

Actionscript Benchmark Tests

#1 Attaching movieclips: for loop vs. while loop

1500 iterations attaching movieclips on stage: for loop vs while loop

FlashFlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	For loop	While loop		For loop	While loop
Test 1	147	119		300	275
Test 2	146	123		310	264
Test 3	148	120		319	282
	147,5	119,5		309,5	278,5

#2 Read data from Array (for, for in, while)

5000 iterations reading data from an array

FlashPlayer 6 - Compiled with Flash MX 2004							
Athlon 2.6ghz			PIV - 2.0 Ghz				
	For loop	For in loop	While loop		For loop	For in loop	While loop
Test 1	47	34	34		136	64	109
Test 2	49	32	34		138	62	107
Test 3	48	33	34		142	62	107
	47,5	33,5	34		139	63	108

#3 Write data to an array (for, while)

5000 iterations writing data to an array

FlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	For loop	While loop		For loop	While loop
Test 1	40	38		120	125
Test 2	40	39		122	119
Test 3	40	38		121	122
	40	38		120,5	123,5

#4 _global vars vs. Timeline vars

20000 loops writing to a timeline variable and a _global variable

FlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	_global	Timeline		_global	Timeline
Test 1	252	325		782	1006
Test 2	237	315		784	981
Test 3	237	314		756	986
	244,5	319,5		769	996

#5 Single vs Multiple var declaration

10000 iterations writing same value to 8 variable using multiple assignment vs. one-by-one assignment

FlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	One by one	Multiple		One by one	Multiple
Test 1	172	167		348	332
Test 2	166	172		350	334
Test 3	171	175		349	336
	171,5	171		348,5	334

#6 Var name lookup

20000 iterations accessing built-in Math members. Direct access vs. Reference access

FlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	Always	Once		Always	Once
Test 1	344	246		659	484
Test 2	352	250		767	536
Test 3	355	250		731	504
	349,5	248		695	494

#7 Short vs. Long variable names

20000 iterations writing to short, medium and very long var names

FlashPlayer 6 - Compiled with Flash MX 2004							
Athlon 2.6ghz			PIV - 2.0 Ghz				
	Short	Medium	Very long		Short	Medium	Very long
Test 1	265	285	351		706	749	909
Test 2	271	289	354		709	755	915
Test 3	270	290	354		715	760	919
	267,5	287,5	352,5		710,5	754,5	914

#8 Declaring var in loops vs. declaring before loops

20000 iterations writing to a local variable

FlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	In loop	Before loop		In loop	Before loop
Test 1	78	78		165	165
Test 2	78	79		176	176
Test 3	78	78		165	168
	78	78		165	166,5

#9 Using nested if

20000 iterations checking 4 conditions in 1 expression vs splitting 4 conditions in 4 nested if

FlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	Nested if	Single exp.		Nested if	Single exp.
Test 1	166	197		384	331
Test 2	168	201		376	326
Test 3	166	200		382	331
	166	198,5		383	331

#10 Nested loops (for vs. while)

10000 iterations writing to a 100x100 bidimensional array: nested for vs. nested while

FlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	Nested for	Nested while		Nested for	Nested while
Test 1	132	127		387	378
Test 2	133	128		390	377
Test 3	132	127		398	389
	132	127		392,5	383,5

#11 TellTarget vs. dot syntax

10000 iterations writing properties to a MovieClip using TellTarget vs. Dot Syntax

FlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	TellTarget	Dot syntax		TellTarget	Dot syntax
Test 1	63	78		130	159
Test 2	84	67		130	160
Test 3	83	67		138	169
	73	72,5		134	164

#12 Accessing local vars (This vs. With)

10000 iterations writing an obj vars using this vs. with

FlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	This	With		This	With
Test 1	108	157		184	291
Test 2	107	157		185	292
Test 3	107	157		183	291
	107,5	157		183,5	291

#13 Loop listening for pressed keys

10000 iterations using Key.isDown, a function reference and key codes instead of key constants

FlashPlayer 6 - Compiled with Flash MX 2004							
Athlon 2.6ghz			PIV - 2.0 Ghz				
	Key.isDown	Reference	Ref. + codes		Key.isDown	Reference	Ref. + codes
Test 1	318	254	256		629	534	527
Test 2	319	266	261		637	544	546
Test 3	319	259	262		637	539	541
	318,5	256,5	259		633	536,5	534

#14 Math.floor() vs int()

10000 iterations transforming a float number into an int with Math.floor() vs int()

FlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	Math.floor()	Int()		Math.floor()	Int()
Test 1	52	39		100	77
Test 2	52	37		102	78
Test 3	53	38		101	77
	52,5	38,5		100,5	77

#15 Eval vs. array access

3000 iterations writing a property to a movieclip using eval() vs array access

FlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	Array	Eval		Array	Eval
Test 1	1014	1009		1151	1165
Test 2	975	984		1121	1147
Test 3	981	987		1122	1148
	997,5	998		1136,5	1156,5

#16 Looping through movieclips: ASBroadcaster vs. Loop

500 iterations looping through movieclips and calling methods on them. ASBroadcaster vs Loop

FlashPlayer 6 - Compiled with Flash MX 2004					
Athlon 2.6ghz			PIV - 2.0 Ghz		
	Loop	ASBr.		Loop	ASBr.
Test 1	23	16		47	31
Test 2	23	17		48	31
Test 3	23	15		47	32
	23	15,5		47	31,5