Table 1: Results (MBit/s) [heur_time: 180,226s] [cplex absmip-gap=0.1]

Instance	best known	heur value	rel_gap	abs_gap	cplex time
CPP seed0 pod4 C20 newR3 oldR0	0	0		0	$\frac{-60001_{-}00000}{1,495}$
CPP seed1 pod4 C20 newR3 oldR0	46,227	46,227	-0	-0	80,674
CPP seed2 pod4 C20 newR3 oldR0	18,245	18,245	-0	-0	192,916
CPP seed3 pod4 C20 newR3 oldR0	0	-0		-0	24,866
CPP seed4 pod4 C20 newR3 oldR0	225,946	255,068	0,129	29,123	3600,221
CPP seed5 pod4 C20 newR3 oldR0	23,472	23,472	-0	-0	23,514
CPP seed6 pod4 C20 newR3 oldR0	0	-0	-	-0	25,341
CPP seed7 pod4 C20 newR3 oldR0	0	0	-	0	15,83
CPP seed8 pod4 C20 newR3 oldR0	43,384	43,384	-0	-0	68,254
CPP seed9 pod4 C20 newR3 oldR0	0	0	_	0	13,959
CPP seed10 pod4 C20 newR3 oldR0	0	0	_	0	1,477
CPP seed11 pod4 C20 newR3 oldR0	6,675	6,675	-0	-0	46,704
CPP seed12 pod4 C20 newR3 oldR0	0	0	_	0	16,124
CPP seed13 pod4 C20 newR3 oldR0	0	-0	_	-0	13,51
CPP seed14 pod4 C20 newR3 oldR0	9,818	9,818	-0	-0	45,152
CPP seed15 pod4 C20 newR3 oldR0	32,102	32,102	-0	-0	150,876
CPP seed16 pod4 C20 newR3 oldR0	0	21,6	_	21,6	12,509
CPP seed17 pod4 C20 newR3 oldR0	0	-0	_	-0	32,721
CPP seed18 pod4 C20 newR3 oldR0	204,326	204,326	-0	-0	68,894
CPP seed19 pod4 C20 newR3 oldR0	0	0	_	0	25,695
CPP seed20 pod4 C20 newR3 oldR0	6,874	6,874	-0	-0	40,189
CPP seed21 pod4 C20 newR3 oldR0	67,103	67,103	-0	-0	71,458
CPP_seed22_pod4_C20_newR3_oldR0	0	0	-	0	19,035
CPP seed23 pod4 C20 newR3 oldR0	15,782	15,782	-0	-0	82,633
CPP seed24 pod4 C20 newR3 oldR0	26,373	26,373	-0	-0	247,269
CPP seed26 pod4 C20 newR1 oldR5	47,351	47,351	0	0	208,436
CPP seed27 pod4 C20 newR1 oldR5	288,338	288,338	-0	-0	14,964
CPP_seed28_pod4_C20_newR1_oldR5	210,358	210,358	-0	-0	46,712
CPP_seed29_pod4_C20_newR1_oldR5	15,324	15,324	-0	-0	4,875
CPP_seed30_pod4_C20_newR1_oldR5	587,559	587,559	-0	-0	11,313
CPP_seed31_pod4_C20_newR1_oldR5	62,535	62,535	-0	-0	52,673
$\overline{\text{CPP_seed32_pod4_C20_newR1_oldR5}}$	38,259	38,259	-0	-0	4,148
$\overline{\text{CPP_seed33_pod4_C20_newR1_oldR5}}$	196,353	196,353	-0	-0	10,573
$\overline{\text{CPP_seed34_pod4_C20_newR1_oldR5}}$	184,83	184,83	0	0	21,762
$\overline{\text{CPP_seed35_pod4_C20_newR1_oldR5}}$	326,302	326,302	-0	-0	7,035
$\overline{\text{CPP_seed36_pod4_C20_newR1_oldR5}}$	1244,05	1244,05	-0	-0	76,43
$\overline{\text{CPP_seed37_pod4_C20_newR1_oldR5}}$	700,665	700,665	-0	-0	47,495
$\overline{\text{CPP_seed38_pod4_C20_newR1_oldR5}}$	626,514	626,514	-0	-0	5,517
$\begin{array}{c} \text{CPP_seed39_pod4_C20_newR1_oldR5} \end{array}$	12,672	12,672	-0	-0	16,199
$CPP_seed40_pod4_C20_newR1_oldR5$	$592,\!235$	$552,\!19$	-0,068	-40,045	3600,188
$\overline{\text{CPP_seed41_pod4_C20_newR1_oldR5}}$	565,503	565,503	-0	-0	2,342
