

DQMH Project Aquieres Analyze & Storage Data

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1. Project description

This software acquires, analyzes and stores in a database the results obtained by sensors and an analog input connected to a microcontroller (MCU), those sensors can obtain a digital result like temperature and humidity.

2. Code component descriptions

2.1. DQMH® modules

This section describes DQMH® module responsibilities and relationships.

2.1.1. Preamble

A DQMH module is the main component of an architecture based on DQMH® framework. A DQMH module is used to implement a section of the application that has one responsibility.

DQMH® framework defines two different type of DQMH module.

Singleton:

A Singleton DQMH module can have only one instance running at any given time.

Cloneable:

A Cloneable DQMH module can have one or multiple instances running in parallel.

DQMH® framework defines two different ways to carry data throughout the application and with both other DQMH modules and non-DQMH based code.

Request events:

A request is a code that fires an event requesting the DQMH module to do something. Multiple locations in the code can send events to the DQMH module.

Request events are many-to-one.

Requests are usually named using imperative tense.

Broadcast events:

A broadcast is a code that fires an event broadcasting that the DQMH module did something. Multiple Event Structures can register to handle the Broadcast Events.

Broadcast Events are one-to-many.

Broadcasts are usually named using past tense or passive voice.



Refer to the DQMH® framework official [documentation](http://delacor.com/documentation/dqmh-html/) (<http://delacor.com/documentation/dqmh-html/>) to find more details on how the framework works

The following section gives you details on the project architecture relying on this framework. It gives you an overview of the modules' interaction and detailed information on each module.

Graphs used in this section have the following legend:

Components:

```
digraph G484315 {
  rankdir=LR;
  edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
  node[color=black shape=box]
  "DQMH module / Lvlib"[color=black shape=component]
  "Vi"[color=skyblue shape=note]
}
```

Events:

```
digraph G2948 {
  rankdir=LR;
  edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
  node[color=black shape=box]
  " "[color=white shape=box]
  " "[color=white shape=box]
  " "[color=white shape=box]
  " "[color=white shape=box]
  " " -> " " [label="Request to a DQMH module" dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
  " " -> " " [label="Broadcast from a DQMH module" dir=both color=goldenrod arrowhead=normal arrowtail=none style=dashed penwidth=1];
}
```

Start and Stop module callers:

```
digraph G449495 {
  rankdir=LR;
  edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
  node[color=black shape=box]
  "Start Module caller"[color=black shape=component]
  "Start Module"[color=yellowgreen shape=note]
  "Start Module" -> "Start Module caller" [label="Called by" dir=both color=yellowgreen arrowhead=odot arrowtail=inv style=filled penwidth=1];
}
```

```
digraph G32547 {
  rankdir=LR;
  edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
  node[color=black shape=box]
  "Stop Module
  caller"[color=black shape=component]
  "Stop Module"[color=tomato shape=note]
  "Stop Module" -> "Stop Module
  caller" [label="Called by" dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
}
```

2.1.2. Modules overview

This project contains the following modules.

Table 1. Modules list

| Singleton | Cloneable |
|-------------------------------|-----------|
| Adquisicion_Helper_Loop.lvlib | |
| Analisis.lvlib | |
| Configuracion.lvlib | |
| Mensajes.lvlib | |
| Save DB_SQLite.lvlib | |
| UI.lvlib | |

This graph represents the links between all DQMH modules.

```

digraph G788197 {
rankdir=LR;
edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
node[color=black shape=box]
"UI"[color=black shape=component]
"Adquisicion_Helper_Loop"[color=black shape=component]
"Configuracion"[color=black shape=component]
"Analisis"[color=black shape=component]
"Mensajes"[color=black shape=component]
"Save_DB_SQLite"[color=black shape=component]
"Adquisicion_Helper_Loop" -> "Adquisicion_Helper_Loop" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Configuracion" -> "Adquisicion_Helper_Loop" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Analisis" -> "Analisis" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Adquisicion_Helper_Loop" -> "Analisis" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Configuracion" -> "Analisis" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"UI" -> "Configuracion" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Configuracion" -> "Configuracion" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Mensajes" -> "Mensajes" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"UI" -> "Mensajes" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Save_DB_SQLite" -> "Save_DB_SQLite" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Configuracion" -> "Save_DB_SQLite" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Analisis" -> "Save_DB_SQLite" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"UI" -> "UI" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
}

```

2.1.3. Adquisicion_Helper_Loop.Mib

Type: Singleton

Responsibility: This module is the interface between the MCU and labview. This module reads the serial port and shows the data aquiered.

