



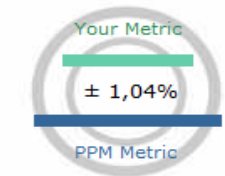
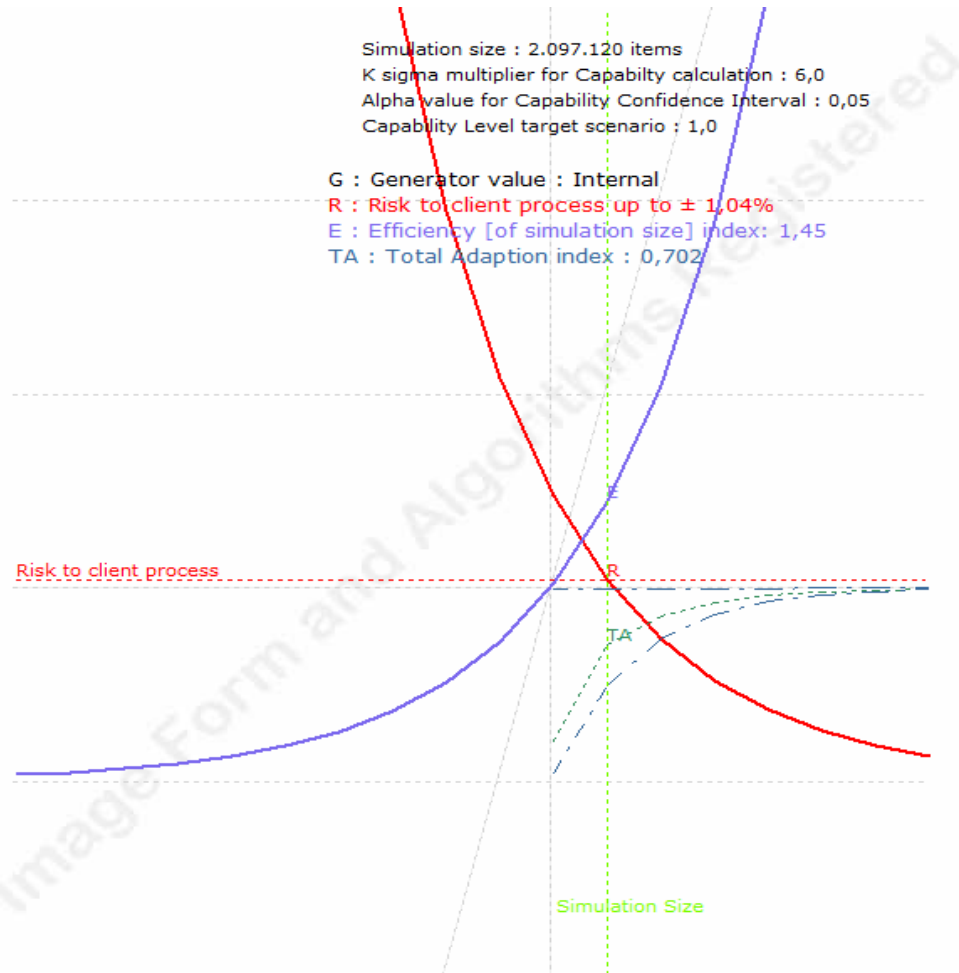
The Dalmatian Test version  
Comparison Study  
Data-File

1.00.04.18 [32 bit]  
Triangular\_2\_MB  
not saved

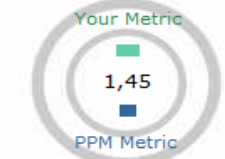
Registered pro edition

Is My Edition

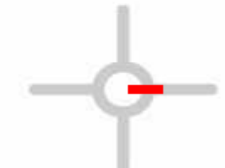
G.r.e.t.a p&ss graph - Power and Sample Size for Montecarlo Simulation



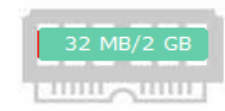
Unit Resolution Plot



Efficiency Plot



Expected Bias Value



Required Memory [32 bit]



This Comparison Study	Triangular Distribution
Generator	Mersenne Twister 2002
Seed value	Internal
Simulated Items	2.097.120
K sigma multiplier for capability calculation	6,00
Alpha value for Capability CI	0,05
nearTrue extended range	disabled
Unit In-Metric Test value [%]	auto CI
Simulation size Efficiency index	1,45
Total Adaption index	0,702
Memory peak in this Win32 process [MB]	32,00
Residual and available Win32 memory [%]	98,44%
Total Time for this Comparison calculation [s]	1,45

Data Entry Summary	[A]	[B]	[C]	[D]	[E]	[F]
Data Distributed as	Triangular	Triangular	Triangular	Triangular	Triangular	d[0.5*x^2]/dx
1* Par Value	1,083485	1,083485	1,083485	1,083485	1,083485	1,083485
2* Par Value	2,916515	2,916515	2,916515	2,916515	2,916515	2,916515
3* Par Value	1,4	1,4	1,4	1,4	1,4	1,4
4* Par Value						
Lower Spec Limit	1,2	1,2	1,2	1,2	1,2	1,2
Upper Spec Limit	2,7	2,7	2,7	2,7	2,7	2,7