$- CPP_seed 42_pod 4_C 20_newR 1_oldR 5$	571,971	571,971	-0	-0	446,42
$CPP_seed43_pod4_C20_newR1_oldR5$	0	-0	-	-0	10,024

$CPP_seed44_pod4_C20_newR1_oldR5$	135,779	135,779	-0	-0	29,392
$CPP_seed45_pod4_C20_newR1_oldR5$	$948,\!267$	$948,\!267$	-0	-0	$5,\!536$
${ m CPP_seed46_pod4_C20_newR1_oldR5}$	$100,\!534$	$100,\!534$	-0	-0	3,796
$\overline{\text{CPP_seed47_pod4_C20_newR1_oldR5}}$	190,676	190,676	-0	-0	3,329
$\overline{\text{CPP_seed48_pod4_C20_newR1_oldR5}}$	192,599	192,599	-0	-0	34,391
$\overline{\text{CPP_seed49_pod4_C20_newR1_oldR5}}$	76,105	76,105	-0	-0	8,144
$\overline{\text{CPP_seed50_pod4_C20_newR1_oldR5}}$	107,331	107,331	-0	-0	31,933
$\overline{\text{CPP_seed51_pod4_C30_newR4_oldR0}}$	0	-0	-	-0	28,787
$\overline{\text{CPP_seed52_pod4_C30_newR4_oldR0}}$	161,237	128,419	-0,204	-32,818	3600,324
CPP_seed53_pod4_C30_newR4_oldR0	17,132	17,132	-0	-0	3017,061
CPP_seed54_pod4_C30_newR4_oldR0	70,242	69,692	-0,008	-0,55	3600,323
CPP seed55 pod4 C30 newR4 oldR0	43,444	43,444	-0	-0	2632,749
CPP seed56 pod4 C30 newR4 oldR0	0	-0	-	-0	25,926
CPP seed57 pod4 C30 newR4 oldR0	67,258	67,258	-0	-0	221,062
CPP seed58 pod4 C30 newR4 oldR0	0	-0	-	-0	14,425
CPP seed59 pod4 C30 newR4 oldR0	0	-0	-	-0	20,463
CPP seed60 pod4 C30 newR4 oldR0	1199,9	1199,9	-0	-0	3600,286
CPP seed61 pod4 C30 newR4 oldR0	18,462	18,462	-0	-0	3063,417
CPP seed62 pod4 C30 newR4 oldR0	14,669	14,669	-0	-0	231,651
CPP seed63 pod4 C30 newR4 oldR0	0	14,957	-	14,957	23,833
CPP seed64 pod4 C30 newR4 oldR0	26,392	26,392	-0	-0	777,64
CPP seed65 pod4 C30 newR4 oldR0	31,67	31,67	-0	-0	161,847
CPP seed66 pod4 C30 newR4 oldR0	32,63	32,63	-0	-0	3600,306
CPP seed67 pod4 C30 newR4 oldR0	302,006	302,006	-0	-0	2474,024
CPP seed68 pod4 C30 newR4 oldR0	73,891	73,891	-0	-0	319,21
CPP seed69 pod4 C30 newR4 oldR0	125,862	125,862	-0	-0	718,772
CPP seed 70 pod 4 C30 new R4 old R0	12,649	12,649	-0	-0	1306,355
CPP seed 71 pod 4 C30 new R4 old R0	0	-0	-	-0	16,701
CPP seed 72 pod 4 C30 new R4 old R0	25,368	25,368	-0	-0	1205,25
CPP seed73 pod4 C30 newR4 oldR0	118,141	111,119	-0,059	-7,022	3600,37
CPP seed74 pod4 C30 newR4 oldR0	11,421	15,396	0,348	3,974	893,58
CPP seed 75 pod 4 C30 new R4 old R0	170,716	170,716	-0	-0	3600,26
CPP seed 76 pod 4 C30 new R2 old R4	549,007	549,007	-0	-0	11,901
CPP seed 77 pod 4 C30 new R2 old R4	473,081	473,081	-0	-0	44,598
CPP seed 78 pod 4 C30 new R2 old R4	578,128	578,128	-0	-0	39,93
$\frac{\text{CPP_seed79_pod4_C30_newR2_oldR4}}{\text{CPP_seed79_pod4_C30_newR2_oldR4}}$	70,93	70,93	-0	-0	107,531
$\frac{\text{CPP seed } 80 \text{ pod } 4 \text{ C} 30 \text{ new } \text{R2 old } \text{R4}}{\text{CPP seed } 80 \text{ pod } 4 \text{ C} 30 \text{ new } \text{R2 old } \text{R4}}$	149,706	149,706	-0	-0	28,033
