



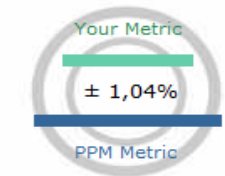
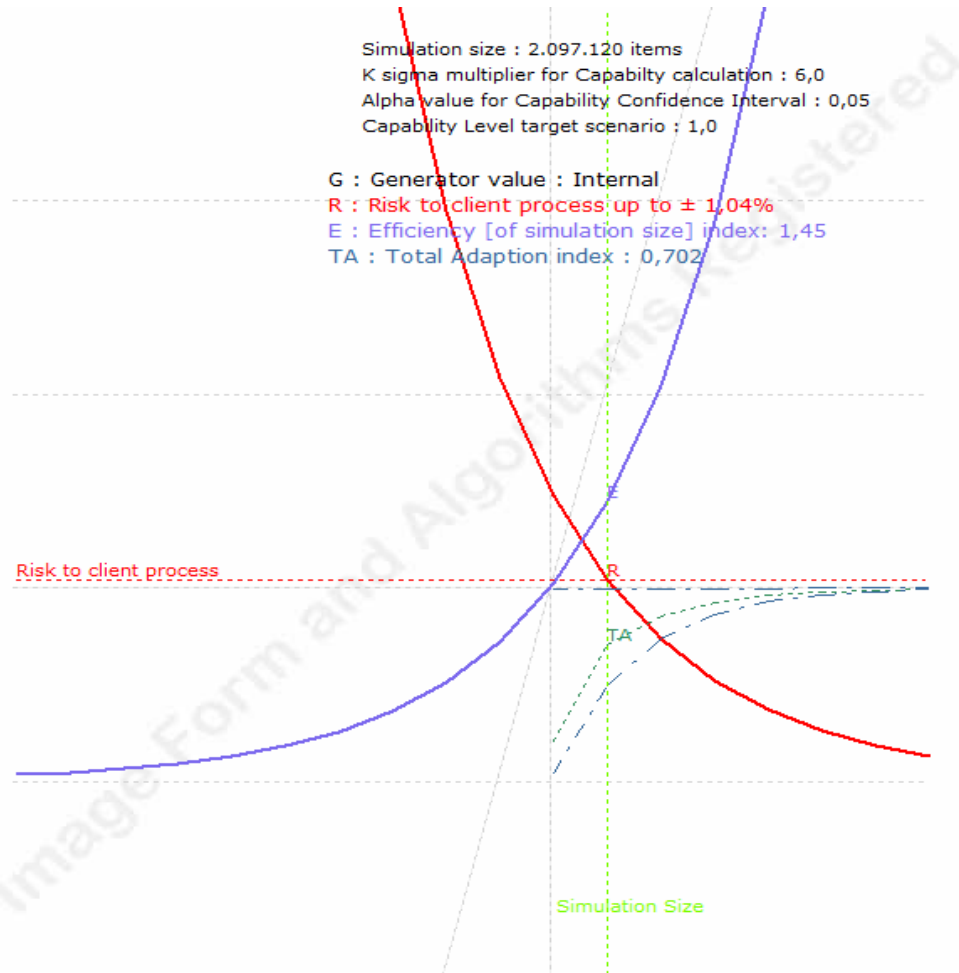
The Dalmatian Test version
Comparison Study
Data-File

1.00.04.18 [32 bit]
Weibull_2_MB
not saved

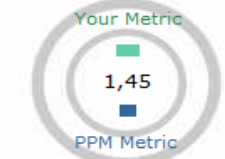
Registered pro edition

Is My Edition

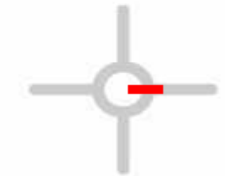
G.r.e.t.a p&ss graph - Power and Sample Size for Montecarlo Simulation



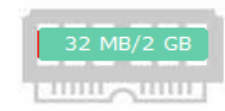
Unit Resolution Plot



Efficiency Plot



Expected Bias Value



Required Memory [32 bit]



This Comparison Study		Weibull 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]	1,64	

