$Time scale\ separation\ in\ models\ of\ symbiosis:\ state\ space\ reduction,\ multiple\ attractors\ and\ initialization\ (Pfab\ et\ al).$ Supplementary Figure 1.  $Coral\ model.\ Cycle-free\ versions\ of\ graph\ for\ the\ auxiliary\ variables.$ Yellow: auxiliary variables that when buffered interrupt all cycles in the graph. Does not show redundant solutions (that just add buffers to ready solutions with less buffers). Number of buffers: 0 Number of buffers: 1 Number of buffers: 2 r<sub>CS</sub>  $\rho_N$ **j**sg  $c_{ROS}$ r<sub>CH</sub> **ј**ср **j**npq jнG  $\rho_C$  $j_{eC}$ *jco*<sub>2</sub> r<sub>CS</sub>  $\rho_N$ **j**sg  $r_{CH}$ **ј**ср **j**npq **ј**нG  $j_{eL}$  $\rho_C$ r<sub>CS</sub>  $\rho_N$  $c_{ROS}$  $r_{CH}$ **ј**ср **ј**нс  $j_{eL}$  $\rho_C$ **j**co<sub>2</sub> r<sub>CS</sub>  $\rho_N$  $j_{SG}$  $c_{ROS}$ **ј**ср **j**npq **ј**нс  $j_{eL}$  $\rho_C$  $j_{eC}$ *jco*<sub>2</sub> Number of buffers: 3 r<sub>CS</sub>  $\rho_N$ **j**sg  $r_{CH}$ **ј**ср **j**npq **ј**нG  $j_{eC}$ r<sub>CS</sub>  $\rho_N$  $c_{ROS}$ r<sub>CH</sub> **ј**сР **ј**нG  $\rho_C$  $j_{eL}$ *jco*<sub>2</sub> rcs  $\rho_N$  $c_{ROS}$ **j**<sub>NPQ</sub> **ј**нс *jco*<sub>2</sub> r<sub>CS</sub>  $\rho_N$ **j**sg  $c_{ROS}$ r<sub>CH</sub>  $j_{CP}$ **j**npq **ј**нс  $\rho_C$ *jco*<sub>2</sub> Number of buffers: 4 r<sub>CS</sub>  $\rho_N$  $c_{ROS}$  $j_{CP}$ **j**npq jнG **j**eL  $\rho_C$ *jco*<sub>2</sub> r<sub>CS</sub>  $\rho_N$ **j**sg  $c_{ROS}$ **j**npq **ј**нс  $j_{CO_2}$  $r_{CS}$  $\rho_N$ **j**sg  $c_{ROS}$  $r_{CH}$  $j_{CP}$ **j**npq jнG **j**eL  $\rho_C$ **j**co<sub>2</sub>  $r_{CS}$  $\rho_N$ **j**sg  $r_{CH}$ **ј**сР **j**npq jнG  $\rho_C$  $j_{eL}$ r<sub>CS</sub>  $\rho_N$  $c_{ROS}$ **ј**сР **ј**нс **j**eL  $\rho_C$ **j**co<sub>2</sub> r<sub>CS</sub>  $\rho_N$ **j**sg  $j_{CP}$ **j**npq **ј**нG  $j_{eL}$  $\rho_C$ *jco₂*  $r_{CS}$  $\rho_N$ **j**sg  $c_{ROS}$  $r_{CH}$  $j_{CP}$  $j_{NPQ}$ **ј**нс  $\rho_C$ *j<sub>co<sub>2</sub></sub>*  $r_{CS}$  $\rho_N$ **j**sg  $r_{CH}$  $j_{CP}$ **j**npq **ј**нс  $j_{eL}$  $\rho_C$  $r_{CS}$  $c_{ROS}$ **ј**сР **ј**нс **j**eL **j**co<sub>2</sub>  $r_{CS}$  $\rho_N$  $c_{ROS}$ **ј**сР **j**npq **ј**нс  $j_{eL}$  $\rho_C$ *jco*<sub>2</sub>  $r_{CS}$  $\rho_N$ **j**sg  $c_{ROS}$  $j_{CP}$ **j**npq **ј**нG  $\rho_C$ **j**eC **j**co<sub>2</sub>  $r_{CS}$  $\rho_N$ **j**sg  $c_{ROS}$  $j_{CP}$ **j**npq **j**HG  $j_{eL}$  $\rho_C$ Number of buffers: 5 r<sub>CS</sub>  $\rho_N$  $j_{SG}$  $c_{ROS}$ јср **j**npq  $j_{HG}$ **j**eL  $\rho_C$ *jco*<sub>2</sub> r<sub>CS</sub>  $\rho_N$ **j**sg  $c_{ROS}$ јср **j**npq  $j_{HG}$  $j_{eL}$  $\rho_C$ jco₂ r<sub>CS</sub>  $\rho_N$ **j**sg  $c_{ROS}$ **ј**ср **j**npq  $j_{HG}$  $\rho_C$ r<sub>CS</sub> **j**sg  $c_{ROS}$ **ј**ср  $j_{HG}$  $j_{eL}$  $\rho_C$ **j**co<sub>2</sub> Number of buffers: 6

Number of buffers: 7