

May I create my own type definitions and reuse them?

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It is so desirable to create a simple or complex type definition that may be consistently and easily reused with other variables without having to copy paste the contents of the original one.

The TYPEDEF clause in the data description is the answer to this.

Consider the following example of a record that holds a time structure that can be reused with many time type variables. You may create the type definition in the working-storage like this:

```
01 td-time          typedef.
05 ws-hrs          pic 99.
05 filler          pic x value ":".
05 ws-mins         pic 99.
05 filler          pic x value ":".
05 ws-secs         pic 99.
```

Then you may define the actual variables based on that definition, like this:

```
01 init-time       usage td-time.
01 end-time        usage td-time.
01 first-time      usage td-time.
```

In this way, every time a variable will end up containing the 3 children fields: ws-hrs, ws-mins and ws-secs.

And you may use them on the procedure division as the following snippet demonstrates:

```
move 13 to ws-hrs of init-time
move 20 to ws-mins of init-time
move 40 to ws-secs of init-time

move init-time to end-time
add 5 to ws-hrs of end-time
add 3 to ws-mins of end-time
move end-time to first-time
add 4 to ws-mins of first-time
add 6 to ws-secs of first-time
display "Init time: " init-time x"0d0a"
        "End time: " end-time x"0d0a"
        "First time: " first-time x"0d0a"
```

That would display the following on the console:

```
Init time: 13:20:40
End time: 18:23:40
First time: 18:27:46
```