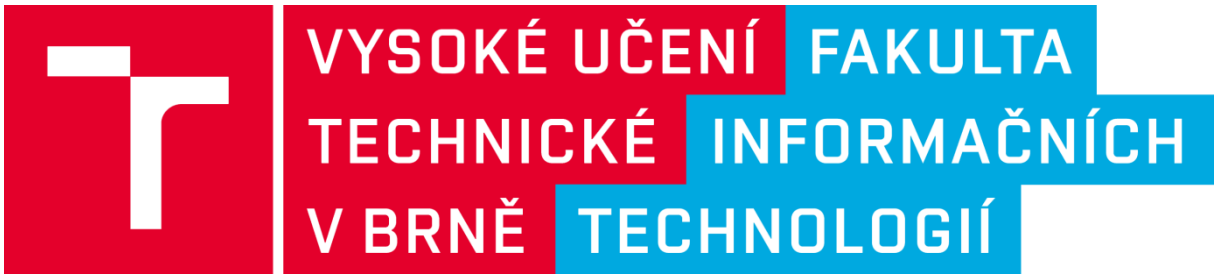

Profiling report

28.4.2022

Team Memory Leak (xduric06, xmahut01, xsluka00, xpagan00)

10 samples:

Function Name	Number of Calls	Elapsed Inclusive Time %	Elapsed Exclusive Time %	Avg Elapsed Inclusive Time	Avg Elapsed Exclusive Time
StandardDeviation.exe	**0**	**100,00 %**	**0,00 %**	**0,00**	**0,00**
MathematicaLibraryIVS.ML.plus(valuetype System.D...	20	49,41 %	49,41 %	3 073,51	3 073,51
MathematicaLibraryIVS.ML.power(valuetype System.D...	11	27,17 %	27,17 %	3 073,51	3 073,51
MathematicaLibraryIVS.ML.minus(valuetype System.D...	2	4,94 %	4,94 %	3 073,51	3 073,51
MathematicaLibraryIVS.ML.divide(valuetype System.D...	2	4,94 %	4,94 %	3 073,51	3 073,51
StandardDeviation.Program.calcSDeviation(class Syste...	1	3,65 %	3,65 %	4 546,72	4 546,72
StandardDeviation.Program.genRandNum(int32)	1	2,48 %	2,48 %	3 079,29	3 079,29
MathematicaLibraryIVS.ML.root(valuetype System.De...	1	2,47 %	2,47 %	3 073,51	3 073,51
MathematicaLibraryIVS.ML.multiply(valuetype System...	1	2,47 %	2,47 %	3 073,51	3 073,51
StandardDeviation.Program.Main(string[])	1	2,47 %	2,47 %	3 067,73	3 067,73

100 samples:

Function Name	Number of Calls	Elapsed Inclusive Time %	Elapsed Exclusive Time %	Avg Elapsed Inclusive Time	Avg Elapsed Exclusive Time
StandardDeviation.exe	**0**	**100,00 %**	**0,00 %**	**0,00**	**0,00**
MathematicaLibraryIVS.ML.plus(valu...	200	64,42 %	64,42 %	3 073,51	3 073,51
MathematicaLibraryIVS.ML.power(valu...	101	32,53 %	32,53 %	3 073,51	3 073,51
MathematicaLibraryIVS.ML.minus(valu...	2	0,64 %	0,64 %	3 073,51	3 073,51
MathematicaLibraryIVS.ML.divide(valu...	2	0,64 %	0,64 %	3 073,51	3 073,51
StandardDeviation.Program.calcSDevia...	1	0,48 %	0,48 %	4 546,72	4 546,72
StandardDeviation.Program.genRandN...	1	0,32 %	0,32 %	3 079,29	3 079,29
MathematicaLibraryIVS.ML.root(valuet...	1	0,32 %	0,32 %	3 073,51	3 073,51
MathematicaLibraryIVS.ML.multiply(val...	1	0,32 %	0,32 %	3 073,51	3 073,51
StandardDeviation.Program.Main(strin...	1	0,32 %	0,32 %	3 067,73	3 067,73

1000 samples:

Function Name	Number of Calls	Elapsed Inclusive Time %	Elapsed Exclusive Time %	Avg Elapsed Inclusive Time	Avg Elapsed Exclusive Time
StandardDeviation.exe	**0**	**100,00 %**	**0,00 %**	**0,00**	**0,00**
MathematicaLibraryIVS.ML.plus(valu...	2 000	66,44 %	66,44 %	3 072,22	3 072,22
MathematicaLibraryIVS.ML.power(valu...	1 001	33,24 %	33,24 %	3 070,93	3 070,93
MathematicaLibraryIVS.ML.minus(valu...	2	0,07 %	0,07 %	3 073,51	3 073,51
MathematicaLibraryIVS.ML.divide(valu...	2	0,07 %	0,07 %	3 073,51	3 073,51
StandardDeviation.Program.calcSDevia...	1	0,05 %	0,05 %	4 546,72	4 546,72
StandardDeviation.Program.genRandN...	1	0,03 %	0,03 %	3 079,29	3 079,29
MathematicaLibraryIVS.ML.root(valuet...	1	0,03 %	0,03 %	3 073,51	3 073,51
MathematicaLibraryIVS.ML.multiply(val...	1	0,03 %	0,03 %	3 073,51	3 073,51
StandardDeviation.Program.Main(strin...	1	0,03 %	0,03 %	3 067,73	3 067,73

Evaluation of profiling

To collect data was used Visual Studio built-in Performance Profiler (Instrumentation tool). Majority of time is consuming “plus” function, which was called 2000 times in profiling with 1000 samples. Second most time consuming function is “power” function which was called 1001 times (with 1000 samples). In conclusion, optimizing code of Mathematical Library should be focused mainly on “plus” and “power” function.