Module Start/Stop calls

```

digraph G903564 {
rankdir=LR;
edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
node[color=black shape=box]
"Start Module"[color=yellowgreen shape=note]
"UI"[color=black shape=component]
"Test Adquisicion_Helper_Loop API"[color=skyblue shape=note]
"Stop Module"[color=tomato shape=note]
"Adquisicion_Helper_Loop"[color=black shape=component]
"Start Module" -> "UI" [dir=both color=yellowgreen arrowhead=odot arrowtail=inv style=filled penwidth=1];
"Start Module" -> "Test Adquisicion_Helper_Loop API" [dir=both color=yellowgreen arrowhead=odot arrowtail=inv style=filled penwidth=1];
"Stop Module" -> "UI" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
"Stop Module" -> "Adquisicion_Helper_Loop" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
"Stop Module" -> "Test Adquisicion_Helper_Loop API" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
}

```

Table 2. Start and Stop module callers

| Function | Callers |
|---|---|
| Adquisicion_Helper_Loop.lvlib:Start Module.vi | UI.lvlib:Main.vi Test Adquisicion_Helper_Loop API.vi |
| Adquisicion_Helper_Loop.lvlib:Stop Module.vi | UI.lvlib:Main.vi Adquisicion_Helper_Loop.lvlib:Handle Exit.vi Test Adquisicion_Helper_Loop API.vi |

Module relationship

```
digraph G182490 {
rankdir=LR;
edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
node[color=black shape=box]
"Adquisicion_Helper_Loop"[color=slateblue shape=component]
"UI"[color=black shape=component]
"Test Adquisicion_Helper_Loop API"[color=skyblue shape=note]
"Configuracion"[color=black shape=component]
"Analisis"[color=black shape=component]
"UI" -> "Adquisicion_Helper_Loop" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Test Adquisicion_Helper_Loop API" -> "Adquisicion_Helper_Loop" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Adquisicion_Helper_Loop" -> "Adquisicion_Helper_Loop" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Configuracion" -> "Adquisicion_Helper_Loop" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Adquisicion_Helper_Loop" -> "Test Adquisicion_Helper_Loop API" [label=" " dir=both color=goldenrod arrowhead=normal arrowtail=none style=dashed penwidth=1];
"Adquisicion_Helper_Loop" -> "Adquisicion_Helper_Loop" [label=" " dir=both color=forestgreen arrowhead=onormal arrowtail=none style=filled penwidth=1];
"Adquisicion_Helper_Loop" -> "Analisis" [label=" " dir=both color=forestgreen arrowhead=onormal arrowtail=none style=filled penwidth=1];
}
```

Table 3. Requests callers

| Request Name | Callers |
|--|--|
| Adquisicion_Helper_Loop.lvlib:Show Panel.vi | Test Adquisicion_Helper_Loop API.vi |
| Adquisicion_Helper_Loop.lvlib:Hide Panel.vi | Test Adquisicion_Helper_Loop API.vi |
| Adquisicion_Helper_Loop.lvlib:Get Module Execution Status.vi | Adquisicion_Helper_Loop.lvlib:Start Module.vi Adquisicion_Helper_Loop.lvlib:Obtain Broadcast Events for Registration.vi |
| | |

| Request Name | Callers |
|---|--|
| Adquisicion_Helper_Loop.lvlib:Show Diagram.vi | Test Adquisicion_Helper_Loop API.vi |
| Adquisicion_Helper_Loop.lvlib:Start Helper Loop.vi | Test Adquisicion_Helper_Loop API.vi |
| Adquisicion_Helper_Loop.lvlib:Stop helper loop.vi | Test Adquisicion_Helper_Loop API.vi |
| Adquisicion_Helper_Loop.lvlib:Set Waveform.vi | Test Adquisicion_Helper_Loop API.vi |
| Adquisicion_Helper_Loop.lvlib:Set adquisition parameters.vi | Configuracion.lvlib:Main.vi Test Adquisicion_Helper_Loop API.vi |

Table 4. Broadcasts Listeners

| Broadcast Name | Listeners |
|---|-------------------------------------|
| Adquisicion_Helper_Loop.lvlib:Module Did Init.vi | Test Adquisicion_Helper_Loop API.vi |
| Adquisicion_Helper_Loop.lvlib:Status Updated.vi | Test Adquisicion_Helper_Loop API.vi |
| Adquisicion_Helper_Loop.lvlib>Error Reported.vi | Test Adquisicion_Helper_Loop API.vi |
| Adquisicion_Helper_Loop.lvlib:Module Did Stop.vi | Test Adquisicion_Helper_Loop API.vi |
| Adquisicion_Helper_Loop.lvlib:Update Module Execution Status.vi | Test Adquisicion_Helper_Loop API.vi |

