Facility Monitoring System Understanding Simple Recipes in FMS 5

Technical Note TCC-199
Rev A

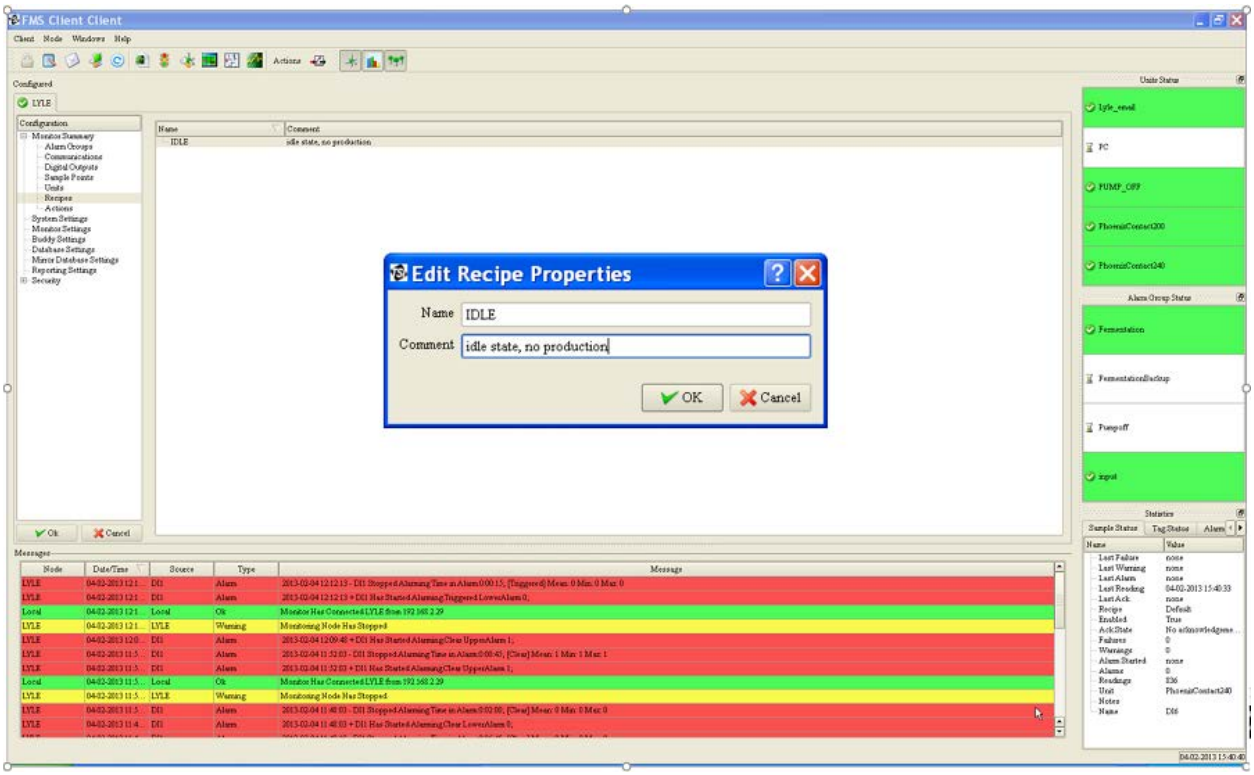
Introduction

There are times when you would like to easily change alarm limits or even stop a sample point from alarming because of repetitive actions, such as daily production shut-down at a one shift production facility. Often times, during this shutdown period, the BMS (Building Management System) will slow down fan speeds on HEPA filtration systems, control to a wider range of room temperature and humidity, or may even shut down certain fans that maintain room pressure differential. It would be beneficial to have FMS 5 ignore any alarm conditions during this time so there are not alarms logged or, if using alarm notifications, facilities aren't bothered with alarm notifications during these periods. There is a simple method of stopping these expected, but nuisance, alarms. A simple recipe can be configured that will change alarm parameters while that recipe is running. The recipe can be turned on or off with a simple software setting on the Control Node page, represented by the traffic light icon, or by using the dropdown menu function of the main menu tool bar (**Node | Control**).

