

File Edit Help



MetaCP

Load

Save

Export



Knowledge

$g \in \mathbb{Z}_p$

Alice's  
initial  
knowledge



Bob

```
<knowledge entity="Alice">  
  <variable id="g" type="constant"></variable>  
</knowledge>
```

$x \in_R \mathbb{N}$

$ax \leftarrow a^x$



Knowledge

$x \in \mathbb{N}$



$gx \in \mathbb{Z}_p$

$g \in \mathbb{Z}_p$

$gy \in \mathbb{Z}_p$

$gx$

$gy$

$y \in_R \mathbb{N}$

$gy \leftarrow g^y$

$k_B \leftarrow gx^y$

```
<event type="send">  
  <variable id="gy"></variable>  
</event>  
<channel></channel>  
<event type="receive">  
  <variable id="gy"></variable>  
</event>
```

types/sets

statements

$x \leftarrow \$ N$

$y \leftarrow \$ N$

$gx \leftarrow \text{exp}(g,x)$

$gy \leftarrow \text{exp}(g,y)$

$kA \leftarrow \text{exp}(gy,x)$

$kB \leftarrow \text{exp}(gx,y)$

+ assignment

constants

variables

functions