Table 5. Used requests

| Module | Broadcasts |
|--------|------------|
| | |

| Module | Broadcasts |
|-------------------------------|--|
| Adquisicion_Helper_Loop.lvlib | Adquisicion_Helper_Loop.lvlib:Get Module Execution Status.vi |
| Analisis.lvlib | Analisis.lvlib:Analyze and Conert Data.vi |

Table 6. Registred broadcast

| Module | Broadcasts |
|--------|------------|
| — | — |

2.1.4. Analisis.Mlib

Type: Singleton

Responsibility: Decodify the information adquired by adquisition. In the module separate the humidity, temperature and analog signal that shows a mesument of voltaje, current and resistance

Module Start/Stop calls

```

digraph G52649 {
rankdir=LR;
edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
node[color=black shape=box]
"Start Module"[color=yellowgreen shape=note]
"UI"[color=black shape=component]
"Test Analisis API"[color=skyblue shape=note]
"Stop Module"[color=tomato shape=note]
"Analisis"[color=black shape=component]
"Start Module" -> "UI" [dir=both color=yellowgreen arrowhead=odot arrowtail=inv style=filled penwidth=1];
"Start Module" -> "Test Analisis API" [dir=both color=yellowgreen arrowhead=odot arrowtail=inv style=filled penwidth=1];
"Stop Module" -> "UI" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
"Stop Module" -> "Analisis" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
"Stop Module" -> "Test Analisis API" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
}

```

Table 7. Start and Stop module callers

| Function | Callers |
|--------------------------------|---|
| Analisis.lvlib:Start Module.vi | UI.lvlib:Main.vi Test Analisis API.vi |
| Analisis.lvlib:Stop Module.vi | UI.lvlib:Main.vi Analisis.lvlib:Handle Exit.vi Test Analisis API.vi |

Module relationship

```
digraph G395848 {
rankdir=LR;
edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
node[color=black shape=box]
"Analisis"[color=slateblue shape=component]
"UI"[color=black shape=component]
"Test Analisis API"[color=skyblue shape=note]
"Adquisicion_Helper_Loop"[color=black shape=component]
"Configuracion"[color=black shape=component]
"Save DB_SQLite"[color=black shape=component]
"UI" -> "Analisis" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Test Analisis API" -> "Analisis" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Analisis" -> "Analisis" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Adquisicion_Helper_Loop" -> "Analisis" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Configuracion" -> "Analisis" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Analisis" -> "Test Analisis API" [label=" " dir=both color=goldenrod arrowhead=normal arrowtail=none style=dashed penwidth=1];
"Analisis" -> "Analisis" [label=" " dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Analisis" -> "Save DB_SQLite" [label=" " dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
}
```

Table 8. Requests callers

| Request Name | Callers |
|---|--|
| Analisis.lvlib:Show Panel.vi | Test Analisis API.vi |
| Analisis.lvlib:Hide Panel.vi | Test Analisis API.vi |
| Analisis.lvlib:Get Module Execution Status.vi | Analisis.lvlib:Start Module.vi Analisis.lvlib:Obtain Broadcast Events for Registration.vi |
| Analisis.lvlib:Show Diagram.vi | Test Analisis API.vi |
| Analisis.lvlib:Analize and Conert Data.vi | Adquisicion_Helper_Loop.lvlib:Main.vi Test Analisis API.vi |
| Analisis.lvlib:Aquiere the delay time configured.vi | Configuracion.lvlib:Main.vi Test Analisis API.vi |

Table 9. Broadcasts Listeners

| Broadcast Name | Listeners |
|----------------|-----------|
| | |

| Broadcast Name | Listeners |
|--|----------------------|
| Analysis.lvlib:Module Did Init.vi | Test Analysis API.vi |
| Analysis.lvlib:Status Updated.vi | Test Analysis API.vi |
| Analysis.lvlib>Error Reported.vi | Test Analysis API.vi |
| Analysis.lvlib:Module Did Stop.vi | Test Analysis API.vi |
| Analysis.lvlib:Update Module Execution Status.vi | Test Analysis API.vi |

Table 10. Used requests

| Module | Broadcasts |
|----------------------|--|
| Analysis.lvlib | Analysis.lvlib:Get Module Execution Status.vi |
| Save DB_SQLite.lvlib | Save DB_SQLite.lvlib:Save_Data_From_Analysis.vi |

