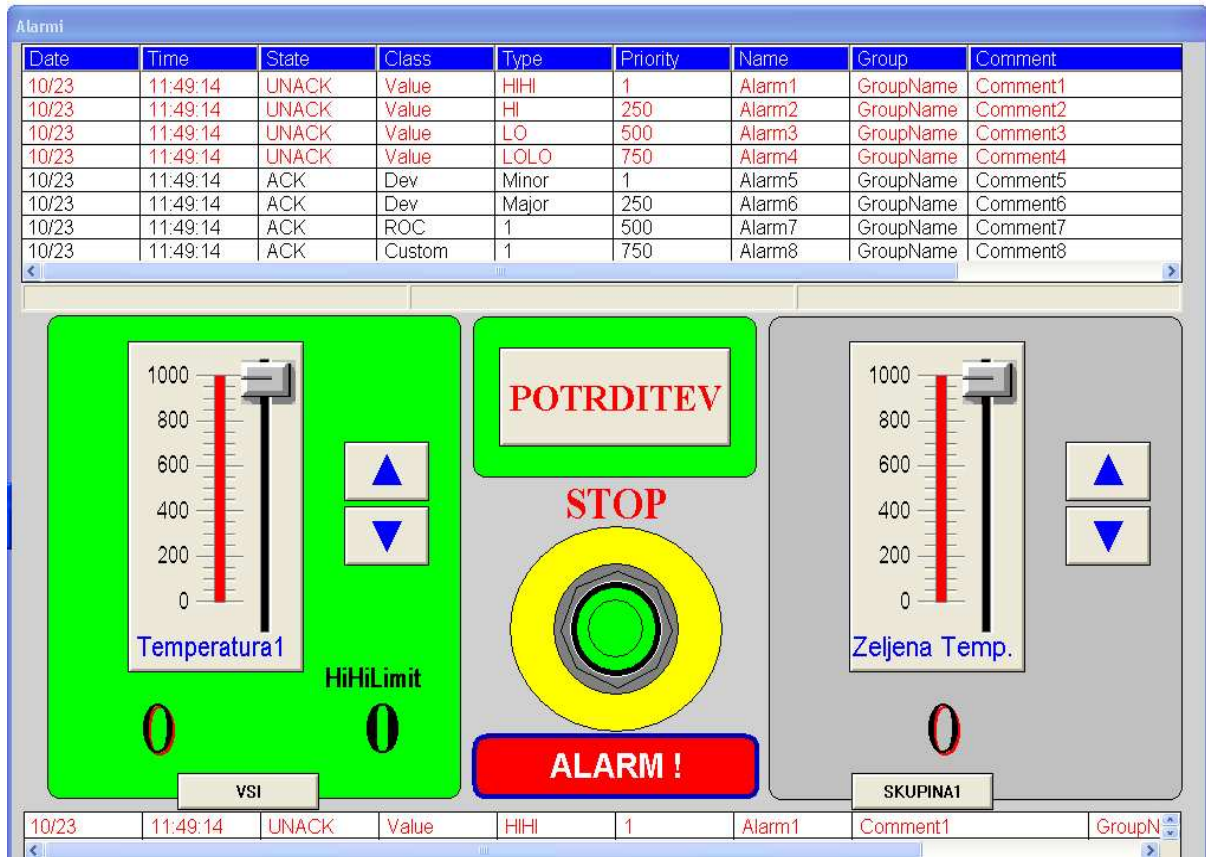


Vaja 05 - Alarmi in dogodki

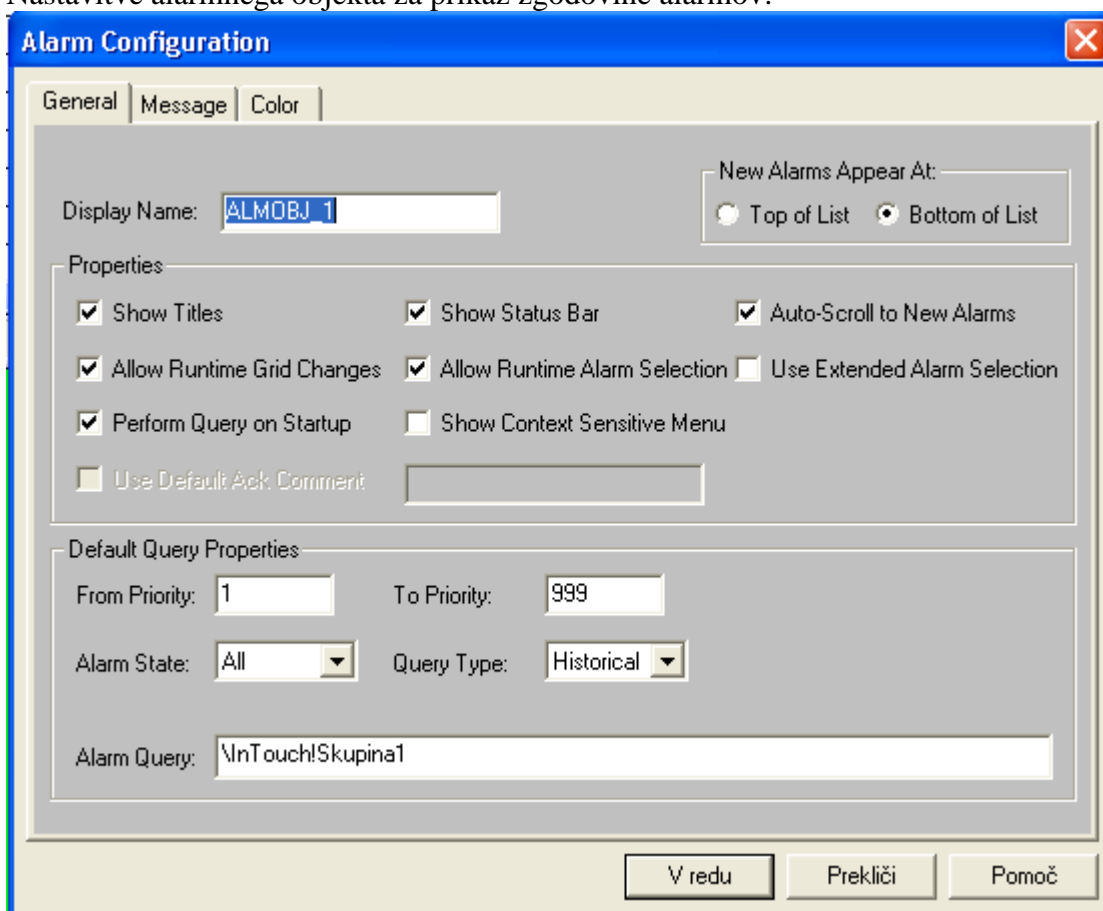
1. Kreirajte okno za prikaz alarmov in dogodkov:



2. Alarmni objekt za prikaz trenutnih alarmov in zgodovine alarmov in dogodkov

Namestite dva alarmna objekta. V prvem naj se prikazuje zgodovina alarmov in dogodkov, v drugem pa prikaz zadnjega aktivnega alarma, ki naj bo brez naslova in take velikosti, da boste lahko prikazovali alarmna sporočila le v eni vrstici. Izvedite nastavitve alarmnih objektov tako, da boste lahko opazovali datum in čas nastanka alarma, tip dogodka, vrsto alarma, prioriteto alarmnega sporočila, ime spremenljivke **komentar**, vrednost spremenljivke, mejno vrednost in alarmno stanje.

