



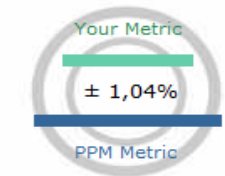
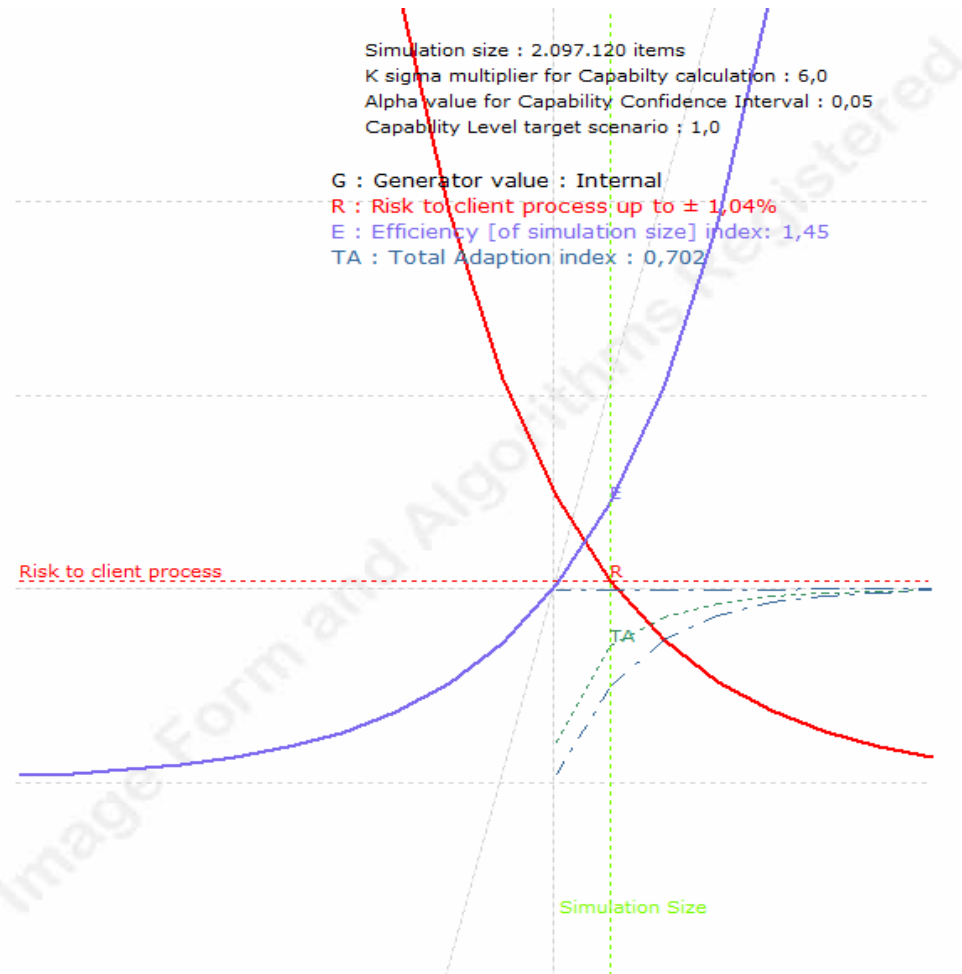
The Dalmatian Test version
Comparison Study
Data-File

1.00.04.18 [32 bit]
Normal_2_MB
not saved

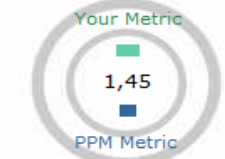
Registered pro edition

Is My Edition

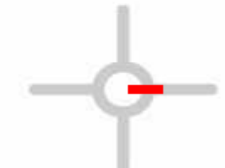
G.r.e.t.a p&ss graph - Power and Sample Size for Montecarlo Simulation



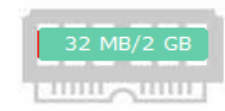
Unit Resolution Plot



Efficiency Plot



Expected Bias Value



Required Memory [32 bit]



This Comparison Study		Normal Distribution
Generator	Mersenne Twister 2002	Box-Muller
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]	1,50	