Moment Values	[A]	[B]	[C]	[D]	[E]	[F]
Procedure	Master	Brute Normal	ISO D_ID	Bothe D_ID	LuLu	d[0.5*x^2]/dx
Moment 1 - [Mean]	1,8	1,799866	1,799866	1,799866	1,799866	1,8
Bias		-0,000134	-0,000134	-0,000134	-0,000134	
Sqrt(Moment 2) - [Standard Deviation]	0,4	0,400261	0,400261	0,400261	0,400261	0,4
Bias		0,000261	0,000261	0,000261	0,000261	
Moment 3 - [Skewness]	0,5	0,502468	0,502468	0,502468	0,502468	0,5
Bias		0,002468	0,002468	0,002468	0,002468	
Moment 4 - [Kurtosis]	-0,6	-0,598234	-0,598234	-0,598234	-0,598234	-0,6
Bias		0,001766	0,001766	0,001766	0,001766	
Moment 2 - [Variance]	0,16	0,160209	0,160209	0,160209	0,160209	0,16
Bias		0,000209	0,000209	0,000209	0,000209	
Coefficient of Variability	0,222222	0,222384	0,222384	0,222384	0,222384	0,222222
Mean Standard Error		0,000276	0,000276	0,000276	0,000276	

Distribution Identification Cycle	[A]	[B]	[C]	[D]	[E]	[F]
D(1)_ID - Kolmogorov-Smirnov	0	0,000939	0,000863	0,000863		

Calculated parameters i.e. Output to Client Process Capability Algorithm		L	U	[A] Theo	[B] Normal	[C] ISO D_ID	[D] Bothe D_ID	[E] LuLu	[F] Normal
PpK				0,662707	0,499562	0,860309	0,665243	0,663384	-0,013317
Bias					-0,163145	0,197602	0,002536	0,000677	-0,676024
PpK - Metric Test		0,66158	0,663834		false	false	false	true	false
PpL				0,662707	0,499562	0,861098	0,665243	0,663384	-0,013317
Bias					-0,163145	0,198391	0,002536	0,000677	-0,676024
PpL - Metric Test		0,66158	0,663834		false	false	false	true	false
PpU				0,70777	0,749622	0,860309	0,706689	0,706521	0,184754
Bias					0,041852	0,15254	-0,001081	-0,001249	-0,523015
PpU - Metric Test		0,706591	0,708948		false	false	true	false	false
Pp				0,685238	0,624592	0,860592	0,685966	0,684952	0,085719
Bias					-0,060646	0,175353	0,000728	-0,000286	-0,59952
Pp - Metric Test		0,684288	0,686188		false	false	true	true	false
L-OofS				23399,17736	66977,61447	4893,091153	22981,65923	23287,17479	515933,5548
Bias					43578,43711	-18506,08621	-417,518129	-112,002567	492534,3774
L-OofS - Metric Test	[auto CI]	23212,86724	23586,74417		false	false	false	true	false
L-OofS - Metric % Variation	[auto CI]	-0,80%	0,80%		186,24%	-79,09%	-1,78%	-0,48%	2104,92%
U-OofS				16863,98268	12260,51266	4926,757989	17000,20404	17021,43893	289699,5856
Bias					-4603,470022	-11937,22469	136,221356	157,456247	272835,6029
U-OofS - Metric Test	[auto CI]	16716,49486	17012,5819		false	false	true	false	false
U-OofS - Metric % Variation	[auto CI]	-0,87%	0,88%		-27,30%	-70,79%	0,81%	0,93%	1617,86%
OofS				40263,16004	79238,12713	9819,849142	39981,86326	40308,61372	805633,1404
Bias					38974,96709	-30443,3109	-281,296773	45,45368	765369,9804
OofS - Metric Test	[auto CI]	39929,3621	40599,32607		false	false	true	true	false
OofS - Metric % Variation	[auto CI]	-0,83%	0,83%		96,80%	-75,61%	-0,70%	0,11%	1900,92%



BenchMark of Procedures	[A]	[B]	[C]	[D]	[E]	[F]
Procedure	Master	Brute Normal	ISO D_ID	Bothe D_ID	LuLu	d[0.5*x^2]/dx
Common statistical calculation [s]				0,46358	0,46358	
15 times the Kolmogorov-Smirnov cycle time for the identification of a unknown dataset (unknown master) [s]				9,484061	0	
Procedure Capability Algorithm [s]				0,00001	0,00001	
Estimated total Time [s] using Intel(R) Core(TM) i7-6700HQ CPU @ 2.60GHz				9,947651	0,46359	
Relative X Speed [LuLu vs KS-Bothe]					21,5	
Relative Robustness at this Simulation size					0,95	
Abjusted X Speed					20,4	

KS algorithm is used in this tool mainly to get the relative computing time in D\_ID Cycle, without additional memory requirement.  
 Note that if you use a different algorithm in the D\_ID loop, the time and memory needed for GoF will increase significantly. (or alternatively the simulation size must be reduced)  
 The absolute speed is instead a function of the performance and characteristics of used generator (NtRand © 3.3. in our case)

Procedure comparison at same Win32 memory

