

$$\begin{aligned}
& \textit{contract} ::= \textit{protocol\_decl} \textit{property\_decl} \textit{rule\_decl} \\
& \textit{protocol\_decl} ::= \mathbf{event} \textit{event\_name} (, \textit{event\_name})^* ; \\
& \qquad \qquad \qquad \mathbf{protocol} \textit{protocol} ; ; \\
& \textit{event\_name} ::= \mathbf{any} \mid \textit{name} \\
& \textit{protocol} ::= \textit{event\_name} \mid \textit{protocol} ; \textit{protocol} \\
& \qquad \qquad \qquad \mid \textit{protocol} + \textit{protocol} \mid \textit{protocol} * \mid \textit{protocol} ? \\
& \textit{property\_decl} ::= \mathbf{variable} \textit{name} (, \textit{name})^* ; \\
& \qquad \qquad \qquad \mathbf{property} (\textit{ldl\_formula} ; )^+ \\
& \textit{rule\_decl} ::= \mathbf{rule} (\textit{rule} ; )^+ \\
& \qquad \qquad \qquad \textit{rule} ::= \mathbf{on} \textit{event\_name} (\{ \textit{code} \})^? \\
& \qquad \qquad \qquad \mathbf{when} \textit{condition} (\{ \textit{code} \})^? \\
& \qquad \qquad \qquad \textit{action} (\{ \textit{code} \})^? \\
& \textit{condition} ::= \textit{proposition} \mid < \textit{ldl\_path} > \textit{condition} \\
& \textit{action} ::= \mathbf{ensure} \textit{proposition} \\
& \qquad \qquad \qquad \mid \mathbf{raise} \textit{event\_name} \\
& \qquad \qquad \qquad \mid \mathbf{do} ( \textit{action} (, \textit{action})^* )
\end{aligned}$$