In this paper, we consider a nonparametric adaptive software rejuvenation schedule under a random censored data. For u failure time data and v random censored data, we formulate upper and lower bounds of the predictive system availability based on a nonparametric predictive inference (NPI). Then, we derive adaptive rejuvenation policies which maximizes the upper or lower bound. In simulation experiments, we show that estimates of the software rejuvenation schedule are updated by acquisition of new failure data, and converge to the theoretical optimal solution.