

How is calculated the SMTP Policy Quota Counter?

PROBLEM

How is calculated the Quota Counter on messages? I see decimal values on counters tracking message count, how is it possible?

SOLUTION

The counter is incremented as follows, as a new message is tracked:

1. Read actual Counter value from DB
2. $\text{ElapsedTime} = \text{Now} - \text{LastUpdate}$
3. IF $\text{ElapsedTime} > \text{Period}$ (the one defined for the quota rule) THEN $\text{CurrentCounter} = 0$
ELSE $\text{CurrentCounter} = (1 - (\text{ElapsedTime} / \text{Period})) * \text{Counter}$
4. $\text{Delta} = \text{CurrentCounter} - \text{Counter}$
5. Increment CurrentCounter
6. IF $\text{CurrentCounter} > \text{Limit}$ THEN
7. $\text{DBValue} += \text{Delta} (+1)$

Consider the following example, starting from a DB Counter of 8 with a time frame of 300 sec :

$\text{Counter} = 8$

$\text{ElapsedTime} = 13:29:57 - 13:26:22 = 215$

$\text{CurrentCounter} = (1 - (215 / 300)) * 8 = 2.27$

$\text{Delta} = 2.27 - 8 = -5.73$

** allow mail $\text{CurrentCounter} (+1) < \text{Limit}$ **

$\text{DBValue} += -5.73 (+1) = 3.27$