldn't figure out the rest of the SQL syntax. I started messing around with FIRST/LAST and then hit on this SQL query which gives us exactly what we need:

```
COLUMN TO_CHAR(TO_DATE(Z30_ON_SHELF_DATE,'YYYYMMDD'),'YYYY/MM/DD') HEA 'InvDate'  
COLUMN MIN(SUBSTR(Z30_CALL_NO,4,25))KEEP(DENSE_RANKFIRSTORDERBY(Z30_CALL_NO_KEY)) FOR A23  
HEA 'FromCallNo'  
COLUMN MAX(SUBSTR(Z30_CALL_NO,4,25))KEEP(DENSE_RANKLASTORDERBY(Z30_CALL_NO_KEY)) FOR A23  
HEA 'ToCallNo'  
COLUMN COUNT(*) HEA 'ItemCount'
```

```
SELECT /*+ DYNAMIC_SAMPLING(2) ALL_ROWS */  
TO_CHAR(TO_DATE(Z30_ON_SHELF_DATE,'YYYYMMDD'),'YYYY/MM/DD'),  
MIN(SUBSTR(Z30_CALL_NO,4,25)) KEEP (DENSE_RANK FIRST ORDER BY (Z30_CALL_NO_KEY)),  
MAX(SUBSTR(Z30_CALL_NO,4,25)) KEEP (DENSE_RANK LAST ORDER BY (Z30_CALL_NO_KEY)),  
COUNT(*)  
FROM UTK50.Z30  
WHERE Z30_COLLECTION = 'JUV'  
AND Z30_ON_SHELF_DATE = '20120215'  
GROUP BY TO_CHAR(TO_DATE(Z30_ON_SHELF_DATE,'YYYYMMDD'),'YYYY/MM/DD');
```

The output from the query looks like this:

```
InvDate FromCallNo ToCallNo ItemCount
```

2012/02/15 FA129fi FA291fo 46

So on February 15th, the first call number scanned was FA129fi and the last call number scanned was FA291fo. ItemCount gives the total number of items scanned.

I can potentially see some other uses for this function, too.

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- **Article last edited:** 10/8/2013