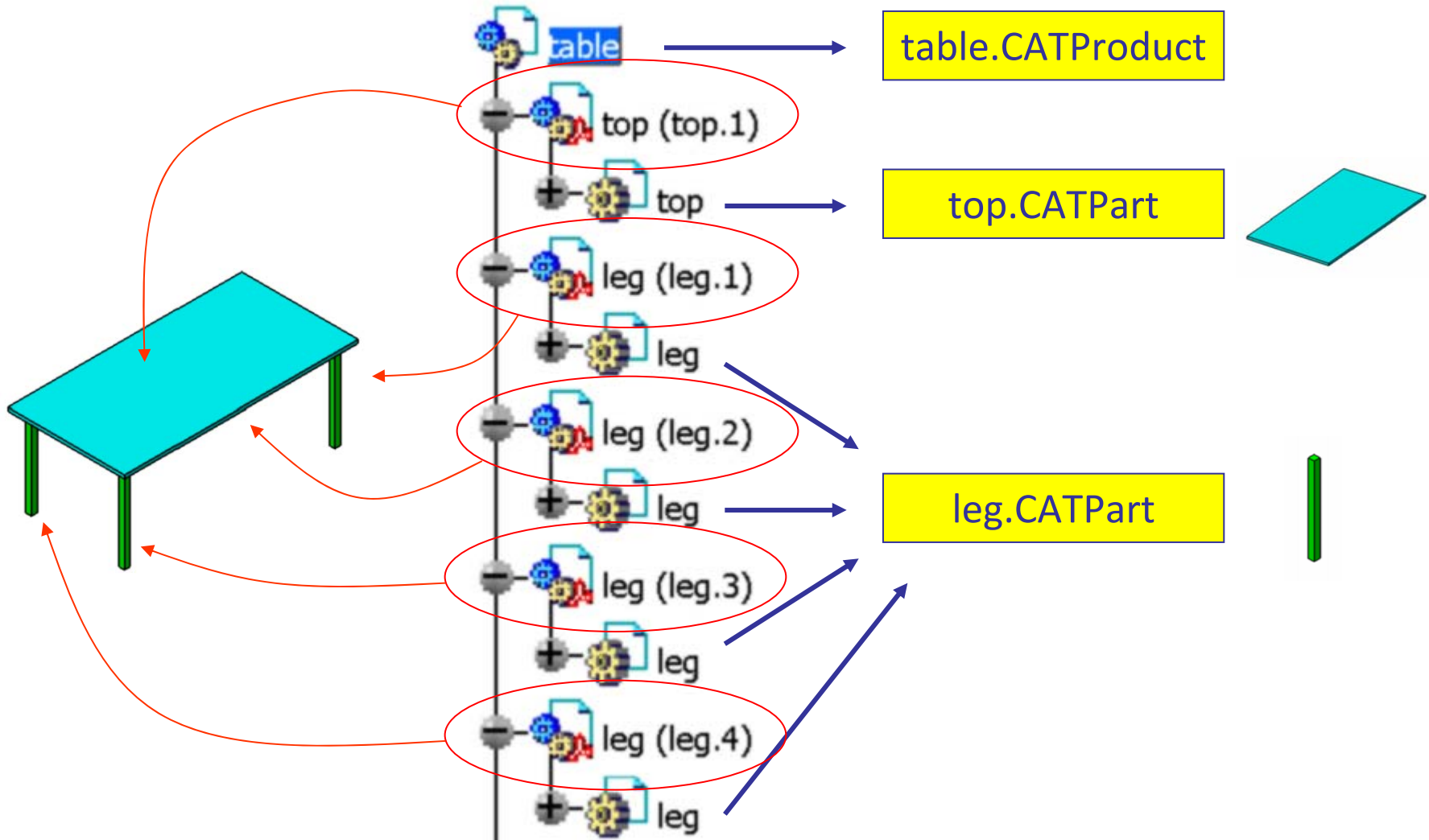


An overview of Product & CAD Structure Management with R I A L T O

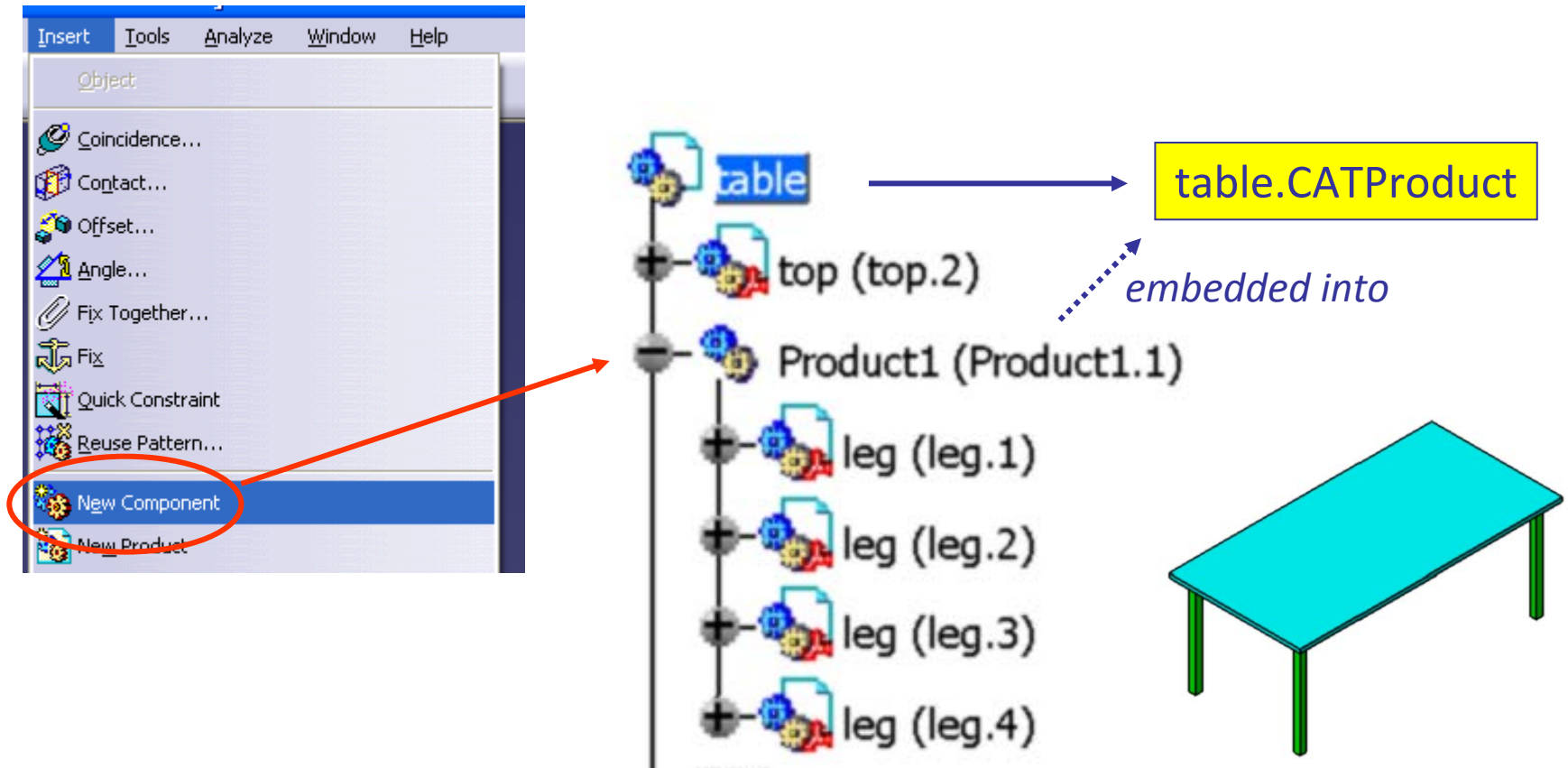
Pascal Morenton
pascal.morenton@ecp.fr



CAD objects & CAD structure

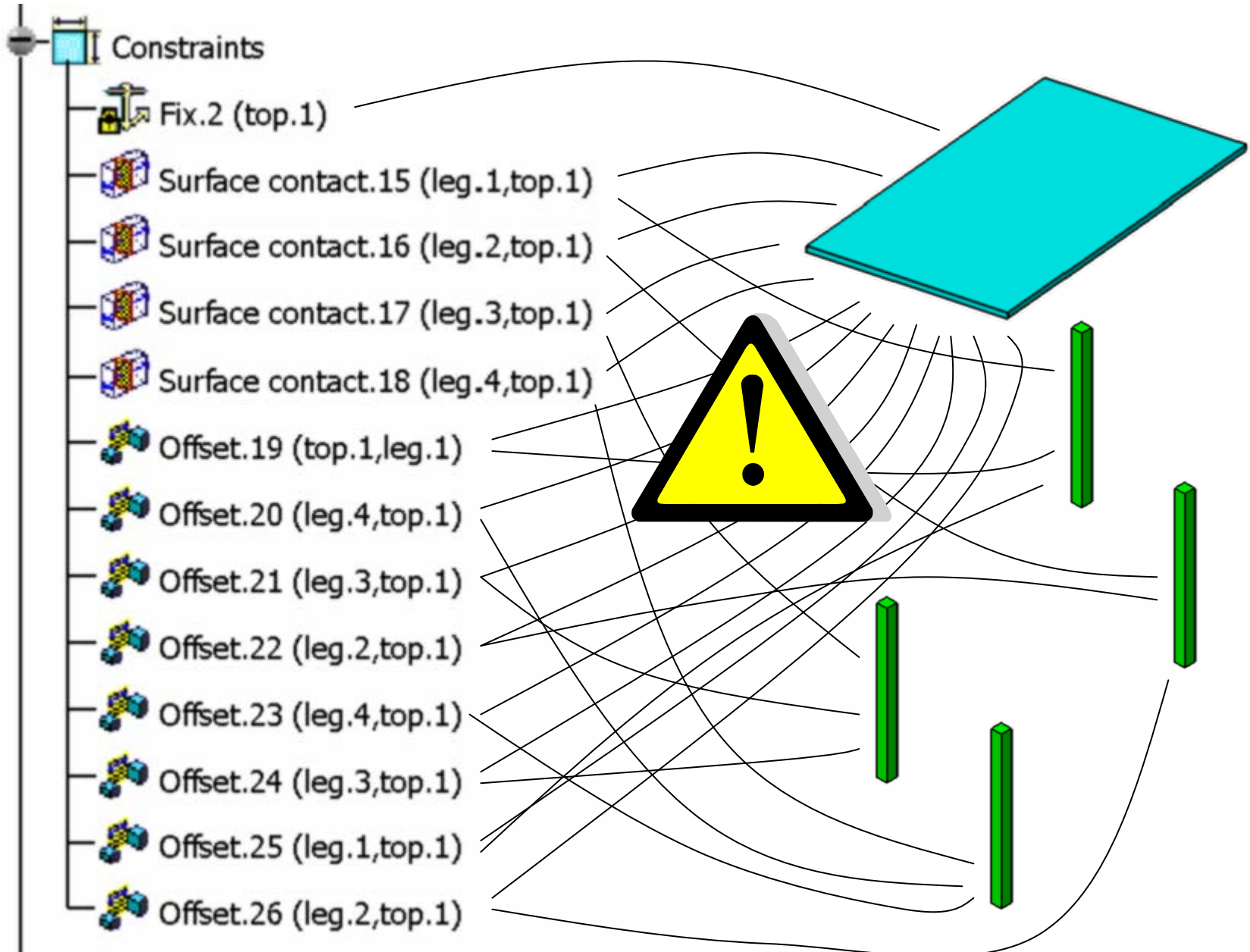


