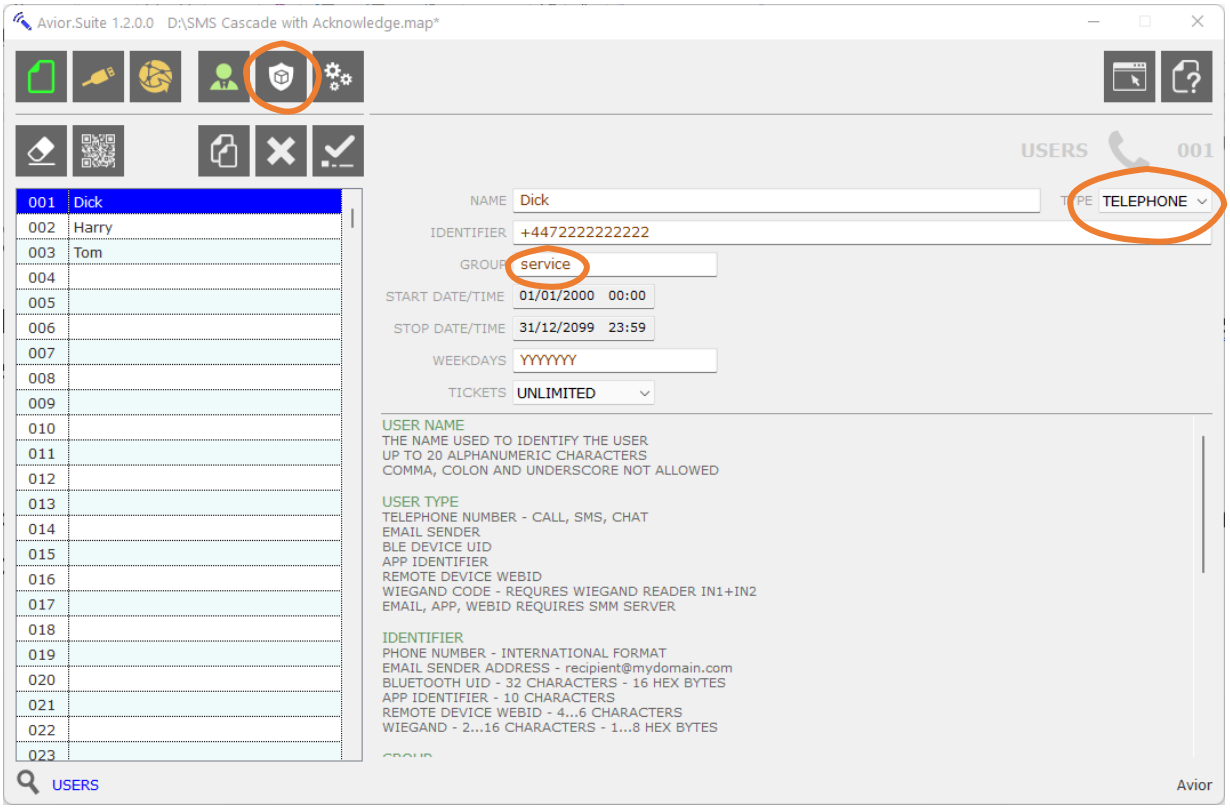
How to cascade/repeat SMS message and stop with a SMS reply.

