1. D:\Python\Python\setroute\python.exe "D:\Python\Pycharm\setroute\PyCharm Community Edition 2021.2.3\plugins\python-ce\helpers\pydev\pydevconsole.py" --mode=client --port=32922

2.

3. import sys; print('Python %s on %s' % (sys.version, sys.platform))

4. sys.path.extend(['E:\\1 □□□□\\3 □□□□\\1 □□□□□□□\\1 □□□□□□□□□\\1_□□□□□□_□□□□\\1_LW _□□□□1\\4 □□□□□\\3 python_code\\9 Code for this paper', 'E:/1 □□□/3 □□□□□/1 □□□□□□/1 □□□□□□□□/1_□□□□□_□□□□/1_LW _□□□1/4 □□□□/3 python_code/9 Code for this paper'])

5.

6. PyDev console: starting.

7.

8. Python 3.9.7 (tags/v3.9.7:1016ef3, Aug 30 2021, 20:19:38) [MSC v.1929 64 bit (AMD64)] on win32

9. >>> runfile('E:/1 □□□/3 □□□□□/1 □□□□□□/1 □□□□□□□□/1_□□□□□_□□□□/1_LW _□□□1/4 □□□□/3 python_code/9 Code for this paper/main_RO_CCG.py', wdir='E:/1 □□□□/3 □□□□□/1 □□□□□□/1 □□□□□□□□/1_□□□□□_□□□□/1_LW _□□□□1/4 □□□□/3 python_code/9 Code for this paper')

10. Backend TkAgg is interactive backend. Turning interactive mode on.

11. Waiting 5s......

12.

13. Optimize the ./R_11_4.xlsx instance by CCG

14.

15. Master protblem status = 2 , is Optimal and MP obj = 442.0

16. The initial lb = -inf ub = inf

17.

18. The current iteration cnt = 0

19. The SP model was solved Optimal 2 and SPObj = 442.0

20. Master protblem status = 2 , is Optimal

21. Deterministic Sub problem Status= 2 , is Optimal

22. lb = 802.0 ub = 802.0

23. MPObj = 802.0 MP_delete_Hua_Obj = 465.0 Hua = 337.0 SPObj = 442.0 Deter_SP_Obj = 337.0

24.

25. ub - lb = 0.0

26.

27. Iteration cycle stopped by termination criterion 1: Because ub - lb <= eps, the iteration stop, and cnt = 0

28. i: 0.0 l_i: 5.0 p_i: 9.0 al_i: 1.0 sol_a_i: 1.0 sol_g_i: 0.0 d_i: 18.0 sol_taoi: 1.0 sol_deltai: 15.0 sol_deltai - sol_taoi: 14.0 sol_taoP: 1.0 sol_deltaP: 4.0 sol_deltaP - sol_taoP: 3.0 cl_i: 3484006.0 sol_c_i: 3484006.0 sol_gp_i: 0.0 total work: 3691016.0 wasted work: 0.7851876014625784

29. i: 1.0 l_i: 5.0 p_i: 17.0 al_i: 3.0 sol_a_i: 3.0 sol_g_i: 0.0 d_i: 39.0 sol_taoi: 3.0 sol_deltai: 35.0 sol_deltai - sol_taoi: 32.0 sol_taoP: 3.0 sol_deltaP: 9.0 sol_deltaP - sol_taoP: 6.0 cl_i: 8397469.0 sol_c_i: 8397469.0 sol_gp_i: 0.0 total work: 8568430.0 wasted work: 0.6484539758158729

30. i: 2.0 l_i: 6.0 p_i: 22.0 al_i: 13.0 sol_a_i: 13.0 sol_g_i: 0.0 d_i: 45.0 sol_taoi: 13.0 sol_deltai: 47.0 sol_deltai - sol_taoi: 34.0 sol_taoP: 13.0 sol_deltaP: 19.0 sol_deltaP - sol_taoP: 6.0 cl_i: 8838503.0 sol_c_i: 8838503.0 sol_gp_i: 0.0 total work: 8963896.0 wasted work: 0.47561484425968353