Table 11. Registered broadcast

| Module | Broadcasts |
|--------|------------|
| — | — |

2.1.5. Configuracion.Lvlib

Type: Singleton

Responsibility: In this module the user can choice the serial communication port and the time lapse when the information will be written in the database

Module Start/Stop calls

```
digraph G547884 {
rankdir=LR;
edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
node[color=black shape=box]
"Start Module"[color=yellowgreen shape=note]
"UI"[color=black shape=component]
"Test Configuracion API"[color=skyblue shape=note]
"Stop Module"[color=tomato shape=note]
"Configuracion"[color=black shape=component]
"Start Module" -> "UI" [dir=both color=yellowgreen arrowhead=odot arrowtail=inv style=filled penwidth=1];
"Start Module" -> "Test Configuracion API" [dir=both color=yellowgreen arrowhead=odot arrowtail=inv style=filled penwidth=1];
"Stop Module" -> "Configuracion" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
"Stop Module" -> "Test Configuracion API" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
}
```

Table 12. Start and Stop module callers

| Function | Callers |
|-------------------------------------|---|
| Configuracion.lvlib:Start Module.vi | UI.lvlib:Main.vi Test Configuracion API.vi |
| Configuracion.lvlib:Stop Module.vi | Configuracion.lvlib:Handle Exit.vi Test Configuracion API.vi |

Module relationship

```
digraph G292183 {
rankdir=LR;
edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
node[color=black shape=box]
"Configuracion"[color=slateblue shape=component]
"UI"[color=black shape=component]
"Test Configuracion API"[color=skyblue shape=note]
"Adquisicion_Helper_Loop"[color=black shape=component]
"Analisis"[color=black shape=component]
"Save DB_SQLite"[color=black shape=component]
"UI" -> "Configuracion" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Test Configuracion API" -> "Configuracion" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Configuracion" -> "Configuracion" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Configuracion" -> "Test Configuracion API" [label=" " dir=both color=goldenrod arrowhead=normal arrowtail=none style=dashed penwidth=1];
"Configuracion" -> "Adquisicion_Helper_Loop" [label=" " dir=both color=forestgreen arrowhead=onormal arrowtail=none style=filled penwidth=1];
"Configuracion" -> "Analisis" [label=" " dir=both color=forestgreen arrowhead=onormal arrowtail=none style=filled penwidth=1];
"Configuracion" -> "Configuracion" [label=" " dir=both color=forestgreen arrowhead=onormal arrowtail=none style=filled penwidth=1];
"Configuracion" -> "Save DB_SQLite" [label=" " dir=both color=forestgreen arrowhead=onormal arrowtail=none style=filled penwidth=1];
}
```

Table 13. Requests callers

| Request Name | Callers |
|--|--|
| Configuracion.lvlib:Show Panel.vi | UI.lvlib:Main.vi Test Configuracion API.vi |
| Configuracion.lvlib:Hide Panel.vi | Test Configuracion API.vi |
| Configuracion.lvlib:Get Module Execution Status.vi | Configuracion.lvlib:Start Module.vi Configuracion.lvlib:Obtain Broadcast Events for Registration.vi |
| Configuracion.lvlib:Show Diagram.vi | Test Configuracion API.vi |

Table 14. Broadcasts Listeners

| Broadcast Name | Listeners |
|---|---------------------------|
| Configuracion.lvlib:Module Did Init.vi | Test Configuracion API.vi |
| Configuracion.lvlib:Status Updated.vi | Test Configuracion API.vi |
| Configuracion.lvlib>Error Reported.vi | Test Configuracion API.vi |
| Configuracion.lvlib:Module Did Stop.vi | Test Configuracion API.vi |
| Configuracion.lvlib:Update Module Execution Status.vi | Test Configuracion API.vi |

Table 15. Used requests

| Module | Broadcasts |
|-------------------------------|---|
| Adquisicion_Helper_Loop.lvlib | Adquisicion_Helper_Loop.lvlib:Set acquisition parameters.vi |
| Analisis.lvlib | Analisis.lvlib:Acquire the delay time configured.vi |
| Configuracion.lvlib | Configuracion.lvlib:Get Module Execution Status.vi |

| Module | Broadcasts |
|----------------------|---|
| Save DB_SQLite.lvlib | Save DB_SQLite.lvlib:Start Helper Loop.vi |

Table 16. Registered broadcast

| Module | Broadcasts |
|--------|------------|
| — | — |

2.1.6. Mensajes.lvlib

Type: Singleton

Responsibility: This module shows information about recent actions like configuration, showing welcome greeting or the actual process

