

PRAGMA

PRAGMA action

Function

This action enables/disables a transfer IN OUT parameters of the procedure by a **reference**.

Declaration

```
PRAGMA "ENABLE_INOUT_BY_REF"  
  
PRAGMA "DISABLE_INOUT_BY_REF"
```

Description

The action is meaningful only when you use a procedure with IN OUT parameters (a structure type) in context of object **Event**. It is unimportant for RPC procedures.

When **CALL** action is executed, the action **PRAGMA "ENABLE_INOUT_BY_REF"** ensures the real parameter, which inputs to the procedure via its formal parameter, will not be copied to the formal parameter of procedure. It means the formal parameter represents a reference to the real parameter.

Basically, **CALL** action creates a copy of the real parameter and uses it as the formal parameter. It causes:

1. A procedure call copies the procedure values uselessly (it is slower).
2. The formal parameter is "separated" from the real parameter.

PRAGMA "ENABLE_INOUT_BY_REF" ensures the formal parameter is "a reference" to the real parameter and the value is not copied. The procedure call is faster.

Example

```
PROCEDURE Proc1(RECORD (SD.Data) _data)  
  
. . .  
  
_data[1]^Col := 2  
. . .  
. . .  
. . .  
END Proc1  
  
BEGIN  
  PRAGMA "ENABLE_INOUT_BY_REF"  
  RECORD (SD.Data) _rec  
  REDIM _rec [2]  
  
  _rec[1]^Col := 0  
  
  CALL Proc1(_rec)  
  
END
```

An application of **PRAGMA "ENABLE_INOUT_BY_REF"** action:

The formal parameter **_data** is the real parameter **_rec**.

When you write **_data[1]^Col := 2**, the value "2" is assigned to the real parameter **_rec[1]^Col**.

An application of **CALL** action (**PRAGMA "ENABLE_INOUT_BY_REF"** action is not used):

The formal parameter **_data** is an absolute copy of the real parameter **_rec**.

When you write **_data[1]^Col := 2**, the value "2" is assigned to the formal parameter **_data**.

After **CALL proc1(_rec)** is executed, the formal parameter **_data** will be copied to the real parameter **_rec**.



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