Appendix

Results of parameter tunning experiments

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Instances Name | *nbd\_size*=5 | | | *nbd\_size*=10 | | | *nbd\_size*=15 | | | *nbd\_size*=20 | | |
|  | *Max\_Iter* | Time | *HV* | *Max\_Iter* | Time | *HV* | *Max\_Iter* | Time | *HV* | *Max\_Iter* | Time | *HV* |
| eil51\_n50\_bounded-strongly-corr\_01.ttp | 500 | 18 | 0.875548 | 500 | 32 | 0.876961 | 500 | 50 | 0.879941 | 500 | 91 | 0.88157 |
| 600 | 21 | 0.876029 | 600 | 39 | 0.87714 | 600 | 61 | 0.88534 | 600 | 110 | 0.882965 |
| 700 | 25 | 0.876269 | 700 | 45 | 0.877535 | 700 | 71 | 0.885436 | 700 | 129 | 0.883053 |
| 800 | 28 | 0.876324 | 800 | 51 | 0.877899 | 800 | 87 | 0.887525 | 800 | 146 | 0.883216 |
| 1000 | 34 | 0.876452 | 1000 | 65 | 0.883362 | 1000 | 115 | 0.88775 | 1000 | 177 | 0.883378 |
| eil51\_n250\_uncorr-similar-weights\_01.ttp | 500 | 120 | 0.886691 | 500 | 329 | 0.890949 | 500 | 493 | 0.8907 | 500 | 721 | 0.889303 |
| 600 | 145 | 0.890775 | 600 | 429 | 0.890951 | 600 | 570 | 0.8907 | 600 | 918 | 0.890212 |
| 700 | 176 | 0.89081 | 700 | 481 | 0.89096 | 700 | 698 | 0.89248 | 700 | 1103 | 0.891942 |
| 800 | 215 | 0.89083 | 800 | 533 | 0.890964 | 800 | 845 | 0.89248 | 800 | 1307 | 0.892113 |
| 1000 | 294 | 0.890847 | 1000 | 640 | 0.890967 | 1000 | 1135 | 0.893822 | 1000 | 1688 | 0.892144 |
| eil51\_n500\_uncorr\_01.ttp | 500 | 448 | 0.909784 | 500 | 1239 | 0.914237 | 500 | 1793 | 0.915308 | 500 | 1848 | 0.916323 |
| 600 | 548 | 0.911931 | 600 | 1472 | 0.914879 | 600 | 2016 | 0.915722 | 600 | 2141 | 0.91736 |
| 700 | 686 | 0.913902 | 700 | 1731 | 0.915819 | 700 | 2243 | 0.915946 | 700 | 2433 | 0.917794 |
| 800 | 827 | 0.915553 | 800 | 1984 | 0.916213 | 800 | 2460 | 0.91708 | 800 | 2731 | 0.917932 |
| 1000 | 1108 | 0.917871 | 1000 | 2392 | 0.918977 | 1000 | 2911 | 0.917347 | 1000 | 3343 | 0.920003 |
| a280\_n1395\_uncorr-similar-weights\_05.ttp | 500 | 5282 | 0.829718 | 500 | 9192 | 0.829806 | 500 | 12742 | 0.829435 | 500 | 15878 | 0.83006 |
| 600 | 6223 | 0.829788 | 600 | 11190 | 0.829881 | 600 | 14840 | 0.829475 | 582 | 18009 | 0.864446 |
| 700 | 7175 | 0.829854 | 700 | 12675 | 0.829932 | 700 | 17253 | 0.829489 |  |  |  |
| 800 | 8124 | 0.829896 | 800 | 14122 | 0.82997 | 738 | 18022 | 0.855808 |  |  |  |
| 1000 | 10395 | 0.829952 | 1000 | 17143 | 0.82999 |  |  |  |  |  |  |
| fnl4461\_n4460\_bounded-strongly-corr\_01.ttp | 83 | 18230 | 0.622348 | 37 | 18129 | 0.618779 | 18 | 18264 | 0.616535 | 16 | 18002 | 0.61321 |