Module Start/Stop calls

```

digraph G905919 {
  rankdir=LR;
  edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
  node[color=black shape=box]
  "Start Module"[color=yellowgreen shape=note]
  "UI"[color=black shape=component]
  "Test Mensajes API"[color=skyblue shape=note]
  "Stop Module"[color=tomato shape=note]
  "Mensajes"[color=black shape=component]
  "Start Module" -> "UI" [dir=both color=yellowgreen arrowhead=odot arrowtail=inv style=filled penwidth=1];
  "Start Module" -> "Test Mensajes API" [dir=both color=yellowgreen arrowhead=odot arrowtail=inv style=filled penwidth=1];
  "Stop Module" -> "UI" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
  "Stop Module" -> "Mensajes" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
  "Stop Module" -> "Test Mensajes API" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
}

```

Table 17. Start and Stop module callers

| Function | Callers |
|--------------------------------|---|
| Mensajes.lvlib:Start Module.vi | UI.lvlib:Main.vi Test Mensajes API.vi |
| Mensajes.lvlib:Stop Module.vi | UI.lvlib:Main.vi Mensajes.lvlib:Handle Exit.vi Test Mensajes API.vi |

Module relationship

```
digraph G342826 {
rankdir=LR;
edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
node[color=black shape=box]
"Mensajes"[color=slateblue shape=component]
"UI"[color=black shape=component]
"Test Mensajes API"[color=skyblue shape=note]
"UI" -> "Mensajes" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Test Mensajes API" -> "Mensajes" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled
penwidth=1];
"Mensajes" -> "Mensajes" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Mensajes" -> "Test Mensajes API" [label=" " dir=both color=goldenrod arrowhead=normal arrowtail=none style=dashed
penwidth=1];
"Mensajes" -> "Mensajes" [label=" " dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled
penwidth=1];
}
```

Table 18. Requests callers

| Request Name | Callers |
|---|--|
| Mensajes.lvlib:Show Panel.vi | Test Mensajes API.vi |
| Mensajes.lvlib:Hide Panel.vi | Test Mensajes API.vi |
| Mensajes.lvlib:Get Module Execution Status.vi | Mensajes.lvlib:Start Module.vi Mensajes.lvlib:Obtain Broadcast Events for Registration.vi |
| Mensajes.lvlib:Show Diagram.vi | Test Mensajes API.vi |
| Mensajes.lvlib:Publicar Mensaje.vi | UI.lvlib:Main.vi Test Mensajes API.vi |

Table 19. Broadcasts Listeners

| Broadcast Name | Listeners |
|-----------------------------------|----------------------|
| Mensajes.lvlib:Module Did Init.vi | Test Mensajes API.vi |
| Mensajes.lvlib:Status Updated.vi | Test Mensajes API.vi |
| Mensajes.lvlib:Error Reported.vi | Test Mensajes API.vi |
| Mensajes.lvlib:Module Did Stop.vi | Test Mensajes API.vi |
| | |

| Broadcast Name | Listeners |
|--|----------------------|
| Mensajes.lvlib:Update Module Execution Status.vi | Test Mensajes API.vi |

Table 20. Used requests

| Module | Broadcasts |
|----------------|---|
| Mensajes.lvlib | Mensajes.lvlib:Get Module Execution Status.vi |

Table 21. Registred broadcast

| Module | Broadcasts |
|--------|------------|
| — | — |

2.1.7. Save DB_SQLite.lvlib

Type: Singleton

Responsibility: Obtain the processed data by Analisis module to write it in a database in SQLite with the purpose of regist the signal behavior

Module Start/Stop calls

```

digraph G119577 {
rankdir=LR;
edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
node[color=black shape=box]
"Start Module"[color=yellowgreen shape=note]
"UI"[color=black shape=component]
"Test Save DB_SQLite API"[color=skyblue shape=note]
"Stop Module"[color=tomato shape=note]
"Save DB_SQLite"[color=black shape=component]
"Start Module" -> "UI" [dir=both color=yellowgreen arrowhead=odot arrowtail=inv style=filled penwidth=1];
"Start Module" -> "Test Save DB_SQLite API" [dir=both color=yellowgreen arrowhead=odot arrowtail=inv style=filled penwidth=1];
"Stop Module" -> "UI" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
"Stop Module" -> "Save DB_SQLite" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
"Stop Module" -> "Test Save DB_SQLite API" [dir=both color=tomato arrowhead=odot arrowtail=inv style=dotted penwidth=1];
}