$\frac{\text{CPP seed 81 pod 4 C30 new R2 old R4}}{\text{CPP seed 81 pod 4 C30 new R2 old R4}}$	1269,909	1269,909	-0	-0	28,244
CPP seed82 pod4 C30 newR2 oldR4	117,545	96,525	-0,179	-21,02	3600,417
CPP seed83 pod4 C30 newR2 oldR4	566,978	566,978	-0	-0	1027,762
CPP seed84 pod4 C30 newR2 oldR4	145,741	145,105	-0,004	-0,636	3600,303
CPP seed85 pod4 C30 newR2 oldR4	132,686	132,686	-0	-0	81,323
CPP seed86 pod4 C30 newR2 oldR4	94,173	94,173	-0	-0	6,294
CPP seed87 pod4 C30 newR2 oldR4	67,17	67,17	-0	-0	48,522
CPP seed88 pod4 C30 newR2 oldR4	413,095	410,363	-0,007	-2,732	3600,352
CPP seed89 pod4 C30 newR2 oldR4	264,821	264,821	-0	-0	26,241
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<u>CPP_seed90_pod4_C30_newR2_oldR4</u>	55,742	55,742	-0	-0	53,37
CPP_seed91_pod4_C30_newR2_oldR4	38,085	38,085	-0	-0	23,147
CPP_seed92_pod4_C30_newR2_oldR4	752,367	752,367	-0	-0	103,93
CPP_seed93_pod4_C30_newR2_oldR4	244,519	244,519	-0	-0	21,802
CPP_seed94_pod4_C30_newR2_oldR4	493,603	493,603	-0	-0	3600,361
CPP_seed95_pod4_C30_newR2_oldR4	596,667	596,667	-0	-0	3456,128
CPP_seed96_pod4_C30_newR2_oldR4	53,171	53,171	-0	-0	93,079
CPP_seed97_pod4_C30_newR2_oldR4	203,75	203,75	-0	-0	38,187
$CPP_seed98_pod4_C30_newR2_oldR4$	596,936	596,936	-0	-0	146,511
$CPP_seed99_pod4_C30_newR2_oldR4$	67,324	67,324	-0	-0	70,382
$CPP_seed100_pod4_C30_newR2_oldR4$	150,388	150,388	-0	-0	3463,861
$CPP_seed101_pod4_C40_newR5_oldR0$	18	18	-0	-0	214,52
$CPP_seed102_pod4_C40_newR5_oldR0$	0	14,088	=	14,088	24,459
$CPP_seed103_pod4_C40_newR5_oldR0$	0	38,355	-	38,355	31,283
$CPP_seed104_pod4_C40_newR5_oldR0$	$25,\!544$	25,544	-0	-0	3600,381
$\overline{\text{CPP_seed105_pod4_C40_newR5_oldR0}}$	34,406	34,406	-0	-0	181,16
$CPP_seed106_pod4_C40_newR5_oldR0$	107,338	73,703	-0,313	-33,635	3600,67
$CPP_seed107_pod4_C40_newR5_oldR0$	629,278	464,821	-0,261	-164,457	3601,228
$CPP_seed108_pod4_C40_newR5_oldR0$	$56,\!536$	$56,\!536$	0	0	3600,373
$\overline{\mathrm{CPP_seed109_pod4_C40_newR5_oldR0}}$	0	-0	=	-0	36,745
$\overline{\text{CPP_seed110_pod4_C40_newR5_oldR0}}$	18,362	32,134	0,75	13,772	264,392
$\overline{\text{CPP_seed111_pod4_C40_newR5_oldR0}}$	57,523	57,523	-0	-0	2556,404
$\overline{\text{CPP_seed112_pod4_C40_newR5_oldR0}}$	0	-0	=	-0	71,259
$\overline{\text{CPP_seed113_pod4_C40_newR5_oldR0}}$	29,899	29,899	-0	-0	457,587
$\overline{\text{CPP_seed114_pod4_C40_newR5_oldR0}}$	5,917	5,917	-0	-0	292,089
$\overline{\text{CPP_seed115_pod4_C40_newR5_oldR0}}$	42,394	42,394	-0	-0	163,6
$\overline{\text{CPP_seed116_pod4_C40_newR5_oldR0}}$	19,622	19,622	-0	-0	3406,216
