

## ma-single-pre-feasible<sup>0,22</sup>

$\forall a:\text{Id}, T:\text{Type}, ds:x:\text{Id} \text{ fp} \rightarrow \text{Type}, P:(\text{State}(ds) \rightarrow T \rightarrow \text{Prop}).$

$T$

$\Rightarrow \text{AtomFree}(\text{Type}; T)$

$\Rightarrow \forall x \in \text{dom}(ds). A = ds(x) \Rightarrow A$

$\Rightarrow \forall x \in \text{dom}(ds). A = ds(x) \Rightarrow \text{AtomFree}(\text{Type}; A)$

$\Rightarrow (\forall s:\text{State}(ds). \text{Dec}(\exists v:T. P(s,v)))$

$\Rightarrow \text{Feasible}(\text{with ds: } ds$

    action  $a:T$

    precondition  $a(v)$  is

$P \text{ s } v$ )