```

Table 22. Start and Stop module callers

| Function | Callers |
|----------|---------|
| | |

| Function | Callers |
|--------------------------------------|---|
| Save DB_SQLite.lvlib:Start Module.vi | UI.lvlib:Main.vi Test Save DB_SQLite API.vi |
| Save DB_SQLite.lvlib:Stop Module.vi | UI.lvlib:Main.vi Save DB_SQLite.lvlib:Handle Exit.vi Test Save DB_SQLite API.vi |

Module relationship

```

digraph G629089 {
rankdir=LR;
edge[dir=both color=black arrowhead=normal arrowtail=none style=filled penwidth=1]
node[color=black shape=box]
"Save DB_SQLite"[color=slateblue shape=component]
"UI"[color=black shape=component]
"Test Save DB_SQLite API"[color=skyblue shape=note]
"Configuracion"[color=black shape=component]
"Analisis"[color=black shape=component]
"UI" -> "Save DB_SQLite" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Test Save DB_SQLite API" -> "Save DB_SQLite" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Save DB_SQLite" -> "Save DB_SQLite" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Configuracion" -> "Save DB_SQLite" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Analisis" -> "Save DB_SQLite" [dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
"Save DB_SQLite" -> "Test Save DB_SQLite API" [label=" " dir=both color=goldenrod arrowhead=normal arrowtail=none style=dashed penwidth=1];
"Save DB_SQLite" -> "Save DB_SQLite" [label=" " dir=both color=forestgreen arrowhead=normal arrowtail=none style=filled penwidth=1];
}

```

Table 23. Requests callers

| Request Name | Callers |
|---|--|
| Save DB_SQLite.lvlib:Show Panel.vi | Test Save DB_SQLite API.vi |
| Save DB_SQLite.lvlib:Hide Panel.vi | Test Save DB_SQLite API.vi |
| Save DB_SQLite.lvlib:Get Module Execution Status.vi | Save DB_SQLite.lvlib:Start Module.vi Save DB_SQLite.lvlib:Obtain Broadcast Events for Registration.vi |
| Save DB_SQLite.lvlib:Show Diagram.vi | Test Save DB_SQLite API.vi |

| Request Name | Callers |
|--|---|
| Save DB_SQLite.lvlib:Start Helper Loop.vi | Configuracion.lvlib:Main.vi Test Save DB_SQLite API.vi |
| Save DB_SQLite.lvlib:Stop helper loop.vi | Test Save DB_SQLite API.vi |
| Save DB_SQLite.lvlib:Set Waveform.vi | Test Save DB_SQLite API.vi |
| Save DB_SQLite.lvlib:Save_Data_From_Analisis.vi | Analisis.lvlib:Main.vi Test Save DB_SQLite API.vi |

Table 24. Broadcasts Listeners

| Broadcast Name | Listeners |
|---|----------------------------|
| Save DB_SQLite.lvlib:Module Did Init.vi | Test Save DB_SQLite API.vi |
| Save DB_SQLite.lvlib:Status Updated.vi | Test Save DB_SQLite API.vi |
| Save DB_SQLite.lvlib:Error Reported.vi | Test Save DB_SQLite API.vi |
| Save DB_SQLite.lvlib:Module Did Stop.vi | Test Save DB_SQLite API.vi |
| Save DB_SQLite.lvlib:Update Module Execution Status.vi | Test Save DB_SQLite API.vi |

Table 25. Used requests

| Module | Broadcasts |
|----------------------|--|
| Save DB_SQLite.lvlib | Save DB_SQLite.lvlib:Get Module Execution Status.vi |

Table 26. Registred broadcast

| Module | Broadcasts |
|--------|------------|
| — | — |

2.1.8. UI.Mib

Type: Singleton

Responsibility: The user interface is the place where the user can control, configure and observe all the results of the data procecssing and the way that are obtained by the MCU.