31. i: 3.0 l_i: 5.0 p_i: 12.0 al_i: 24.0 sol_a_i: 24.0 sol_g_i: 0.0 d_i: 33.0 sol_taoi: 24.0 sol_deltai: 29.0 sol_deltai - sol_taoi: 5.0 sol_taoP: 24.0 sol_deltaP: 25.0 sol_deltaP - sol_taoP: 1.0 cl_i: 1243727.0 sol_c_i: 1243727.0 sol_gp_i: 0.0 total work: 1450042.0 wasted work: 0.7825514709229112

32. i: 4.0 l_i: 5.0 p_i: 29.0 al_i: 26.0 sol_a_i: 26.0 sol_g_i: 0.0 d_i: 30.0 sol_taoi: 26.0 sol_deltai: 33.0 sol_deltai - sol_taoi: 7.0 sol_taoP: 26.0 sol_deltaP: 28.0 sol_deltaP - sol_taoP: 2.0 cl_i: 1803254.0 sol_c_i: 1803254.0 sol_gp_i: 0.0 total work: 1845508.0 wasted work: 0.1602691508245968

33. i: 5.0 l_i: 7.0 p_i: 5.0 al_i: 28.0 sol_a_i: 28.0 sol_g_i: 0.0 d_i: 35.0 sol_taoi: 28.0 sol_deltai: 37.0 sol_deltai - sol_taoi: 9.0 sol_taoP: 28.0 sol_deltaP: 30.0 sol_deltaP - sol_taoP: 2.0 cl_i: 2194062.0 sol_c_i: 2194062.0 sol_gp_i: 0.0 total work: 2372796.0 wasted work: 0.6779369149307399

34. i: 6.0 l_i: 5.0 p_i: 12.0 al_i: 29.0 sol_a_i: 31.0 sol_g_i: 0.4 d_i: 45.0 sol_taoi: 31.0 sol_deltai: 44.0 sol_deltai - sol_taoi: 13.0 sol_taoP: 31.0 sol_deltaP: 34.0 sol_deltaP - sol_taoP: 3.0 cl_i: 3426326.0 sol_c_i: 3954660.0 sol_gp_i: 0.3339945785478431 total work: 3954660.0 wasted work: 0.0

35. i: 7.0 l_i: 5.0 p_i: 29.0 al_i: 33.0 sol_a_i: 35.0 sol_g_i: 0.25 d_i: 44.0 sol_taoi: 35.0 sol_deltai: 43.0 sol_deltai - sol_taoi: 8.0 sol_taoP: 35.0 sol_deltaP: 37.0 sol_deltaP - sol_taoP: 2.0 cl_i: 2057589.0 sol_c_i: 2109152.0 sol_gp_i: 0.04889453202045182 total work: 2109152.0 wasted work: 0.0

36. i: 8.0 l_i: 5.0 p_i: 22.0 al_i: 42.0 sol_a_i: 52.0 sol_g_i: 1.0 d_i: 61.0 sol_taoi: 52.0 sol_deltai: 68.0 sol_deltai - sol_taoi: 16.0 sol_taoP: 52.0 sol_deltaP: 56.0 sol_deltaP - sol_taoP: 4.0 cl_i: 4171846.0 sol_c_i: 5226422.0 sol_gp_i: 1.0 total work: 5668346.0 wasted work: 1.6762148958443963

37. i: 9.0 l_i: 5.0 p_i: 29.0 al_i: 46.0 sol_a_i: 49.0 sol_g_i: 0.42857142857142855 d_i: 54.0 sol_taoi: 49.0 sol_deltai: 54.0 sol_deltai - sol_taoi: 5.0 sol_taoP: 49.0 sol_deltaP: 51.0 sol_deltaP - sol_taoP: 2.0 cl_i: 1080677.0 sol_c_i: 2372796.0 sol_gp_i: 0.7001427249299381 total work: 2636440.0 wasted work: 1.0

38. i: 10.0 l_i: 5.0 p_i: 17.0 al_i: 33.0 sol_a_i: 39.45 sol_g_i: 0.9214285714285714 d_i: 74.0 sol_taoi: 40.0 sol_deltai: 60.0 sol_deltai - sol_taoi: 20.0 sol_taoP: 40.0 sol_deltaP: 44.0 sol_deltaP - sol_taoP: 4.0 cl_i: 5219621.0 sol_c_i: 5703127.30952381 sol_gp_i: 0.9169681645017711 total work: 6063812.0 wasted work: 1.36807471619377

39. Time: 96.000000

40.

41.

42.

43.