

Typesetting Z specifications with `zed-csp`

PhoneDB

$known : \mathbb{P} NAME$

$phone : NAME \rightarrow PHONE$

$known = \text{dom } phone$

Document[*CHAR*]

$left, right : \text{seq } CHAR$

$policy : \mathbb{P}_1 RESOURCE \rightarrow RESOURCE$

$\forall S : \mathbb{P}_1 RESOURCE \bullet$
 $policy(S) \in S$

[*X*, *Y*]

$first : X \times Y \rightarrow X$

$\forall x : X; y : Y \bullet$
 $first(x, y) = x$

AddPhone

$\Delta PhoneDB$

$name? : NAME$

$number? : PHONE$

$name? \notin known$

$phone' = phone \oplus \{name? \mapsto number?\}$

$OP ::= plus \mid minus \mid times \mid divide$

$EXP ::= const\langle\langle N \rangle\rangle$
 $\mid binop\langle\langle OP \times EXP \times EXP \rangle\rangle$