

# Controlling Exceptions in Logged Process (Work with D2000 HI)

## Alarms - Controlling exceptions in logged process

There are two types of alarms implemented in the D2000 system - **system** and **process** alarms. System alarms are defined as objects of *Alarm* type. These objects are evaluated by means of the independent client process **D2000 Alarm** which is the parent of system alarms. Process alarms are not represented as D2000 system objects. They are defined for objects of I/O and Eval tag types. They start and finish dependent on the states of given object types. They are evaluated by the process **D2000 Calc** (process alarms of eval tags) or by the process **D2000 KOM** (process alarms of I/O Tags).

From the point of HI user's view, alarms can be divided into:



- critical alarms
- uncritical alarms
- blocked alarms

*System alarm* can be either critical or uncritical in dependence on the configuration in the process [D2000 CNF](#). Change from the critical status to uncritical status or vice versa is not possible in this case.

For *process alarm*, change from the critical status to uncritical status or vice versa is possible, in dependence on the configuration in the process [D2000 CNF](#).

After blocking, critical and uncritical alarms are moved into the list in the tab **Blocked alarms** in the **Alarm list** dialog box.

Alarm occurrence in the system is indicated by the flashing bulb icon located in the lower-left corner of the HI process's desktop, and by the sound signal (if the audible alert is enabled - see the parameter groups [Critical alarms](#) and [Uncritical alarms](#) in the **Console preferences** (or **User preferences**) dialog box - the **Beep on alarm** and **Beep on alarm if Alarm list is open** options).

	- no current alarm in the system
	- at least one alarm in the system

Clicking the bulb icon placed in the lower-left corner of the HI desktop opens the window containing the list of alarms. The alarm window can be opened automatically when an alarm occurs in the system, in dependence on the HI process configuration - see the parameter groups [Critical alarms](#) and [Uncritical alarms](#) in the **Console preferences** (or **User preferences**) dialog box - the **Open dialog on alarm** option). The window is described in more detail in the topic of [Displaying active and blocked alarms](#).