# **Improve Performance with Start Routine**

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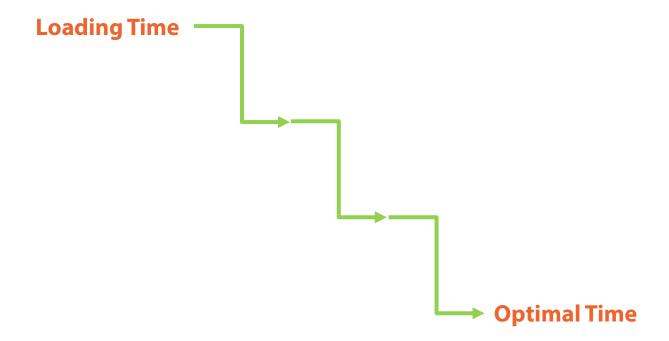




#### **Overview**



### **Overview**



### **Overview**

**Start Routine** 

**Internal Tables** 



```
IF month_of_sale = january AND booktype = children.
discount_percentage = 30.
```

#### ENDIF.

IF month\_of\_sale = september AND booktype = travel.
 discount\_percentage = 15.

#### ENDIF.

• • •

```
discount_percentage = 30.
ENDIF.
IF month_of_sale = september AND booktype = travel.
 discount_percentage = 15.
ENDIF.
```

#### **Solutions**

DSO + Select

Hard Coding + IF

Data Maintenance

Code Maintenance

## **Analysis**

```
SELECT SINGLE /bic/zbooktype
 INTO
        booktype
 FROM /bic/mzbook
 WHERE /bic/zbook = book_code
 AND objvers = active.
SELECT SINGLE /bic/kdiscperc
 INTO discount_percentage
 FROM /bic/azbs01ds00
 WHERE calmonth2 = month_of_sale
        /bic/zbooktype = booktype.
```

# **Execution Logic**

Logic

Iterations

Loop at Records

Field Rule 1

Field Rule 2

Field Rule n

**End Loop** 

50.000





## **Execution Logic**

Logic

Iterations

**Common Practice** 

Loop at Records

Field Rule 1

Field Rule 2

Field Rule n

**End Loop** 

50.000

Target Field Calculations in Memory

#### **Internal Tables**



**In-memory Tables** 

**Buffering** 

# Comparison

**Database Tables** 

**Internal Tables** 

**Performance** 

Slow

**Fast** 

Size

**Unlimited** 

Limited

Lifetime

Long

**Short** 

## **Execution Logic**

Logic

Iterations

**Common Practice** 

Loop at Records

Field Rule 1

Field Rule 2

Field Rule n

**End Loop** 

50.000

Target Field Calculations in Memory

### **Execution Logic**

Logic

**Start Routine** 

Loop at Records

Field Rule 1

Field Rule 2

Field Rule n

End Loop

**Iterations** 

1

50.000

**Common Practice** 

DB Buffering, Changing Source in Memory

Target Field
Calculations in
Memory

#### Transformation

**Start Routine** 

Select from Database

#### Field Rule 1

Declaration of Variables

**Declaration of Constants** 

Declaration of Internal Table

Declaration of Work Area

**Business Logic** 

Field Rule 2

Field Rule n

#### **Transformation**

**Start Routine** 

Select from Database

Field Rule 1

Declaration of Variables

**Declaration of Constants** 

Declaration of Internal Table

Declaration of Work Area

**Business Logic** 

Field Rule 2

Field Rule n

Syntax Error: "DISCOUNTS\_TABLE" is unknown

# **Transformation Start Routine** Declaration of Internal Table Select from Database Field Rule 1 Declaration of Variables **Declaration of Constants** Declaration of Work Area **Business Logic** Field Rule 2 Field Rule n

Syntax Error: "DISCOUNTS\_TABLE" is unknown

# **Transformation** Declaration of Internal Table **Start Routine** Select from Database Field Rule 1 Declaration of Variables **Declaration of Constants** Declaration of Work Area **Business Logic** Field Rule 2

Field Rule n





# **Transformation** Declaratic GLOBAL nal Table **Start Routine** LOCAL Select from Database Field Rule 1 Declaration of Constants LOCAL **Business Logic** Field Rule 2 Field Rule n

**Information Sharing** 

**Information Hiding** 

Information Hiding

# **Summary**

**Flexibility** 

Data Store Object

Data Maintenance

# **Summary**

**Start Routine** 

**Performance** 

**Internal Table** 

**In-memory Operations** 

# **Summary**

Flexibility

**Performance**