

Multics Staff Bulletin

MSB-102

TO: Distribution

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DATE: May 1, 1973

SUBJECT: Comparison of Compilation times for PL/1 and Fortran

The following results are those of a rerun of test described in MPL-62 dated April 19, 1973. Unlike the test run then, this test includes runs made on the HIS-6180 Multics rather than the 360/67 cp/cms. All pricing figures are current as of this reporting date (i.e. HIS-6180 Multics based on Vurtual CPU time and rates).

OS/ASP (fortran H, PL/1 version 5):

	CPU	memory	i/o	total
prog1.fortran	3.12 sec \$.37	200K-.110 min \$.18	223-87 \$.16	\$.71
prog2.fortran	1.62 sec \$.19	200K-.087 min \$.15	204-93 \$.15	\$.49
prog3.pl1	3.36 sec \$.40	128K-.769 min \$.82	251-1392 \$1.47	\$2.69
prog4.pl1	2.64 sec \$.31	128K-.650 min \$.69	214-1183 \$1.24	\$2.24

HIS-645 MULTICS (fortran version 2, PL/1 version 1)

	CPU	connect	pagefaults	total
prog1.fortran	18.824 sec \$1.88	33.333 sec \$.12	38+269	\$2.00
prog2.fortran	20.730 sec \$2.07	67.333 sec \$.24	111+463	\$2.31
prog3.pl1	35.419 sec \$3.54	144.633 sec \$.51	419+921	\$4.05
prog4.pl1	28.595 sec \$2.86	147.0 sec \$.51	415+708	\$3.37

HIS-6180 MULTICS (fortran version 2, PL/1 version 1)
*with new CPU pricing & measurement (virtual CPU time)

	CPU	connect	memory units	total
prog1.fortran	12.146 \$.73	16.666 sec \$.06	43.467 \$.65	\$1.44
prog2.fortran	12.718 \$.76	24.333 \$.09	34.588 \$.52	\$1.37

	CPU	connect	memory units	total
prog3.pl1	18.468	26.666	44.833	
	\$1.11	\$.09	\$.67	\$1.87
prog4.pl1	14.473	24.666	41.082	
	\$.87	\$.09	\$.62	\$1.58

CPU USAGE (seconds)	pgm 1	pgm 2	pgm 3	pgm 4
I370	3.12	1.62	3.36	2.64
H645	18.824	20.730	35.419	28.595
H6180	12.146	12.718	18.468	14.473

TOTAL COST	pgm 1	pgm 2	pgm 3	pgm 4
I370	\$.71	\$.49	\$2.69	\$2.24
H645	\$2.00	\$2.31	\$4.05	\$3.37
H6180	\$1.44	\$1.37	\$1.87	\$1.58