

# Initial Values (and the RESET Statement)

This chapter describes the default initial values of user-defined variables, explains how you can assign an initial value to a user-defined variable and how you can use the RESET statement to reset the field value to its default initial value or the initial value defined for that variable in the DEFINE DATA statement.

This chapter covers the following topics:

- Default Initial Value of a User-Defined Variable/Array
- Assigning an Initial Value to a User-Defined Variable/Array
- Resetting a User-Defined Variable to its Initial Value

## Default Initial Value of a User-Defined Variable/Array

If you specify no initial value for a field, the field will be initialized with a default initial value depending on its format:

Format	Default Initial Value
B, F, I, N, P	0
A, U	<i>blank</i>
L	F (ALSE)
D	D' '
T	T' 00:00:00'
C	(AD=D)
Object Handle	NULL-HANDLE

## Assigning an Initial Value to a User-Defined Variable/Array

In the DEFINE DATA statement, you can assign an initial value to a user-defined variable. If the initial value is alphanumeric, it must be enclosed in apostrophes.

- Assigning a Modifiable Initial Value
- Assigning a Constant Initial Value
- Assigning a Natural System Variable as Initial Value
- Assigning Characters as Initial Value for Alphanumeric Variables

## Assigning a Modifiable Initial Value

If the variable/array is to be assigned a modifiable initial value, you specify the initial value in angle brackets with the keyword `INIT` after the variable definition in the `DEFINE DATA` statement. The value(s) assigned will be used each time the variable/array is referenced. The value(s) assigned can be modified during program execution.

Example:

```
DEFINE DATA LOCAL
1 #FIELDA (N3) INIT <100>
1 #FIELDB (A20) INIT <'ABC'>
END-DEFINE
...
```

## Assigning a Constant Initial Value

If the variable/array is to be treated as a named constant, you specify the initial value in angle brackets with the keyword `CONSTANT` after the variable definition in the `DEFINE DATA` statement. The constant value(s) assigned will be used each time the variable/array is referenced. The value(s) assigned cannot be modified during program execution.

Example:

```
DEFINE DATA LOCAL
1 #FIELDA (N3) CONST <100>
1 #FIELDB (A20) CONST <'ABC'>
END-DEFINE
...
```

## Assigning a Natural System Variable as Initial Value

The initial value for a field may also be the value of a Natural system variable.

Example:

In this example, the system variable `*DATX` is used to provide the initial value.

```
DEFINE DATA LOCAL
1 #MYDATE (D) INIT <*DATX>
END-DEFINE
...
```

## Assigning Characters as Initial Value for Alphanumeric Variables

As initial value, a variable can also be filled, entirely or partially, with a specific single character or string of characters (only possible for alphanumeric variables).

- **Filling an entire field:**

With the option `FULL LENGTH <character(s)>`, the entire field is filled with the specified character(s).

In this example, the entire field will be filled with asterisks.

```

DEFINE DATA LOCAL
1 #FIELD (A25) INIT FULL LENGTH <'*'>
END-DEFINE
...

```

- **Filling the first  $n$  positions of a field:**

With the option `LENGTH  $n$  <character(s)>`, the first  $n$  positions of the field are filled with the specified character(s).

In this example, the first 4 positions of the field will be filled with exclamation marks.

```

DEFINE DATA LOCAL
1 #FIELD (A25) INIT LENGTH 4 <'!'>
END-DEFINE
...

```

## Resetting a User-Defined Variable to its Initial Value

The `RESET` statement is used to reset the value of a field. Two options are available:

- Reset to Default Initial Value
- Reset to Initial Value Defined in `DEFINE DATA`

### Notes:

1. A field declared with a `CONSTANT` clause in the `DEFINE DATA` statement may not be referenced in a `RESET` statement, since its content cannot be changed.
2. In reporting mode, the `RESET` statement may also be used to define a variable, provided that the program contains no `DEFINE DATA LOCAL` statement.

### Reset to Default Initial Value

`RESET` (without `INITIAL`) sets the content of each specified field to its default initial value depending on its format.

Example:

```

DEFINE DATA LOCAL
1 #FIELDA (N3) INIT <100>
1 #FIELDB (A20) INIT <'ABC'>
1 #FIELDC (I4) INIT <5>
END-DEFINE
...
...
RESET #FIELDA /* resets field value to default initial value
...

```

### Reset to Initial Value Defined in `DEFINE DATA`

`RESET INITIAL` sets each specified field to the initial value as defined for the field in the `DEFINE DATA` statement.

For a field declared without INIT clause in the DEFINE DATA statement, RESET INITIAL has the same effect as RESET (without INITIAL).

Example:

```
DEFINE DATA LOCAL
1 #FIELD A (N3) INIT <100>
1 #FIELD B (A20) INIT <'ABC'>
1 #FIELD C (I4) INIT <5>
END-DEFINE
...
RESET INITIAL #FIELD A #FIELD B #FIELD C /* resets field values to initial values as defined in DEFINE DATA
...
```