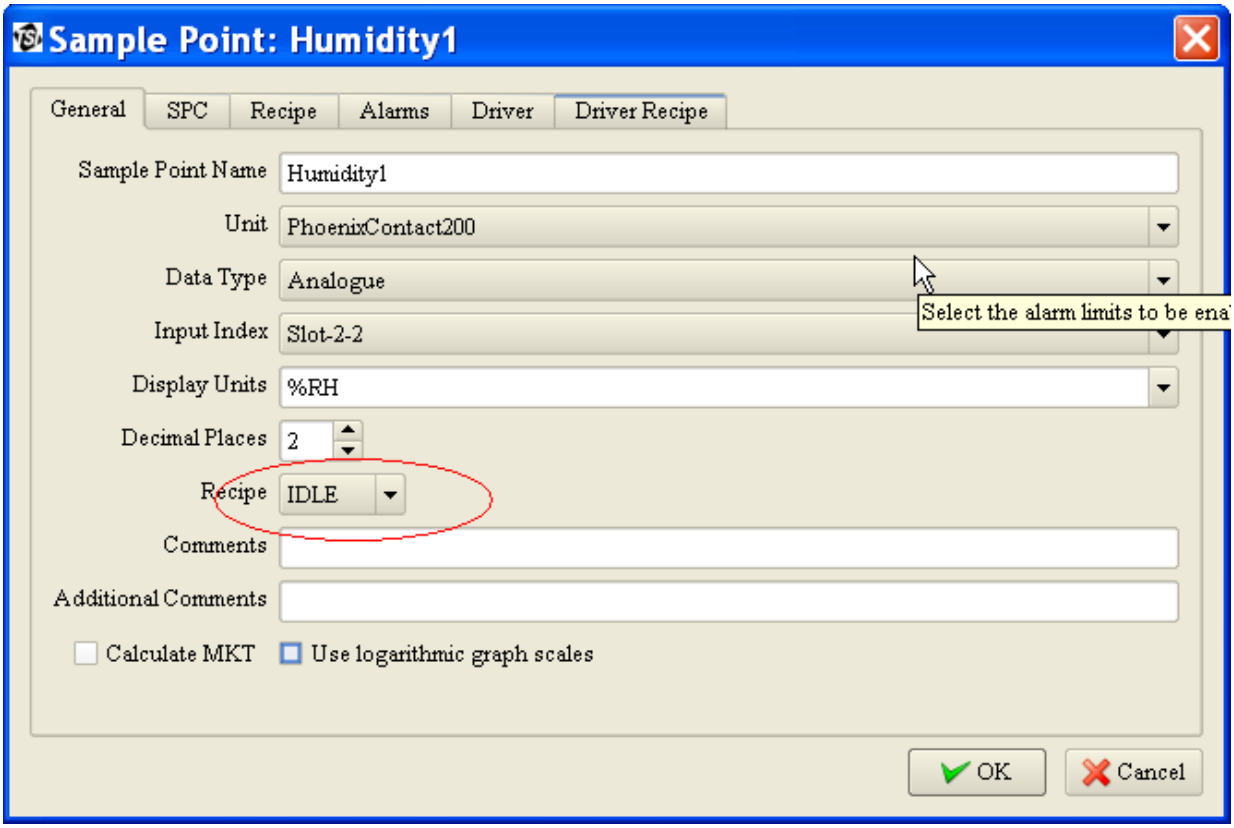
Recipe Set Up and Control

To demonstrate how to set up and control simple recipe functions, screen shots are included from an actual running system. The system is running within a room kept at or below 30% humidity during the day, but may increase at night. The system is set to send email notifications if any sample points exceed alarm parameters, however it is set to not send email notifications during the night at 3 a.m. if room humidity exceeds 30%. This means the alarm parameters have to be turned off without having to reconfigure twice daily sample points.

