A consequence of the weird wReserved value at the start of the DECIMAL structure



July 31, 2025



Not too long ago, I explained why <u>why there is a weird wReserved value at the start of the DECIMAL structure</u>. Markus Grohs pointed out <u>in a comment</u> that the way that <u>decVal</u> is overlaid on top of a <u>VARIANT</u> means that you have to be careful about the order in which you set the fields.

Given

```
DECIMAL value = [ some value ];
VARIANT var;
VariantClear(&var);
```

then you have to remember to set the vt *last* because it is overwritten by the wReserved inside the DECIMAL.

```
// Wrong
var.vt = VT_DECIMAL;
var.decVal = value; // oops, the wReserved overwrites the var.vt.
// Better
var.decVal = value; // the wReserved overwrites var.vt
var.vt = VT_DECIMAL; // but we fix it up immediately
```

The extra wReserved in the DECIMAL is like a bulky backpack that you wear as you go about your daily business. You usually forget that you have it on, until you turn around in a tight spot and accidentally knock something over.