$\overline{\text{CPP_seed117_pod4_C40_newR5_oldR0}}$	11,359	11,359	-0	-0	1563,21
$\overline{\text{CPP_seed118_pod4_C40_newR5_oldR0}}$	0	0	_	0	517,417
$\overline{\text{CPP_seed119_pod4_C40_newR5_oldR0}}$	15,311	15,311	-0	-0	1624,586
$\overline{\mathrm{CPP_seed120_pod4_C40_newR5_oldR0}}$	309,11	337,636	0,092	28,526	3600,677
CPP seed121 pod4 C40 newR5 oldR0	6,88	72,537	9,543	65,657	69,684
$\overline{ ext{CPP_seed122_pod4_C40_newR5_oldR0}}$	18,173	18,173	-0	-0	548,549
$\overline{ ext{CPP_seed123_pod4_C40_newR5_oldR0}}$	41,139	41,139	-0	-0	3600,663
$\overline{ ext{CPP_seed124_pod4_C40_newR5_oldR0}}$	50,501	50,501	-0	-0	3600,386
CPP_seed125_pod4_C40_newR5_oldR0	22,736	22,736	-0	-0	584,367
CPP seed126 pod4 C40 newR3 oldR4	135,014	135,014	-0	-0	198,681
CPP seed127 pod4 C40 newR3 oldR4	557,556	557,556	-0	-0	579,549
CPP seed128 pod4 C40 newR3 oldR4	155,239	155,239	-0	-0	230,487
CPP seed129 pod4 C40 newR3 oldR4	1308,828	1308,828	-0	-0	3600,329
CPP seed130 pod4 C40 newR3 oldR4	678,247	652,506	-0,038	-25,741	3600,33
CPP seed131 pod4 C40 newR3 oldR4	258,714	258,714	-0	-0	2930,295
CPP seed132 pod4 C40 newR3 oldR4	306,942	303,281	-0,012	-3,661	3600,335
CPP seed133 pod4 C40 newR3 oldR4	403,239	403,239	-0	-0	2084,207
CPP seed134 pod4 C40 newR3 oldR4	54,248	68,648	0,265	14,4	19,242
CPP seed135 pod4 C40 newR3 oldR4	2,81	2,81	-0	-0	34,704
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$CPP_seed136_pod4_C40_newR3_oldR4$	$203,\!53$	$203,\!53$	-0	-0	148,027
$\overline{\mathrm{CPP_seed137_pod4_C40_newR3_oldR4}}$	233,812	233,812	-0	-0	3600,407
$\overline{\mathrm{CPP_seed138_pod4_C40_newR3_oldR4}}$	106,495	106,495	-0	-0	$3600,\!395$
$\overline{\mathrm{CPP_seed139_pod4_C40_newR3_oldR4}}$	96,911	96,911	-0	-0	111,062
$\overline{\mathrm{CPP_seed140_pod4_C40_newR3_oldR4}}$	135,779	135,779	-0	-0	3600,501
$\overline{\mathrm{CPP_seed141_pod4_C40_newR3_oldR4}}$	95,74	95,74	-0	-0	55,257
$\overline{\mathrm{CPP_seed142_pod4_C40_newR3_oldR4}}$	47,951	47,951	-0	-0	10,193
$\overline{\mathrm{CPP_seed143_pod4_C40_newR3_oldR4}}$	1357,19	1357,19	-0	-0	$3461,\!155$
$\overline{\mathrm{CPP_seed144_pod4_C40_newR3_oldR4}}$	94,337	94,337	-0	-0	$1751,\!253$
$\overline{\mathrm{CPP_seed145_pod4_C40_newR3_oldR4}}$	462,161	341,199	-0,262	-120,962	$3600,\!535$
$\overline{\mathrm{CPP_seed146_pod4_C40_newR3_oldR4}}$	312,279	$312,\!279$	-0	-0	105,268
$CPP_seed147_pod4_C40_newR3_oldR4$	510,798	510,798	-0	-0	437,191
$CPP_seed148_pod4_C40_newR3_oldR4$	487,692	487,692	-0	-0	1312,759
$\overline{\text{CPP_seed149_pod4_C40_newR3_oldR4}}$	278,862	267,871	-0,039	-10,991	3600,358
$\overline{\text{CPP_seed150_pod4_C40_newR3_oldR4}}$	47,583	55,893	0,175	8,31	1037,844