



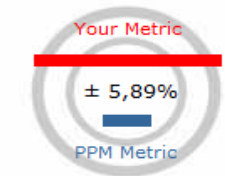
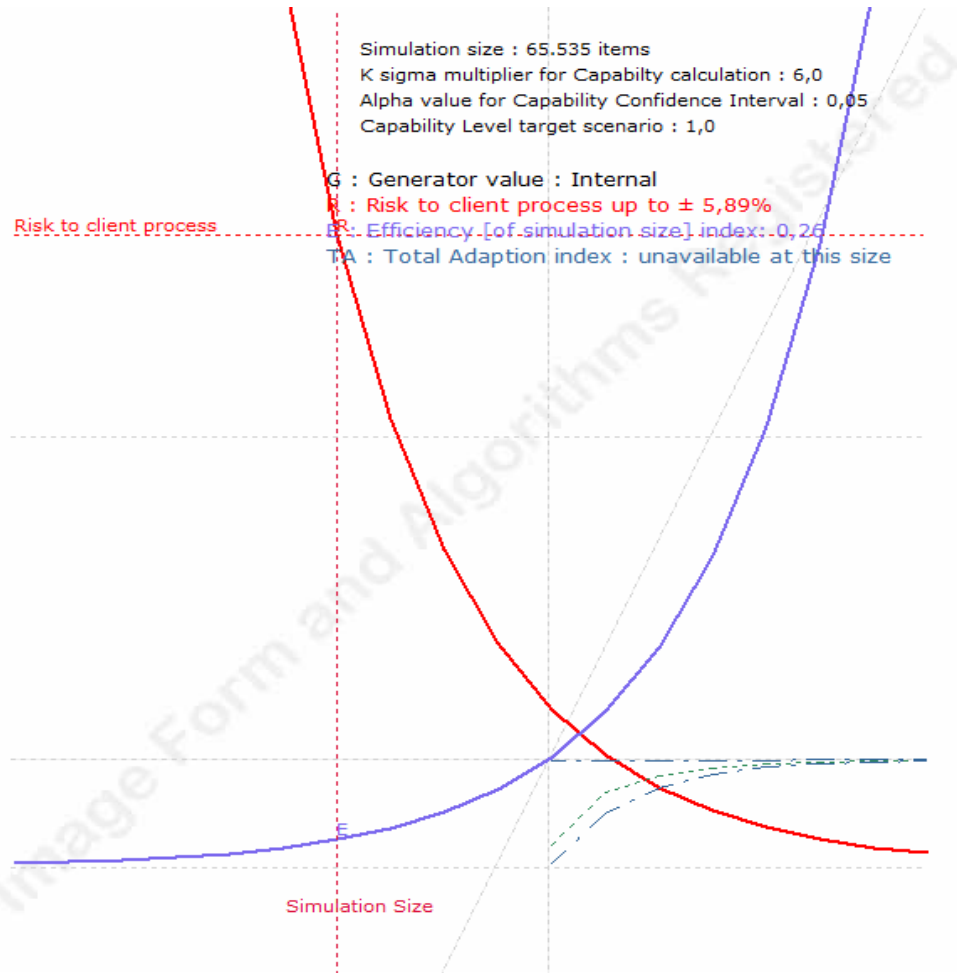
The Dalmatian Test version
Comparison Study
Data-File

1.00.04.18 [32 bit]
Normal_64_kB
not saved

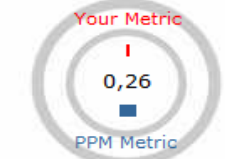
Registered pro edition

Is My Edition

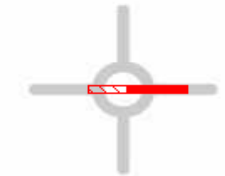
G.r.e.t.a p&ss graph - Power and Sample Size for Montecarlo Simulation



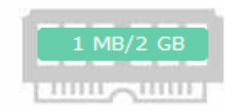
Unit Resolution Plot



Efficiency Plot



Expected Bias Value and Sundog event probability



Required Memory [32 bit]



This Comparison Study		Normal Distribution	
Generator	Mersenne Twister 2002	Box-Muller	
Seed value	Internal		
Simulated Items	65.535		
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	0,26		
Total Adaption index	unavailable at this size		
Memory peak in this Win32 process [MB]	1,00		
Residual and available Win32 memory [%]	99,95%		
Total Time for this Comparison calculation [s]	0,05		

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	-0,000549	-0,000549	-0,000549		0
Bias		-0,000549	-0,000549	-0,000549		
Sqrt(Moment 2) - [Standard Deviation]	1	1,002516	1,002516	1,002516		1
Bias		0,002516	0,002516	0,002516		
Moment 3 - [Skewness]	0	-0,019943	-0,019943	-0,019943		0
Bias		-0,019943	-0,019943	-0,019943		
Moment 4 - [Kurtosis]	0	0,015861	0,015861	0,015861		0
Bias		0,015861	0,015861	0,015861		
Moment 2 - [Variance]	1	1,005038	1,005038	1,005038		1
Bias		0,005038	0,005038	0,005038		
Coefficient of Variability	Infinite	-1824,794532	-1824,794532	-1824,794532		Infinite
Mean Standard Error		0,003916	0,003916	0,003916		

Distribution Identification Cycle	[A]	[B]	[C]	[D]	[E]	[F]
D(1)_ID - Kolmogorov-Smirnov	0	0,005313	0,003028	0,003028		

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	0,997308	0,997308	0,997308		1
Bias					-0,002692	-0,002692	-0,002692		0
PpK - Metric Test		0,998468	1,001532		false	false	false		true
PpL				1	0,997308	0,997308	0,997308		1
Bias					-0,002692	-0,002692	-0,002692		0
PpL - Metric Test		0,998468	1,001532		false	false	false		true
PpU				1	0,997673	0,997673	0,997673		1
Bias					-0,002327	-0,002327	-0,002327		0
PpU - Metric Test		0,998468	1,001532		false	false	false		true
Pp				1	0,99749	0,99749	0,99749		1
Bias					-0,00251	-0,00251	-0,00251		0
Pp - Metric Test		0,998614	1,001385		false	false	false		true
L-OofS				1349,898032	1386,129033	1386,129033	1386,129033		1349,898032
Bias					36,231001	36,231001	36,231001		0
L-OofS - Metric Test	[auto CI]	1329,666812	1370,410163		false	false	false		true
L-OofS - Metric % Variation	[auto CI]	-1,50%	1,52%		2,68%	2,68%	2,68%		0,00%
U-OofS				1349,898032	1381,160849	1381,160849	1381,160849		1349,898032
Bias					31,262818	31,262818	31,262818		0
U-OofS - Metric Test	[auto CI]	1329,666812	1370,410163		false	false	false		true
U-OofS - Metric % Variation	[auto CI]	-1,50%	1,52%		2,32%	2,32%	2,32%		0,00%
OofS				2699,796063	2767,289882	2767,289882	2767,289882		2699,796063
Bias					67,493819	67,493819	67,493819		0
OofS - Metric Test	[auto CI]	2659,333624	2740,820326		false	false	false		true
OofS - Metric % Variation	[auto CI]	-1,50%	1,52%		2,50%	2,50%	2,50%		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]				0,014825		
15 times the Kolmogorov-Smirnov cycle time for the identification of a unknown dataset (unknown master) [s]				0,356047		
Procedure Capability Algorithm [s]				0,000007		
Estimated total Time [s] using Intel(R) Core(TM) i7-6700HQ CPU @ 2.60GHz				0,370879		

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