Component

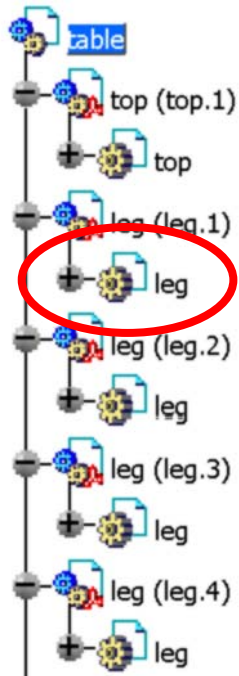


a component is « embedded » into its father (a product). It's just a way for structuring a system for business needs

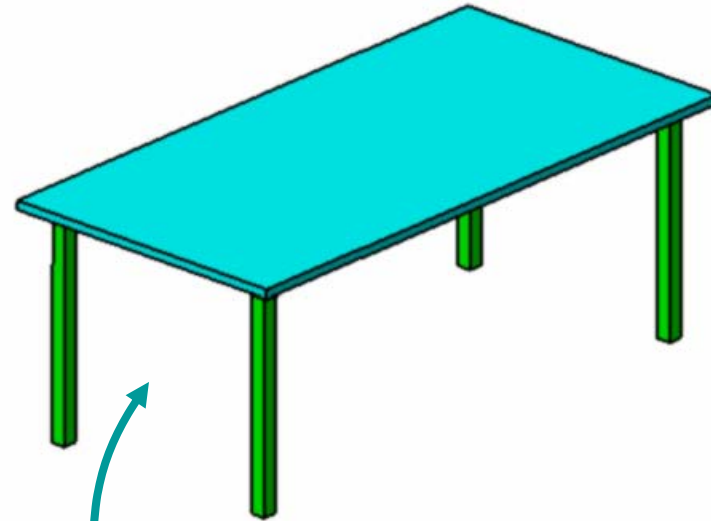
Legs / Top relative positions – 1st solution



Legs / Top relative positions – 2nd solution



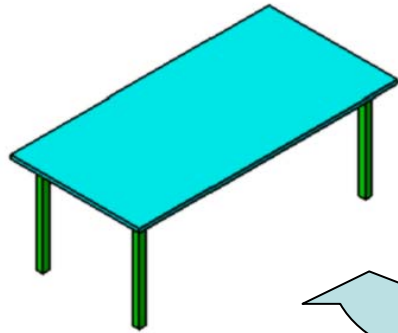
The shapes are defined in the CAD files



The positions of the parts are driven by the position matrix saved in a PDM system (figured here by a spreadsheet)