Data Entry Summary	[A]	[B]	[C]	[D]	[E]	[F]
Data Distributed as	Weibull	Weibull	Weibull	Weibull	Weibull	d[0.5*x^2]/dx
1* Par Value	1,64181	1,64181	1,64181	1,64181	1,64181	1,64181
2* Par Value	0,894284	0,894284	0,894284	0,894284	0,894284	0,894284
3* Par Value						
4* Par Value						
Lower Spec Limit	0,3	0,3	0,3	0,3	0,3	0,3
Upper Spec Limit	2,1	2,1	2,1	2,1	2,1	2,1

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]	0,8	0,799953	0,799953	0,799953	0,799953	0,8
Bias		-0,000047	-0,000047	-0,000047	-0,000047	
Sqrt(Moment 2) - [Standard Deviation]	0,5	0,500526	0,500526	0,500526	0,500526	0,5
Bias		0,000526	0,000526	0,000526	0,000526	
Moment 3 - [Skewness]	0,919993	0,922899	0,922899	0,922899	0,922899	0,919993
Bias		0,002905	0,002905	0,002905	0,002905	
Moment 4 - [Kurtosis]	0,922545	0,923532	0,923532	0,923532	0,923532	0,922545
Bias		0,000987	0,000987	0,000987	0,000987	
Moment 2 - [Variance]	0,25	0,250526	0,250526	0,250526	0,250526	0,25
Bias		0,000526	0,000526	0,000526	0,000526	
Coefficient of Variability	0,625	0,625694	0,625694	0,625694	0,625694	0,625
Mean Standard Error		0,000346	0,000346	0,000346	0,000346	

Distribution Identification Cycle	[A]	[B]	[C]	[D]	[E]	[F]
D(1)_ID - Kolmogorov-Smirnov	0	0,000939	0,000481	0,000481		

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				0,340783	0,332952	0,593656	0,340298	0,340483	0,170785
Bias					-0,007831	0,252873	-0,000485	-0,0003	-0,169998
PpK - Metric Test		0,339977	0,341589		false	false	true	true	false
PpL				0,340783	0,332952	0,593656	0,340298	0,340483	0,500143
Bias					-0,007831	0,252873	-0,000485	-0,0003	0,15936
PpL - Metric Test		0,339977	0,341589		false	false	true	true	false
PpU				0,704942	0,865787	0,655425	0,704152	0,70377	0,170785
Bias					0,160845	-0,049516	-0,00079	-0,001172	-0,534157
PpU - Metric Test		0,703766	0,706117		false	false	true	true	false
Pp				0,522862	0,599369	0,640069	0,522225	0,522126	0,335464
Bias					0,076507	0,117207	-0,000637	-0,000736	-0,187398
Pp - Metric Test		0,522137	0,523587		false	false	true	false	false
L-OofS				153307,9491	158932,5189	37458,79948	153652,1961	153521,0193	66751,61314
Bias					5624,569805	-115849,1496	344,247056	213,070226	-86556,33593
L-OofS - Metric Test	[auto CI]	152736,5335	153880,7793		false	false	true	true	false
L-OofS - Metric % Variation	[auto CI]	-0,37%	0,37%		3,67%	-75,57%	0,22%	0,14%	-56,46%
U-OofS				17222,43844	4697,153685	24633,36592	17323,73283	17372,87327	304201,4329
Bias					-12525,28476	7410,927484	101,29439	150,434834	286978,9944
U-OofS - Metric Test	[auto CI]	17072,68662	17373,31108		false	false	true	true	false
U-OofS - Metric % Variation	[auto CI]	-0,87%	0,88%		-72,73%	43,03%	0,59%	0,87%	1666,31%
OofS				170530,3875	163629,6726	62092,1654	170975,929	170893,8926	370953,046
Bias					-6900,71495	-108438,2221	445,541447	363,50506	200422,6585
OofS - Metric Test	[auto CI]	169809,2201	171254,0903		false	false	true	true	false
OofS - Metric % Variation	[auto CI]	-0,42%	0,42%		-4,05%	-63,59%	0,26%	0,21%	117,53%



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]				0,464219	0,464219	
15 times the Kolmogorov-Smirnov cycle time for the identification of a unknown dataset (unknown master) [s]				11,435023	0	
Procedure Capability Algorithm [s]				0,00001	0,000028	
Estimated total Time [s] using Intel(R) Core(TM) i7-6700HQ CPU @ 2.60GHz				11,899253	0,464248	
Relative X Speed [LuLu vs KS-Bothe]					25,6	
Relative Robustess at this Simulation size					0,95	
Abjusted X Speed					24,3	

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