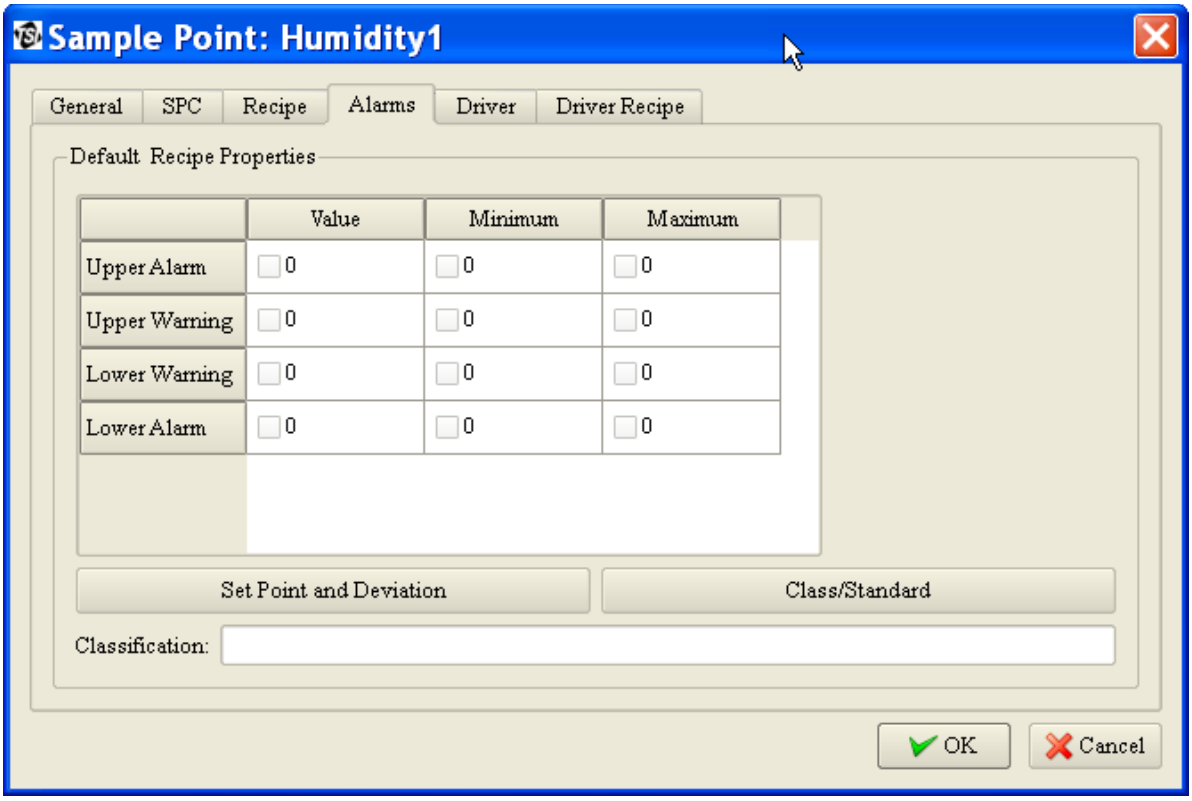
First, configure a recipe by clicking on the configuration icon (the wrenches). Click on "**Monitor Summary**" to expand the group and click on "**Recipes**". Right-click in the open field to the right. Click "**New Recipe**" and type desired name in the field provided. A note can also be added at this point to describe the recipe conditions. For this example, a new recipe named "IDLE" has been created and notes included to outline recipe conditions (idle state, no production).



After creating the recipe, it will simply need to be associated with the desired sample point and alarm conditions. For this example, the humidity sensor was selected as well as the IDLE recipe on the **General** tab. There will be a dropdown menu of all available recipes, including **Default**.