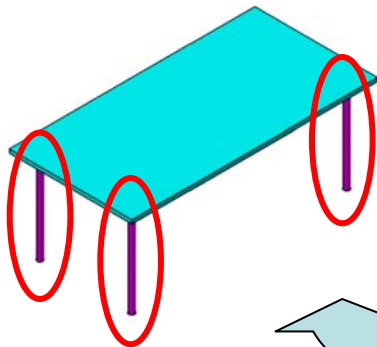
D	H	I	J	K	L	M	N	O	P	Q	R	S	T
Name	Qty	iX	iY	iZ	jX	jY	jZ	kX	kY	kZ	oX	oY	oZ
TABLE PR200911022225481_A1	0												
TOP PA200911022225482_A1	1	1	0	0	0	1	0	0	0	1	0	0	0
LEG PA200911022225484_A1	4	1	0	0	0	1	0	0	0	1	778	301	0
		1	0	0	0	1	0	0	0	1	870	-198	0
		1	0	0	0	1	0	0	0	1	-830	-329	0
		1	0	0	0	1	0	0	0	1	-877	385	0

Replace a part



D		H	I	J	K	L	M	N	O	P	Q	R	S	T
Name		Qty	iX	iY	iZ	jX	jY	jZ	kX	kY	kZ	oX	oY	oZ
TABLE	PR200911022355181_A1	0												
TOP	PA200911022355182_A1	1	1	0	0	0	1	0	0	0	1	0	0	0
LEG	PA200911022355183_A1	4	1	0	0	0	1	0	0	0	1	875	375	-750
		1	0	0	0	1	0	0	0	1	875	-375	-750	
		1	0	0	0	1	0	0	0	1	-875	-375	-750	
		1	0	0	0	1	0	0	0	1	-875	375	-750	

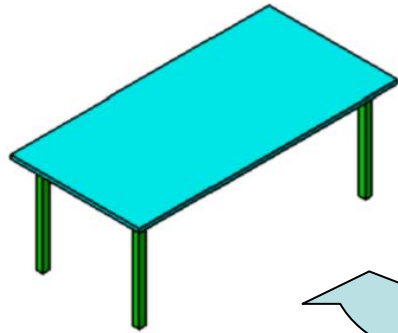
Create Product



D		H	I	J	K	L	M	N	O	P	Q	R	S	T
Name		Qty	iX	iY	iZ	jX	jY	jZ	kX	kY	kZ	oX	oY	oZ
TABLE	PR200911022355181_A1	0												
TOP	PA200911022355182_A1	1	1	0	0	0	1	0	0	0	1	0	0	0
LEG_CYL	PA20091102225484_A1	4	1	0	0	0	1	0	0	0	1	875	375	-750
		1	0	0	0	1	0	0	0	1	875	-375	-750	
		1	0	0	0	1	0	0	0	1	-875	-375	-750	
		1	0	0	0	1	0	0	0	1	-875	375	-750	

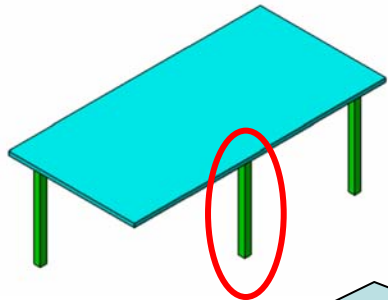
Create Product

Change the position of a part



D		H	I	J	K	L	M	N	O	P	Q	R	S	T
Name		Qty	iX	iY	iZ	jX	jY	jZ	kX	kY	kZ	oX	oY	oZ
TABLE	PR200911022355181_A1	0												
TOP	PA200911022355182_A1	1	1	0	0	0	1	0	0	0	1	0	0	0
LEG	PA200911022355183_A1	4	1	0	0	0	1	0	0	0	1	875	375	-750
			1	0	0	0	1	0	0	0	1	875	-375	-750
			1	0	0	0	1	0	0	0	1	-875	-375	-750
			1	0	0	0	1	0	0	0	1	-875	375	-750

Create Product



D		H	I	J	K	L	M	N	O	P	Q	R	S	T
Name		Qty	iX	iY	iZ	jX	jY	jZ	kX	kY	kZ	oX	oY	oZ
TABLE	PR200911022355181_A1	0												
TOP	PA200911022355182_A1	1	1	0	0	0	1	0	0	0	1	0	0	0
LEG	PA200911022355183_A1	4	1	0	0	0	1	0	0	0	1	0	375	-750
			1	0	0	0	1	0	0	0	1	875	-375	-750
			1	0	0	0	1	0	0	0	1	-875	-375	-750
			1	0	0	0	1	0	0	0	1	-875	375	-750

Create Product