Nastavitve alarmnega objekta za prikaz zgodovine alarmov:



The screenshot shows the 'Alarm Configuration' dialog box with the 'General' tab selected. The 'Display Name' is 'ALMOBJ_1'. The 'New Alarms Appear At' section has 'Bottom of List' selected. The 'Properties' section includes several checked options: 'Show Titles', 'Show Status Bar', 'Auto-Scroll to New Alarms', 'Allow Runtime Grid Changes', 'Allow Runtime Alarm Selection', 'Perform Query on Startup', and 'Use Default Ack. Comment'. The 'Default Query Properties' section shows 'From Priority' as 1, 'To Priority' as 999, 'Alarm State' as 'All', and 'Query Type' as 'Historical'. The 'Alarm Query' field contains the text '\\nTouch!Skupina1'. At the bottom, there are three buttons: 'V redu', 'Prekliči', and 'Pomoč'.

3. Tvorite spremenljivke:

<u>Ime:</u>	<u>Tip:</u>
<i>Stop</i>	<i>Mem Discrete</i>
<i>Temperatura1</i>	<i>Mem Integer</i>
<i>Temperatura1_Zeljena</i>	<i>Mem Integer</i>

Vse spremenljivke naj pripadajo skupini alarmov “*Skupina1*”.

4. Potrditev alarmnih sporočil

Izvedite vse potrebno za opozarjanje operaterja na nepotrjene alarme in izvedite možnost potrditve alarmnega sporočila s tipko. Opozarjanje izvedite z utripanjem ozadja tipke in napisa na tipki ob nepotrjenih alarmih.



Za utripanje napisa na tipki in ozadja uporabite dinamično lastnost *Blink*. V polje expression vpišite:

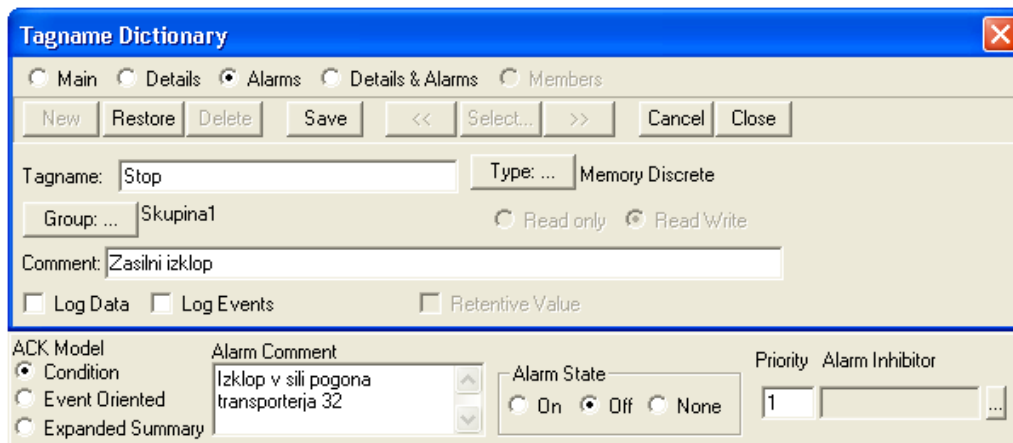
Skupina1.Ack == 0

Za tipko uporabite dinamično lastnost *Action*. V polje za programski modul vpišite

Ack Skupina1;

5. Določitev alarmov

Za diskretno spremenljivko “*Stop*” določite alarmno stanje in vpišite besedilo alarma:



