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The \mathit{Trace} module logs model traces to a \mathit{JSON} file.
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LOCAL INSTANCE Naturals
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LOCAL INSTANCE Sequences

LOCAL INSTANCE Json

LOCAL INSTANCE TLC

CONSTANT Enabled

CONSTANT File

Constant Depth

VARIABLE trace

```
 \begin{array}{l} Add(action,\ context) \ \stackrel{\triangle}{=} \\ \wedge \ Enabled \\ \wedge \ Len(trace) < Depth \\ \wedge \ trace' = Append(trace,\ [action \mapsto action,\ context \mapsto context]) \end{array}
```

$$Log(filename) \triangleq \\ \land Enabled \\ \land Len(trace) > 0$$

$$\land \textit{JsonSerialize}(\textit{File}, \textit{trace})$$

$$Init \stackrel{\triangle}{=} \\ \wedge trace = \langle \rangle$$

 $<sup>\</sup>backslash *$  Last modified  $\mathit{Thu}$   $\mathit{Sep}$  30 11:59:31  $\mathit{PDT}$  2021 by  $\mathit{jordanhalterman}$ 

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