$$Q(s,\, g) = Q(s,\, g) + \alpha \left(\tilde{r} + \tilde{\gamma} \cdot \max \hat{Q}_{\theta^-} \left(\tilde{S}',\, \underset{g}{\operatorname{argmax}}\, Q_\theta(\tilde{S}',\, g) \right) - Q(s,\, g) \right)$$

where $\tilde{r} = \sum_{k=0}^{n} \gamma^k \cdot r,\ \tilde{\gamma} = \gamma^{n+1}$