



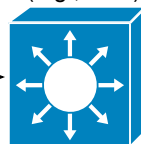
Alice

Alice

(Item) pair-wise plaintext deviations of ratings are submitted.

Item 1	Item 2	...	Item n-1	Item n
4	5	...	2	-
2	-	...	1	2

Identity
anonymiser
(e.g., NAT)

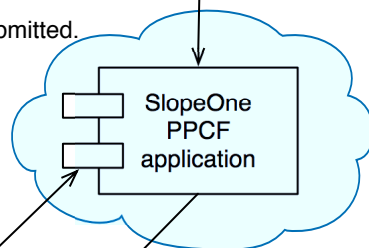


Bob

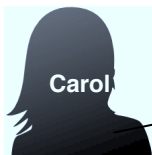
Bob

(Item) pair-wise plaintext deviations of ratings are submitted.

SaaS cloud



SlopeOne
PPCF
application



Carol

Carol

Encrypted (with Carol's public key) query vector.

Item 1	...	Item k	...	Item n
4	-	?	...	3

Carol decrypts the numerator and divides to
obtain the prediction value of 3.5.

Item k
35
10

Encrypted numerator
(deviations)

Plaintext denominator
(cardinalities)