Data Entry Summary	[A]	[B]	[C]	[D]	[E]	[F]
Data Distributed as	Normal	Normal	Normal	Normal	Normal	d[0.5*x^2]/dx
1* Par Value	0	0	0	0	0	0
2* Par Value	1	1	1	1	1	1
3* Par Value						
4* Par Value						
Lower Spec Limit	-3	-3	-3	-3	-3	-3
Upper Spec Limit	3	3	3	3	3	3

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]	0	-0,000455	-0,000455	-0,000455	-0,000455	0
Bias		-0,000455	-0,000455	-0,000455	-0,000455	
Sqrt(Moment 2) - [Standard Deviation]	1	1,000015	1,000015	1,000015	1,000015	1
Bias		0,000015	0,000015	0,000015	0,000015	
Moment 3 - [Skewness]	0	-0,002291	-0,002291	-0,002291	-0,002291	0
Bias		-0,002291	-0,002291	-0,002291	-0,002291	
Moment 4 - [Kurtosis]	0	-0,000008	-0,000008	-0,000008	-0,000008	0
Bias		-0,000008	-0,000008	-0,000008	-0,000008	
Moment 2 - [Variance]	1	1,000029	1,000029	1,000029	1,000029	1
Bias		0,000029	0,000029	0,000029	0,000029	
Coefficient of Variability	Infinite	-2196,153749	-2196,153749	-2196,153749	-2196,153749	Infinite
Mean Standard Error		0,000691	0,000691	0,000691	0,000691	

Distribution Identification Cycle	[A]	[B]	[C]	[D]	[E]	[F]
D(1)_ID - Kolmogorov-Smirnov	0	0,000939	0,000415	0,000415		

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				1	0,999834	0,999834	0,999834	0,999032	1
Bias					-0,000166	-0,000166	-0,000166	-0,000968	0
PpK - Metric Test		0,998468	1,001532		true	true	true	true	true
PpL				1	0,999834	0,999834	0,999834	0,999032	1
Bias					-0,000166	-0,000166	-0,000166	-0,000968	0
PpL - Metric Test		0,998468	1,001532		true	true	true	true	true
PpU				1	1,000137	1,000137	1,000137	1,002242	1
Bias					0,000137	0,000137	0,000137	0,002242	0
PpU - Metric Test		0,998468	1,001532		true	true	true	false	true
Pp				1	0,999985	0,999985	0,999985	1,000637	1
Bias					-0,000015	-0,000015	-0,000015	0,000637	0
Pp - Metric Test		0,998614	1,001385		true	true	true	true	true
L-OofS				1349,898032	1352,111643	1352,111643	1352,111643	1362,821393	1349,898032
Bias					2,213611	2,213611	2,213611	12,923362	0
L-OofS - Metric Test	[auto CI]	1329,666812	1370,410163		true	true	true	true	true
L-OofS - Metric % Variation	[auto CI]	-1,50%	1,52%		0,16%	0,16%	0,16%	0,96%	0,00%
U-OofS				1349,898032	1348,075102	1348,075102	1348,075102	1320,382238	1349,898032
Bias					-1,822929	-1,822929	-1,822929	-29,515793	0
U-OofS - Metric Test	[auto CI]	1329,666812	1370,410163		true	true	true	false	true
U-OofS - Metric % Variation	[auto CI]	-1,50%	1,52%		-0,14%	-0,14%	-0,14%	-2,19%	0,00%
OofS				2699,796063	2700,186745	2700,186745	2700,186745	2683,203632	2699,796063
Bias					0,390682	0,390682	0,390682	-16,592432	0
OofS - Metric Test	[auto CI]	2659,333624	2740,820326		true	true	true	true	true
OofS - Metric % Variation	[auto CI]	-1,50%	1,52%		0,01%	0,01%	0,01%	-0,61%	0,00%



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]				0,476821	0,476821	
15 times the Kolmogorov-Smirnov cycle time for the identification of a unknown dataset (unknown master) [s]				10,517809	0	
Procedure Capability Algorithm [s]				0,00001	0,000028	
Estimated total Time [s] using Intel(R) Core(TM) i7-6700HQ CPU @ 2.60GHz				10,994639	0,476849	
Relative X Speed [LuLu vs KS-Bothe]					23,1	
Relative Robustess at this Simulation size					0,95	
Abjusted X Speed					21,9	

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

