




















## Variables and Arrays

Type	Vars			Array
<i>Blob</i>	vX			aX
<i>Boolean</i>	vB			aB
<i>Collection</i>	vC	[ ]	-	-
<i>Date</i>	vD			aD
<i>Longint</i>	vL	2 <sup>32</sup>		aL
<i>Object</i>	vJ	{ }		aJ
<i>Picture</i>	vO			aO
<i>Pointer</i>	vP	->		aP
<i>Real</i>	vR	0.5		aR
<i>Text</i>	vT	T		aT
<i>Time</i>	vH			aH
<i>Variant</i>	vV	≈	-	-

## Classes

Type	Prefix		Var type
<i>4DClass</i>	c4{•}		4D
<i>Class Store</i>	cs		CS
<i>Entity</i>	cE		CS
<i>EntitySelection</i>	cES		CS

## Examples

```
$c4BI_answer:=4D.Blob
```

```
$c4ES:=ds.CLIENTS.all()
```

```
$cs_button:=cs._BUTTON.new()
```






```
$cES_CLIENTS:=ds.CLIENTS.query("name = :1"; "M@")
```

```
$cE_CLIENTS:=$cES_CLIENTS.first()
```











## Classes 4D (@v20R10)

4D class		Prefix	4D class		Prefix
<i>Blob</i>	4D	c4Bl	SMTPTransporter	4D	c4ST
<i>Class</i>	4D	c4Cl	SystemWorker	4D	c4SW
<i>CryptoKey</i>	4D	c4CK	TCPConnection	4D	c4TC
<i>DataClass</i>	4D	c4DC	TCPEvent	4D	c4TE
<i>DataStoreImplementation</i>	4D	c4DSI	TCPListener	4D	c4TL
<i>Directory</i>	4D	c4Di	Transporter	4D	c4T
<i>Document</i>	4D	c4Do	UDPEvent	4D	c4UE
<i>Entity</i>	4D	c4E	UDPSocket	4D	c4US
<i>EntitySelection</i>	4D	c4ES	Vector	4D	c4VE
<i>File</i>	4D	c4Fi	WebForm	4D	c4WF
<i>Folder</i>	4D	c4Fo	WebFormItem	4D	c4WFI
<i>Function</i>	4D	c4Fu	WebServer	4D	c4WS
<i>HTTPAgent</i>	4D	c4HA	Write	4D	c4W
<i>HTTPRequest</i>	4D	c4HR	WriteDocument	4D	c4WD
<i>IMAPTransporter</i>	4D	c4IT	WriteElement	4D	c4WE
<i>MailAttachment</i>	4D	c4MA	WriteRange	4D	c4WR
<i>Object</i>	4D	c4O	WriteSection	4D	c4WSe
<i>OutgoingMessage</i>	4D	c4OM	WriteStyleSheet	4D	c4WSS
<i>POP3Transporter</i>	4D	c4PT	ZipArchive	4D	c4ZA
<i>ProgressIndicator</i>	4D	c4PI	ZipFile	4D	c4ZFi
<i>Session</i>	4D	c4S	ZipFolder	4D	c4ZFo
<i>Signal</i>	4D	c4Si			

## Exceptions (all spaces)

Type		Vars
<i>Blob</i>		
<i>Boolean</i>		is@
<i>Collection</i>	[ ]	co_@
<i>Date</i>		
<i>Longint</i>	2 <sup>32</sup>	(^tt\\d*) ; (^idx\\d*) (^[ijklxyz]+[0-9]*\$) (^[ijklxyz]+_\\w*\$)
<i>Object</i>	{ }	(^signal[0-9]*\$) ob_@
<i>Picture</i>		
<i>Pointer</i>	->	ptr@
<i>Real</i>	0.5	
<i>Text</i>	T	txt ; path ; path_@
<i>Time</i>		
<i>Variant</i>	≈	

## Properties

Type	Vars			Collection
<i>Blob</i>	x			ax
<i>Boolean</i>	is			ab
<i>Collection</i>	c	[ ]	-	a<x>
<i>Date</i>	d			ad
<i>Longint</i>	l	2 <sup>32</sup>	2 <sup>32</sup>	al
<i>Object</i>	j	{ }	{ }	aj
<i>Picture</i>	o			ao
<i>Pointer</i>	p	->	->	ap
<i>Real</i>	r	0.5	0.5	ar
<i>Text</i>	t	T	T	at
<i>Time</i>	h			ah
<i>Variant</i>	v	⌘	-	av

## Example

```
$vC_aj_fields := new collection() // Collection of objects
Storage.aj_fields:= $vC_aj_fields
This.t_table:= "SESSIONS"
$c4Fo_sources:=Folder("/PROJECT/Sources/"; *)
This.fo_sources:= $c4Fo_sources
$c4Fi_catalog:= $c4Fo_sources.file("catalog.4DCatalog"; *)
This.fi_catalog:= $c4Fi_catalog
$vJ_prefs:=Storage.j_prefs
$vJ_catalog.t_name:= $vT_name
$vJ_catalog.l_count_tables:= $vL_count_tables
$vJ_catalog.aj_tables:= $vC_aj_tables
```

Very readable...