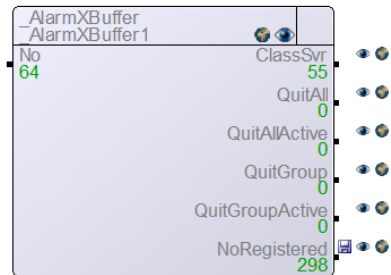## _AlarmXBuffer

This class serves the alarm communication between HMI and CPU and for temporary buffering of some alarms. It is stringently necessary that the class instance keeps the **_AlarmXBuffer1** default name. The instance of this class belongs to the process (CPU). Via the **No** client the size of the temporary buffer can be set. The temporary buffer is necessary to ensure realtime attitude. The connected terminal (HMI) checks about each second if alarms are in the temporary buffer or not. The servers **QuitAll** and **QuitGroup**

can be used to acknowledge alarms. The group number (corresponds to the value of the **_AlarmX0Para::Group** client) has to be defined at acknowledge of an alarm group. The single alarms are realized via the **_AlarmX0Para** class or its derivation.

Interfaces

Servers

ClassSvr	Incremented when an alarm is triggered, repaired or cancelled.
QuitAll	By writing to this server, all alarms are cancelled.
QuitAllActive	All active alarms can be cancelled via a write access to this server.
QuitGroup	By writing to this server, all alarms of a group are cancelled. The value that is written to the server, is the group number.
QuitGroupActive	All active alarms of a group can be cancelled via a write access to this server. The value that is written to the server, is the group number.
NoRegistered	Shows the number of all registered alarm objects. If from a previous boot process, this server contains a value unlike 0, this value is then used for the definition of the buffer size. The server exists for information and data retention purposes, a change during runtime is impractical and not allowed.

Clients

No	Here, the size of the alarm message buffer is defined. For versions of the class below 0.15, it is essential that at least the number of alarm objects placed in the project be set here. Starting with version 0.15 of the class, the buffer size is adjusted automatically.

Global Methods

Init	Here, the buffer for the alarms is initialized.
RegisterAlarmXPara	An alarm is called from this server for registration.
ActionAlarm	Called by an alarm object to report the occurrence, removal or cancelling of an alarm.