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(54) **METHOD FOR MANAGING KEYS OF A SECURITY GROUP**

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ABSTRACT

A method of adding a first publisher to a security group includes receiving a key request for keys for the first publisher, wherein the key request has at least one credential associated with the first publisher and a key parameter index indicative of a bandwidth of the first publisher, includes modifying a lifetime value of the at least one key of the security group based on the key parameter index of the received key request, wherein an expiry of the at least one key is based on the lifetime value of the one or more keys; and includes transmitting the at least one key and the modified lifetime value of the at least one key to the first publisher, where the first publisher is configured to publish at least one message encrypted using the at least one key, prior to expiry of the at least one key.

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