

Note Language: English

Version: 3

Validity: Valid from 24.10.2000

## Summary

### Symptom

Customer programs and program enhancements ("user exits") have a bad performance. The bad performance can be seen when accessing the following SAP logistic tables:

AFRU, AFKO, AUFK, CAUFV, RESB

### Additional key words

### Cause and prerequisites

The R/3 System does not contain secondary indexes to the most important PP / PM flow tables.

To access them effectively you need a basic knowledge of the SAP data model. This notes contains information on the most important errors and provides alternatives.

However, note the following WARNINGS:

- Before you use the suggested alternatives check your program for functional correctness.

Pay attention to the following NOTES:

In the following examples, you often find accesses to several e.g...:

```
SELECT aufnr FROM resb WHERE rsnun = <afko-rsnun>
SELECT ..... FROM afko WHERE aufnr = <resb-aufnr>
```

To increase the performance you should define a selection view on the corresponding tables (here: resb and afko) to combine the accesses to both table into one.

### Solution

#### 1. Access to order confirmation (table AFRU)

##### a) Search for confirmation of orders (field AFRU-AUFNR):

Incorrect:

```
SELECT FROM afru WHERE aufnr = ...
```

Correct:

```
SELECT aufpl FROM afko WHERE aufnr = <afru-aufnr>
SELECT rueck FROM afvc WHERE aufpl = <afko-aufpl>
SELECT ..... FROM afru WHERE rueck = <afvc-rueck>
```

Caution:

From table AFVC, you receive one value per operation for "RUECK".

#### 2. Access to PPS orders (tables AFKO, CAUFV, AUFK)

##### a) Find orders for reservation (field AFKO-RSNUM; CAUFV-RSNUM):

Incorrect:

```
SELECT FROM afko WHERE rsnun = ...
```

Correct:

```
SELECT aufnr FROM resb WHERE rsnun = <afko-rsnun>
SELECT ..... FROM afko WHERE aufnr = <resb-aufnr>
```

Note:

The same access path applies to CAUFV and AUFK.  
Search for sales orders (tables VBAP-VBELN, VBAP-POSNR; VBFA-VBELN, VBFA-POSNN; and so on.)

Incorrect:

```
SELECT FROM AUFK WHERE KDAUF = <VBAP-VBELN>
AND KDPOS = <VBAP-POSNR>
```

Correct:

```
SELECT FROM AFPO WHERE KDAUF = <VBAP-VBELN>
AND KDPOS = <VBAP-POSNR>
SELECT FROM AUFK WHERE AUFNR = AFPO-AUFNR.
```

Note:

The tables AFKO and CAUFV can be selected analogously to the AUFK access using order number AUFNR.

3. Access to reservations and dependent requirement (table: RESB, MDRS ATP\_RESB)

a) Search for reservation for PPS orders (field RESB-AUFNR):

Incorrect:

```
SELECT FROM resb WHERE AUFNR = ...
```

Correct:

```
SELECT rsnum FROM afko WHERE aufnr = <resb-aufnr>
SELECT ..... FROM resb WHERE rsnum = <afko-rsnum>
```

Note:

The same access path applies to MDRS and ATP\_RESB.

b) Search for reservation for Planned orders (field RESB-PLNUM):

Incorrect:

```
SELECT FROM resb WHERE PLNUM = ...
```

Correct:

```
SELECT rsnum FROM plaf WHERE plnum = <resb-plnum>
SELECT ..... FROM resb WHERE rsnum = <plaf-rsnum>
```

Note:

The same access path applies to MDRS and ATP\_RESB.

## Source code corrections

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### Header Data

Release Status:	Released for Customer
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Priority:	Recommendations/additional info
Category:	Consulting
Main Component	SV-BO Backoffice Service Delivery

**The note is not release-dependent.**

## Related Notes

Number	Short Text
819324	FAQ: MaxDB SQL optimization
766349	FAQ: Oracle SQL optimization
191492	Performance: Customer developments in MM/WM
185530	Performance: Customer developments in SD