Module Start/Stop calls

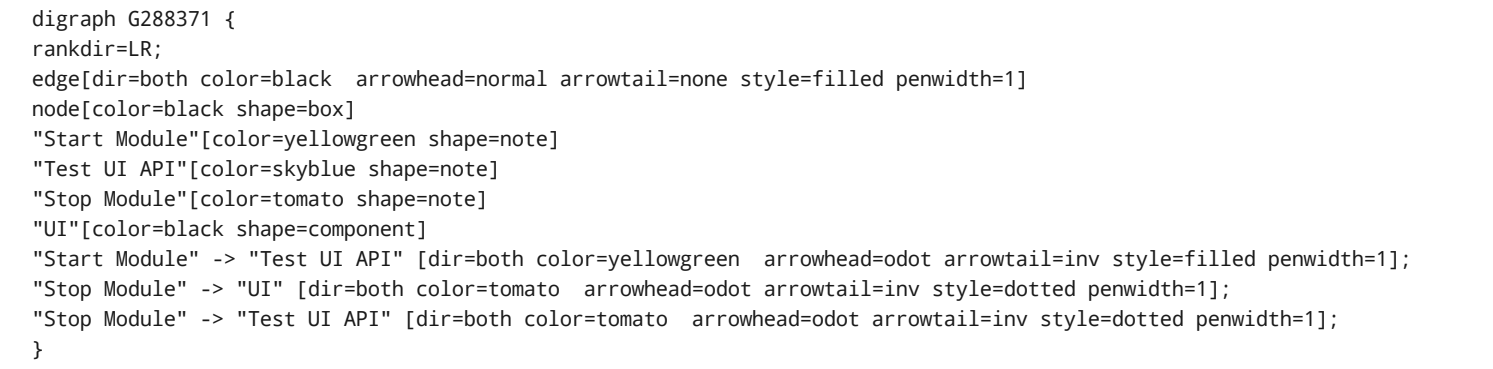


Table 27. Start and Stop module callers

| Function | Callers |
|--------------------------|---|
| UI.lvlib:Start Module.vi | Test UI API.vi |
| UI.lvlib:Stop Module.vi | UI.lvlib:Handle Exit.vi Test UI API.vi |

Module relationship

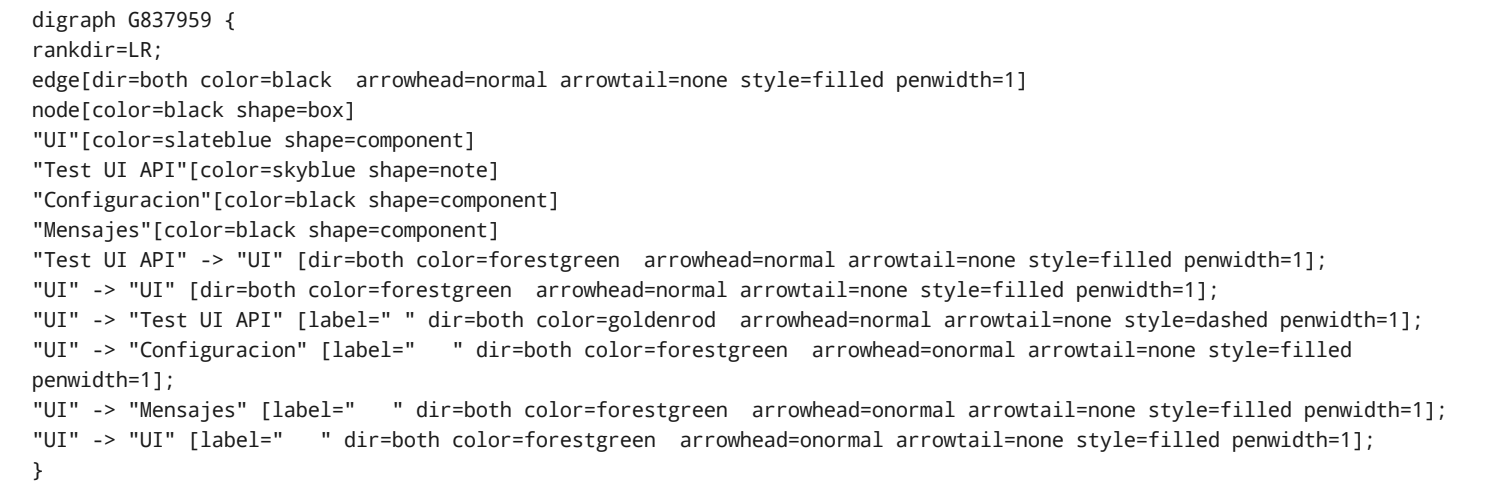


Table 28. Requests callers

| Request Name | Callers |
|------------------------|----------------|
| UI.lvlib:Show Panel.vi | Test UI API.vi |
| UI.lvlib:Hide Panel.vi | Test UI API.vi |

| Request Name | Callers |
|---|--|
| UI.lvlib:Get Module Execution Status.vi | UI.lvlib:Start Module.vi UI.lvlib:Obtain Broadcast Events for Registration.vi |
| UI.lvlib:Show Diagram.vi | Test UI API.vi |

Table 29. Broadcasts Listeners

| Broadcast Name | Listeners |
|--|----------------|
| UI.lvlib:Module Did Init.vi | Test UI API.vi |
| UI.lvlib:Status Updated.vi | Test UI API.vi |
| UI.lvlib:Error Reported.vi | Test UI API.vi |
| UI.lvlib:Module Did Stop.vi | Test UI API.vi |
| UI.lvlib:Update Module Execution Status.vi | Test UI API.vi |

Table 30. Used requests

| Module | Broadcasts |
|---------------------|---|
| Configuracion.lvlib | Configuracion.lvlib:Show Panel.vi |
| Mensajes.lvlib | Mensajes.lvlib:Publicar Mensaje.vi |
| UI.lvlib | UI.lvlib:Get Module Execution Status.vi |

Table 31. Registered broadcast

| Module | Broadcasts |
|--------|------------|
| — | — |

2.2. Libraries

This section describes the libraries contained in the project.