Tagname Dictionary

Main Details Alarms Details & Alarms Members

New Restore Delete Save << Select... >> Cancel Close

Tagname: Stop Type: ... Memory Discrete

Group: ... Skupina1 Read only Read Write

Comment: Zasilni izklop

Log Data Log Events Retentive Value

ACK Model

Condition Event Oriented Expanded Summary

Alarm Comment

Izklop v sili pogona transporterja 32

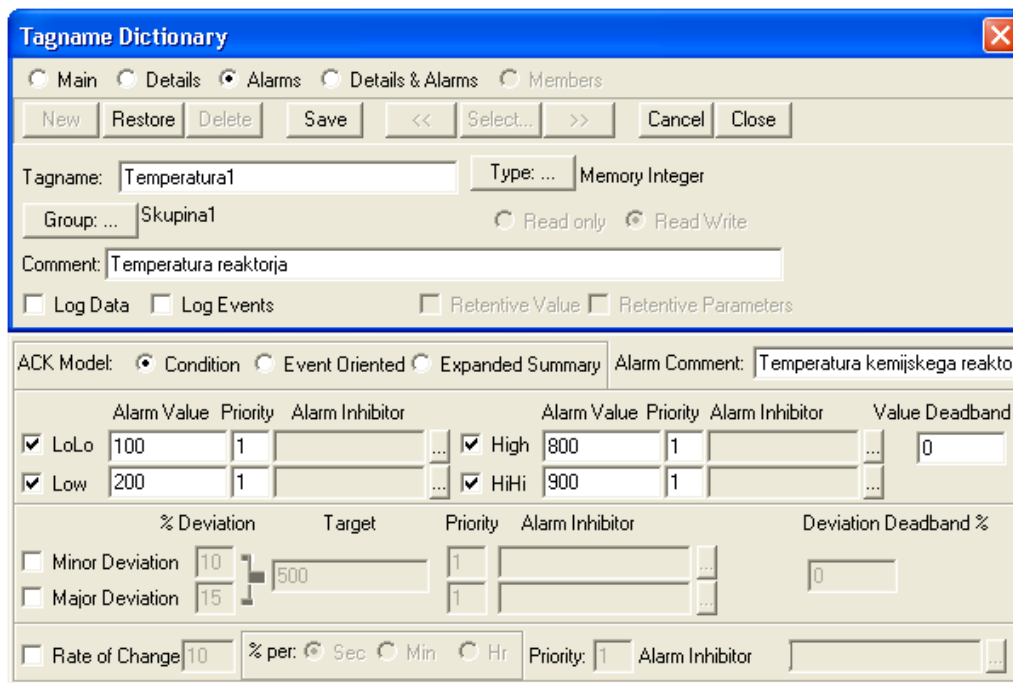
Alarm State

On Off None

Priority Alarm Inhibitor

1

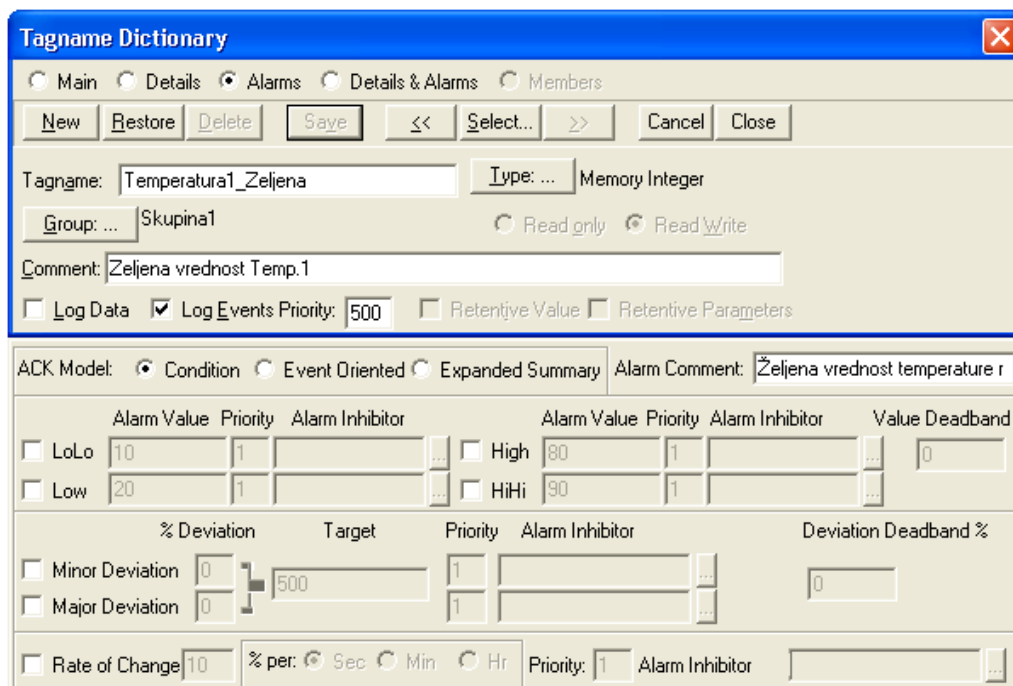
Za zvezno spremenljivko “*Temperatura1*” določite (*Special, Tagname dictionary, izberite spremenljivko Temperatura, izberite gumb Alarms*) in preiskusite naslednje alarme:



The screenshot shows the 'Tagname Dictionary' dialog box with the 'Alarms' tab selected. The tag name is 'Temperatura1', type is 'Memory Integer', and group is 'Skupina1'. The comment is 'Temperatura reaktorja'. The 'Log Data' and 'Log Events' checkboxes are unchecked. The 'ACK Model' is set to 'Condition'. The 'Alarm Comment' is 'Temperatura kemijskega reakto'. The 'Alarm Value' section shows 'LoLo' at 100, 'Low' at 200, 'High' at 800, and 'HiHi' at 900. The 'Value Deadband' is set to 0. The '% Deviation' section shows 'Minor Deviation' at 10 and 'Major Deviation' at 15. The 'Target' is set to 500. The 'Priority' is 1. The 'Alarm Inhibitor' is set to 1. The 'Deviation Deadband %' is 0. The 'Rate of Change' is 10. The '% per' is set to 'Sec'.

6. Dogodki

Za spremenljivko “*Temperatura1_Zeljena*” določite spremljanje dogodkov: *Special/Tagname Dictionary* in označite *Log Events*:



The screenshot shows the 'Tagname Dictionary' dialog box with the 'Alarms' tab selected. The tag name is 'Temperatura1_Zeljena', type is 'Memory Integer', and group is 'Skupina1'. The comment is 'Zeljena vrednost Temp.1'. The 'Log Data' checkbox is unchecked, and the 'Log Events' checkbox is checked. The 'Priority' is 500. The 'ACK Model' is set to 'Condition'. The 'Alarm Comment' is 'Zeljena vrednost temperature r'. The 'Alarm Value' section shows 'LoLo' at 10, 'Low' at 20, 'High' at 80, and 'HiHi' at 90. The 'Value Deadband' is set to 0. The '% Deviation' section shows 'Minor Deviation' at 0 and 'Major Deviation' at 0. The 'Target' is set to 500. The 'Priority' is 1. The 'Alarm Inhibitor' is set to 1. The 'Deviation Deadband %' is 0. The 'Rate of Change' is 10. The '% per' is set to 'Sec'.



7. Alarmna polja spremenljivk

HiHiLimit

0

izvedite možnost dinamične nastavitve zgornje meje alarma "*HiHiLimit*" z uporabo dinamične lastnosti: *User Input Analog* in alarmnega polja *HiHiLimit*:

Temperatura1.HiHiLimit

8. Izvedite še naslednje:

- Ob nepotrjenem alarmu naj igra poljubna melodija.
- Dogodek (Event) naj se registrira le, če je sprememba vrednosti spremenljivka večja od 50.
- Dodajte polje z napisom ALARM, ki naj bo vidno le, kadar bo prisoten alarm v skupini alarmov *Skupina1*.
- Izvedite izbiro skupine alarmov, ki jih želite opazovati v alarmnem objektu. Izbirate lahko med skupinama *\$System* in *Skupina1*.

Namig:

Uporabite funkcije:

```
PlaySound( "C:\WINDOWS\MEDIA\horns.wav", 1 );
almQuery( "ALMOBJ_1", "\intouch!$System", 1, 999, "All", "Hist" );
almQuery( "ALMOBJ_1", "\intouch!Skupina1", 1, 999, "All", "Hist" );
```