In one embodiment a network system has one master transmission apparatus and a plurality of transmission apparatuses connected with a ring type network. The master transmission apparatus comprises a first blockage port and a second blockage port. The first blockage port blocks a first virtual transmission path. The second blockage port blocks a second virtual transmission path. Each of the plurality of transmission apparatuses comprises a branch line system interface, a frame setting unit and a trunk line system interface. The frame setting unit creates a first transmission frame that is the result of adding a first tag indicating the first virtual transmission path to a transmission frame inputted from a terminal apparatus using the branch line system interface and a second transmission frame that is the result of adding a second tag indicating the second virtual transmission path to the inputted transmission frame. The trunk line system interface outputs the first transmission frame created by the frame setting unit to the first virtual transmission path and outputs the second transmission frame created by the frame setting unit to the second virtual transmission path.