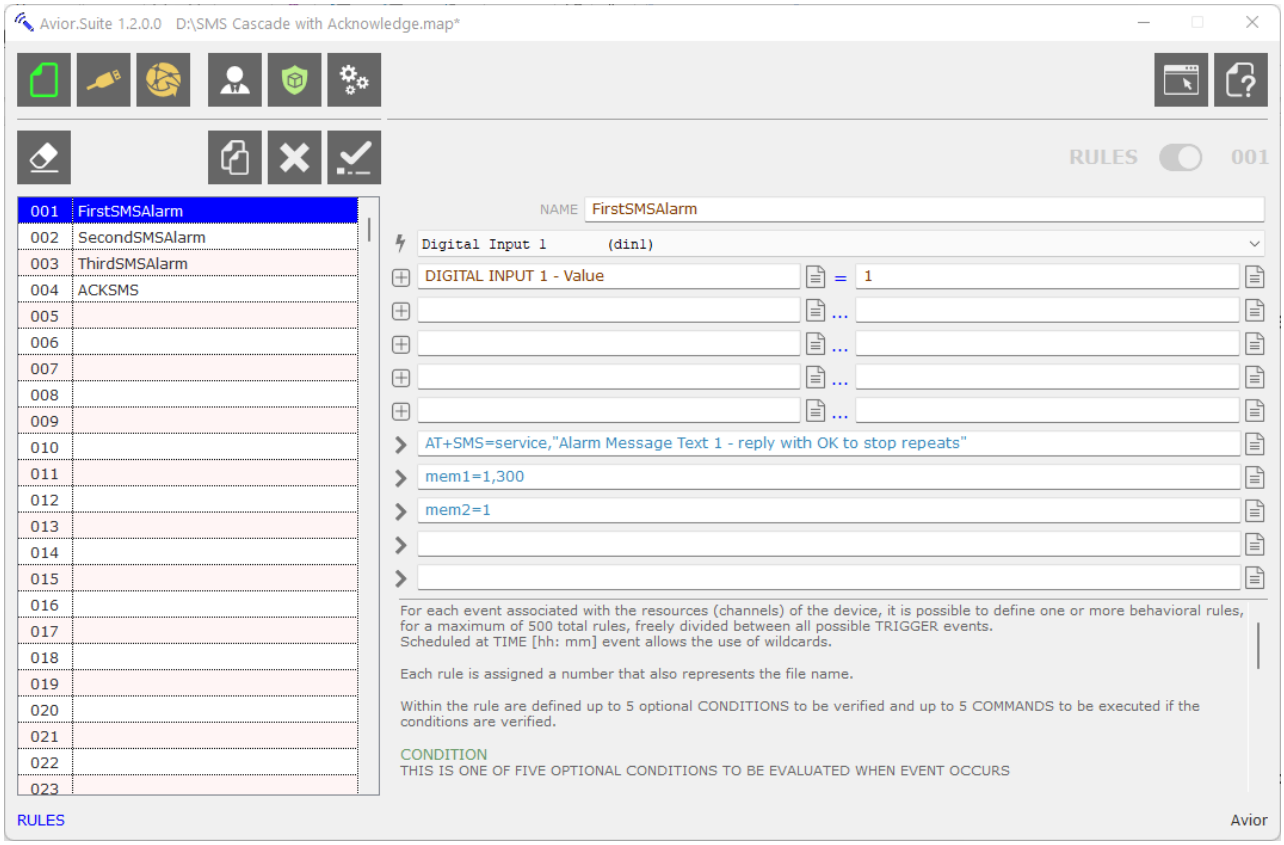
If you wish to have SMS sent multiple times until one of the recipients acknowledges by sending a response, please follow this guide where we use groups, memory variable, timers, and incoming messages.

1. Set up a group of recipients in the USER section
   These recipients will all receive the alarm messages when this group name is used in RULES:



For each recipient enter their name and mobile number (+44…) and enter the group name you wish to use. In the above example we have three users, and they are all part of the same group named "service"

