Command Class Alarm Endpoints

When an XML from an unknown device is generated by the z-wave binding and uploaded to the Zwave Data Base the Command Class Alarm channels on the Endpoints tab need to be reviewed. As the device is unknown, the binding may create a generic channel that doesn't link to any event (or to the right event). Below is a table the alarm channels available from the DB dropdown and their corresponding Alarm Type and events in the binding (as of 2-22-2023).

No.	Alarm Channels in Data Base	Alarm Type (s) included	Events
1	alarm_access	ACCESS CONTROL (6)	None
2	alarm_battery	POWER MANAGEMENT (8)	10 thru 15
3	alarm_burglar	HOME SECURITY (7)	1,2
4	alarm_clock	CLOCK (11)	None
5	alarm_co	CO (2)	1,2,3
6	alarm_co2	CO2 (3)	1,2,3
7	alarm_combustiblegas	GAS (18)	1,2,5
8	alarm_emergency	EMERGENCY (10)	1,2,3
9	alarm_entry	ACCESS CONTROL (6)	1,2,3,4,5,6
10	alarm_flood	WATER (5)	1,2
11	alarm_general	GENERAL (0)	None
12	alarm_heat	HEAT (4)	1,2
13	alarm_motion	HOME SECURITY (7)	7,8
14	alarm_number	various	various
15	alarm_power	POWER MANAGEMENT (8)	1,2,3,4
16	alarm_raw	JSON String	JSON String
17	alarm_smoke	SMOKE (1)	1,2,3
18	alarm_system	SYSTEM (9)	5
19	alarm_tamper	SMOKE (1), HOME SECURITY (7), SYSTEM (9)	(1)-3, (7)-3,4,9 (9)-6
20	alarm_watervalve	WATER_VALVE (15)	None
21	sensor_door	ACCESS CONTROL (6)	22,23
22	notification_siren	SIREN (14)	1

The first thing to look at are the Alarm channels with no events. Those need to be changed. The second thing to review is that the Alarm event the device provides (usually outlined in the manual) needs to align with the events defined in the ZWaveAlarmConverter.java file in the binding for that channel. The list is too long for inclusion here, but since HOME SECURITY ("BURGLAR") frequently has issues I'll use it as an example.

```
HOME_SECURITY__NONE("BURGLAR", 0),
HOME_SECURITY__INTRUSION("BURGLAR", 1),
HOME_SECURITY__INTRUSION_UNKNOWN("BURGLAR", 2),
```

```
HOME_SECURITY__TAMPER("BURGLAR", 3),
HOME_SECURITY__TAMPER_INVALID_CODE("BURGLAR", 4),
HOME_SECURITY__GLASS_BREAK("BURGLAR", 5),
HOME_SECURITY__GLASS_BREAK_UNKNOWN("BURGLAR", 6),
HOME_SECURITY__MOTION("BURGLAR", 7),
HOME_SECURITY__MOTION_UNKNOWN("BURGLAR", 8),
HOME_SECURITY__TAMPER_MOVED("BURGLAR", 9),
```

Note that the event are spread over three channels so alarm_burglar cannot be used to capture either motion or tamper activity. I also should have noted that all the channels with HOME SECURITY include the "0".

As to filling the rest of the "Edit Channel", the Label can be changed, and the Config can be left blank. The overview can help explain any quirks.

