```
—— MODULE Target -
INSTANCE Naturals
 An empty constant
Constant Nil
 The set of possible master nodes
CONSTANT Node
 The target state
Variable target
 A record of connections between nodes and the target
VARIABLE conn
TypeOK \triangleq
    \land target.id \in Nat
    \land \, \forall \, p \in \texttt{DOMAIN} \ target.values:
         \land target.values[p].index \in Nat
         \land target.values[p].value \in STRING
    \land target.running \in BOOLEAN
    \land \forall n \in \text{DOMAIN } conn:
         \land n \in Node
         \land conn[n].id \in Nat
         \land conn[n].connected \in BOOLEAN
This section specifies the behavior of configuration targets.
Start \triangleq
    \land \neg target.running
    \land target' = [target \ EXCEPT \ !.id]
                                                  = target.id + 1,
                                      !.running = TRUE
    \land UNCHANGED \langle conn \rangle
Stop \triangleq
    \land target.running
    \land target' = [target \ EXCEPT \ !.running = FALSE,
                                      !.values = [p \in \{\} \mapsto [index \mapsto 0, value \mapsto Nil]]]
    \land conn' = [n \in Node \mapsto [conn[n] \text{ EXCEPT } !.connected = \text{FALSE}]]
```

This section specifies the behavior of connections to the target.

```
\begin{aligned} &Connect(n) \; \stackrel{\triangle}{=} \\ & \wedge \neg conn[n].connected \\ & \wedge target.running \\ & \wedge conn' = [conn \; \text{EXCEPT} \; ![n].id \; = conn[n].id + 1, \\ & \quad ![n].connected = \text{TRUE}] \\ & \wedge \text{UNCHANGED} \; \langle target \rangle \end{aligned} \begin{aligned} &Disconnect(n) \; \stackrel{\triangle}{=} \\ & \wedge \; conn[n].connected \\ & \wedge \; conn' = [conn \; \text{EXCEPT} \; ![n].connected = \text{FALSE}] \\ & \wedge \; \text{UNCHANGED} \; \langle target \rangle \end{aligned}
```