2. Setting up the first RULE to send a SMS when digital input 1 closes:



The RULE is giving a name "FirstSMSAlarm" and is using the

ϟ **TRIGGER** Digital Input 1 and when the

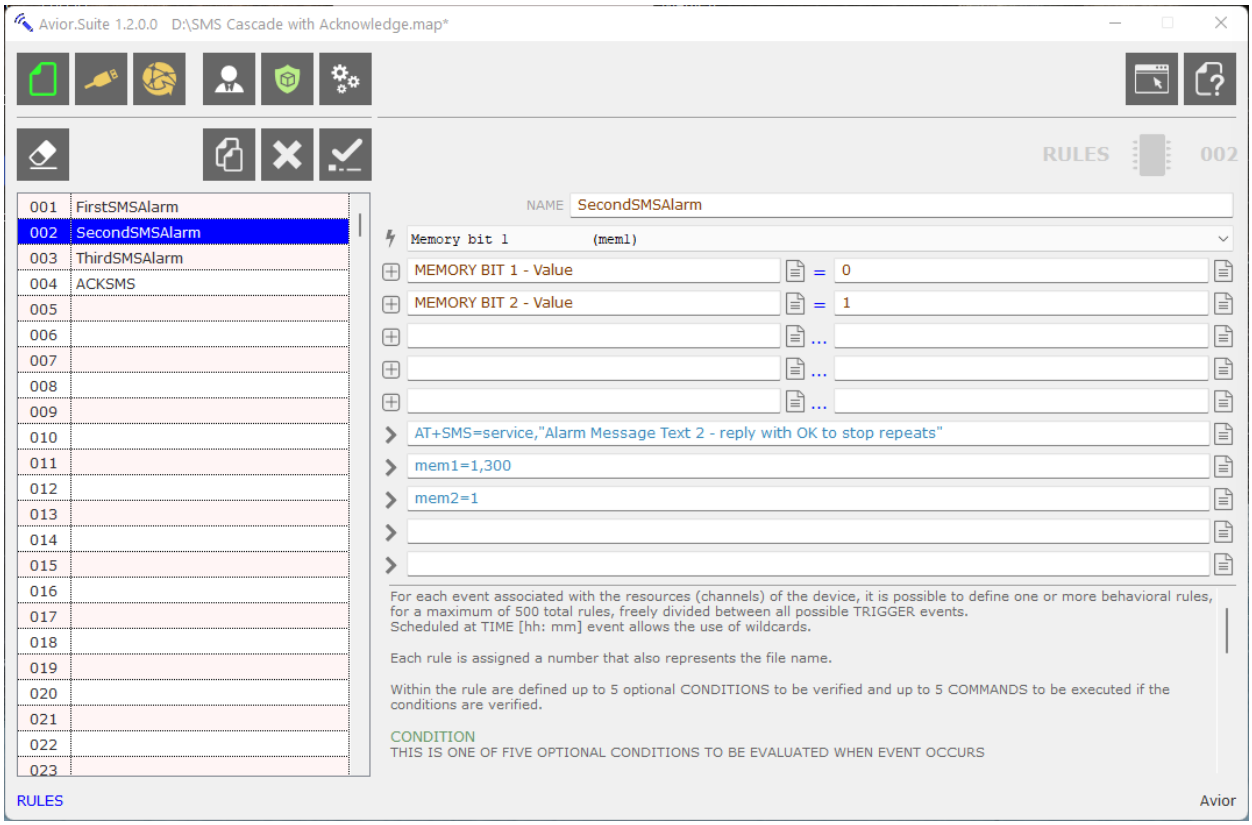
+ CONDITION Digital Input 1 = 1 (when the input closes) the RULE performs the following 3 ACTIONS:

> **AT+SMS=service,"Alarm Message Text 1 - reply with OK to stop repeats"**
(this sends an SMS to all the recipients identified in the GROUP names "service" and sends the message text "Alarm Message Text 1 - reply with OK to stop repeats")

> **mem1=1,300**
(this turns internal memory bit1 ON for the time shown in seconds (300s = 5mins) and we will use this bit as a condition in the next rule – sending the message a second time)

> **mem2=1**
(this turns internal memory bit2 ON and is a condition that is controlled by RULE4 which is waiting for a user to send a reply by SMS to stop the messages being repeated)

3. The second and third RULES are almost the same – you could repeat these rules as many times as you wish if you want the message to be sent more than three times:



This RULE named "SecondSMSAlarm" is checking the condition of the two memory bits we set in the first RULE which was triggered by Input 1 closing. This RULE is TIGGERED:

ϟ **TRIGGER** Memory Bit 1 and when the

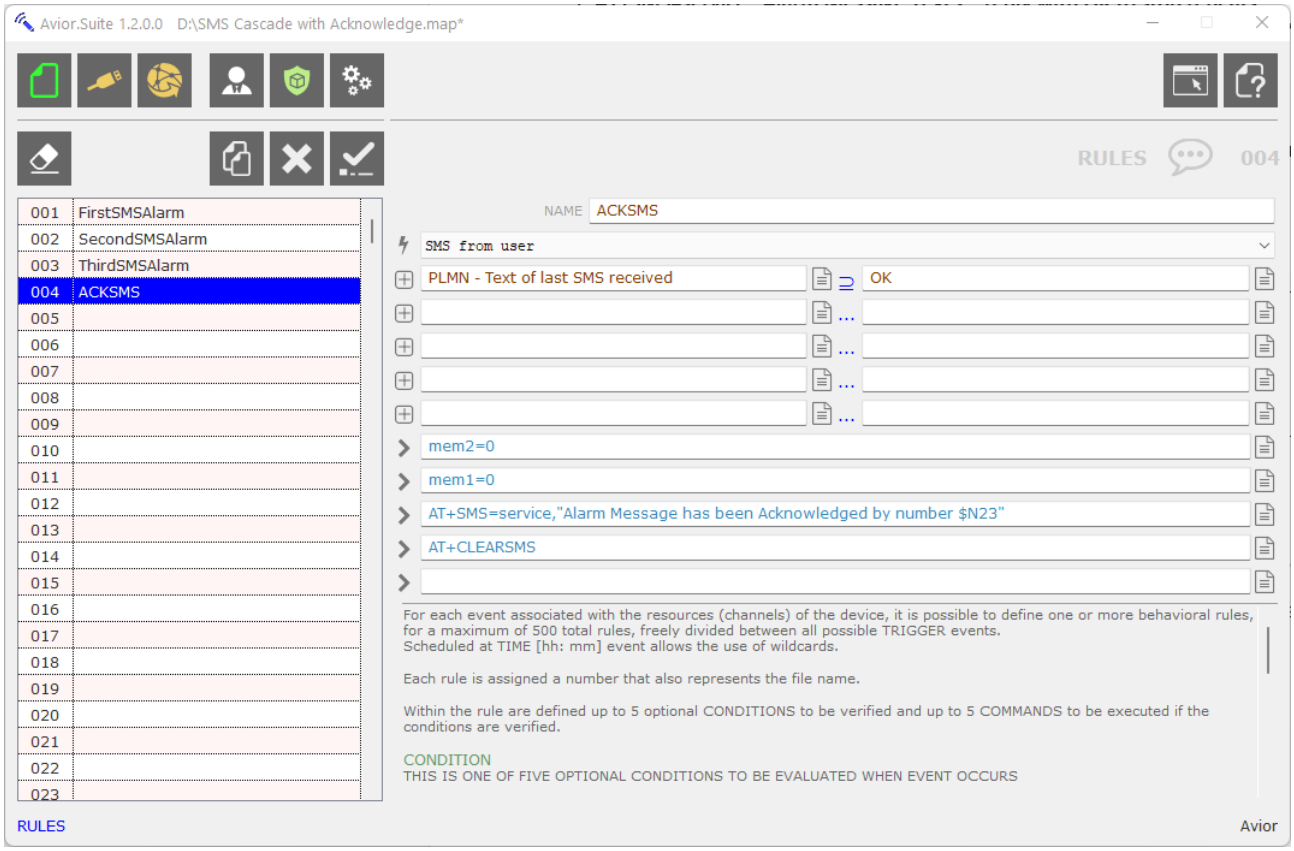
+ CONDITION Memory bit 1=0 (the 300 seconds timer in RULE1 has elapsed) AND a second condition Memory bit 2=1 (the incoming SMS alarm acknowledgment message has not be received) THEN perform the following 3 ACTIONS:

> **AT+SMS=service,"Alarm Message Text 2 - reply with OK to stop repeats"**
(this sends an SMS to all the recipients identified in the GROUP names "service" and sends the message text "Alarm Message Text 2 - reply with OK to stop repeats")

> **mem1=1,300**
(this turns internal memory bit1 ON, again, for the time shown in seconds (300s = 5mins) and we will use this bit as a condition in the next rule – sending the message a second time)

> **mem2=1**
(this turns internal memory bit2 ON and is a condition that is controlled by RULE4 which is waiting for a user to send a reply by SMS to stop the messages being repeated)

4. The fourth RULE checks for an incoming SMS message to stop the messages repeating:



This RULE named "ACKSMS" is checking for an incoming SMS from any USER containing the text "OK" The RULE is TIGGERED:

ϟ **TRIGGER** SMS from USER

+ CONDITION PLMN (mobile network) Text of the Last SMS received contains the characters "OK" THEN perform the following 3 ACTIONS:

> **mem2=0**
(this turns internal memory bit2 OFF and is a condition that used in the previous RULES as a CONDITION which stops the RULE and stops the alarm SMS being sent)

> **mem1=0**
(this turns internal memory bit1 OFF to rest any timers)

> **AT+SMS=service,"Alarm Message has been Acknowledged by number $N23"**
(this sends an SMS to all the recipients identified in the GROUP names "service" confirming that the alarm has been acknowledged and inserts the number of the person which sent the OK message $N23)

> **AT+CLEARSMS**
(this just clears the incoming SMS ready for next time)