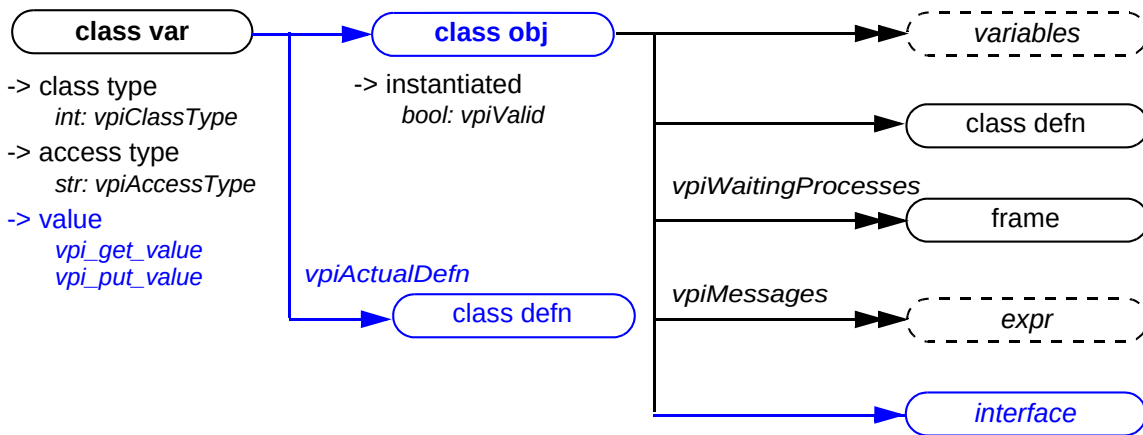


32.22 Class variables and class objects



NOTES:

- 1) The **vpiWaitingProcesses** iterator on a mailbox or semaphore shall ~~show~~ **return** the processes waiting on the object **resource**.
 — Waiting process means either frame or task/function handle. A process may be waiting to retrieve a message from a mailbox or waiting for the semaphore resource key for example.
- 2) **vpiMessages** iterator shall return all the messages in a mailbox.
- 3) **vpiClassDefn** returns the ~~C~~class ~~D~~efn that was used to create the handle. **vpiActualDefn** returns the ~~C~~class ~~D~~efn that the handle object points to when the query is made. If the class var has the value of NULL, **vpiActualDefn** shall return a NULL handle. The difference can be seen in the example below:

```

class Packet
...
endclass : Packet

class LinkedPacket extends Packet
...
endclass : LinkedPacket

LinkedPacket l = new;
Packet p = l;

```

In this example, the **vpiClassDefn** of variable p is Packet, but the **vpiActualDefn** is “LinkedPacket”.

- 4) **vpiClassDefn/vpiActualDefn** both shall return NULL for built-in classes.
- 5) **vpiClassType** can be one of **vpiUserDefinedClass**, **vpiMailboxClass**, **vpiSemaphoreClass**.
- 6) **vpiAccessType** can be one of **vpiPublicAcc**, **vpiProtectedAcc**, **vpiLocalAcc**.