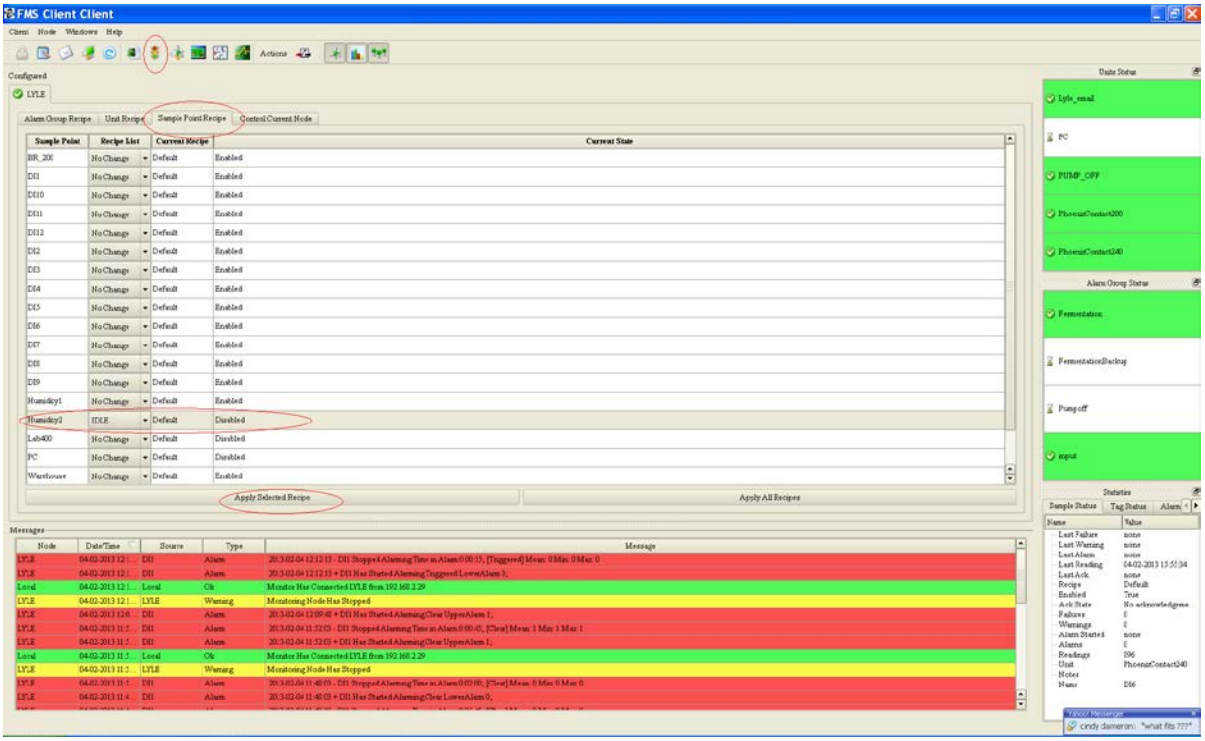


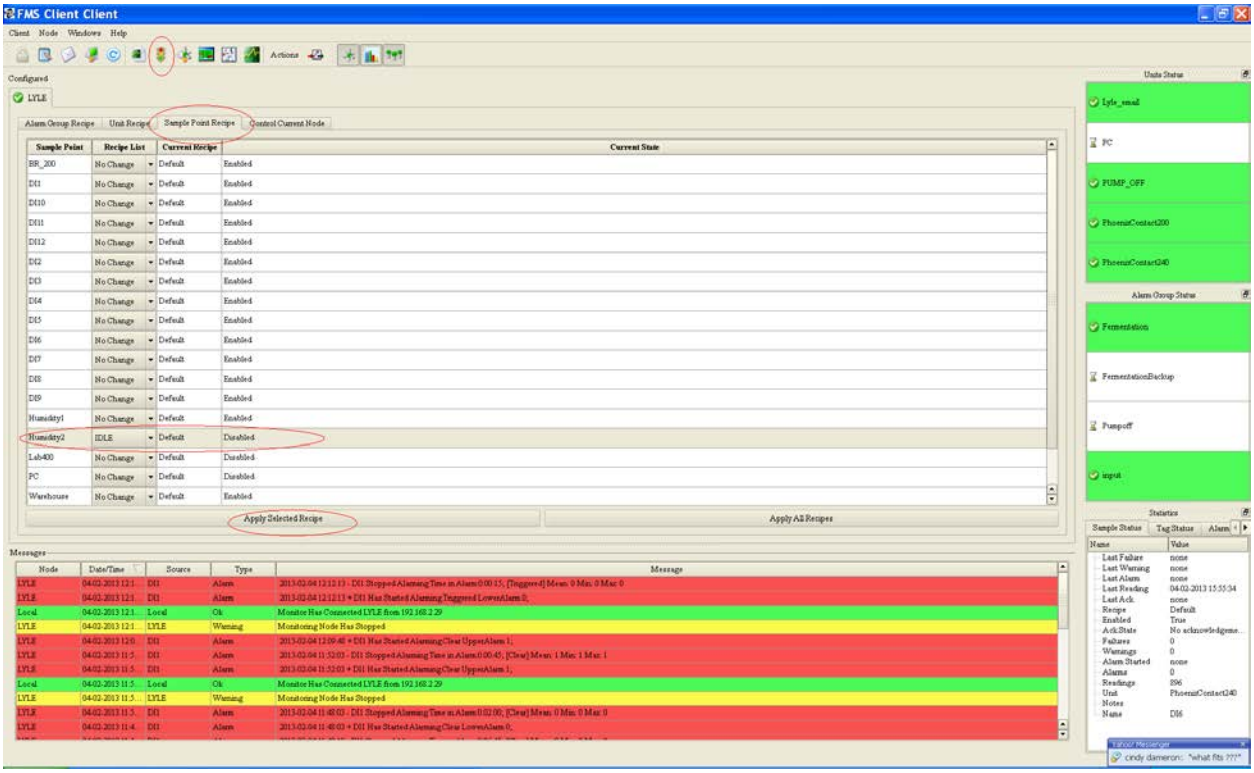
Select **Alarms** tab and set the desired alarm parameters. In this example, no alarms are desired during the period of time that the IDLE recipe is selected.



After making the configuration changes, save work and reboot the node for the changes to take effect.

Once the node has rebooted, use the manual controls to invoke the chosen recipe. Select **Sample Point Recipe** and scroll down/select the desired sample point to be controlled. Select the desired recipe from the recipe list and select **Apply Selected Recipe.** FMS Software will reset the alarm parameters to no alarms while the **IDLE** recipe is enabled. To reset the alarm parameters back to normal, repeat the steps, and select **Default**.





Summary — Other Simple Recipe Control Options

By using this selection process, it is possible to invoke multiple recipes on multiple sample points. It's simply a matter of selecting the recipes to be changed on all the desired points and clicking **Apply All Recipes**.

As indicated by the tabs, it's easy to control Units with a recipe. For example, if there were a desire to temporarily disable a unit on an ongoing basis, it's easier to use a recipe and quickly reboot the system rather than reconfiguring the unit. Similarly, entire Alarm groups can be disabled or changed in this manner.

In addition to manual control of recipes, it's possible to combine digital inputs to automate recipe control and to automate recipe control using digital outputs/inputs. These advanced techniques are described in detail in TSI TCC-200: Facility Monitoring System Using Simple Digital Inputs in FMS.

Knowledge Beyond Measure.

TSI Incorporated – Visit our website www.tsi.com for more information.

USA	Tel: +1 800 680 1220	India	Tel: +91 80 67877200
UK	Tel: +44 149 4 459200	China	Tel: +86 10 8251 6588
France	Tel: +33 4 91 11 87 64	Singapore	Tel: +65 6595 6388
Germany	Tel: +49 241 523030		

TCC-199 Rev A (7/5/2022) Printed in U.S.A