2.3. Classes

This section describes the classes contained in the project.

3. VI descriptions

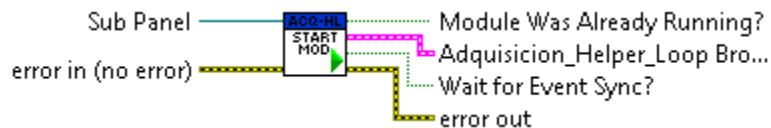
3.1. DQMH® modules

This section describes DQMH® modules events.

3.1.1. Adquisicion_Helper_Loop.Mib

Adquisicion_Helper_Loop.Mib:Start Module.vi

Event type: Not a DQMH Event

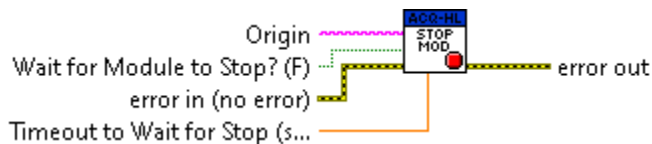


Description:

Launches the Module Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Adquisicion_Helper_Loop.Mib:Stop Module.vi

Event type: Not a DQMH Event

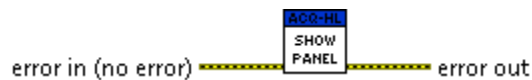


Description:

Send the Stop request to the Module's Main.vi. If **Wait for Module to Stop?** is TRUE, this VI will wait until the module main VI stops, and will timeout at the **Timeout to Wait for Stop** value. This value defaults to "-1", which means the VI will not timeout, and will always wait until the module main VI stops before completing execution. Note: The **Timeout to Wait for Stop** value is ignored if 'Wait for Module to Stop?' is set to FALSE. ____ Based on Delacor QMH Project Template 5.0.0.82.

Adquisicion_Helper_Loop.Mib:Show Panel.vi

Event type: Request



Description:

Send the Show Panel request to the Module's Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Adquisicion_Helper_Loop.Mib:Hide Panel.vi

Event type: Request

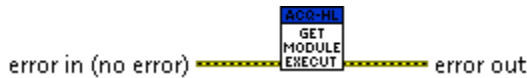


Description:

Send the Hide Panel request to the Module's Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Adquisicion_Helper_Loop.Mib:Get Module Execution Status.vi

Event type: Request

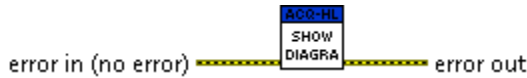


Description:

Fire the Get Module Execution Status request. ____ Based on Delacor QMH Project Template 5.0.0.82.

Adquisicion_Helper_Loop.Mib:Show Diagram.vi

Event type: Request

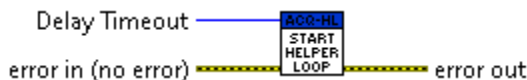


Description:

This VI tells the Module to show its block diagram to facilitate troubleshooting (add probes, breakpoints, highlight execution, etc). ____ Based on Delacor QMH Project Template 5.0.0.82.

Adquisicion_Helper_Loop.Mib:Start Helper Loop.vi

Event type: Request



Description:

Start helper loop for continuous tasks ____ Created using Delacor QMH Event Scripter 5.0.0.112.

Adquisicion_Helper_Loop.Mib:Stop helper loop.vi

Event type: Request



Description:

Stop helper loop for continuous tasks ____ Created using Delacor QMH Event Scripter 5.0.0.112.

Adquisicion_Helper_Loop.Mib:Set Waveform.vi

Event type: Request



Description:

Waveform parameters ____ Created using Delacor QMH Event Scripter 5.0.0.112.

Adquisicion_Helper_Loop.Mib:Set adquisition parameters.vi

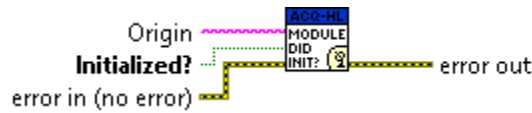
Event type: Request

**Description:**

Sets the communication port with MCU to acquire the data ____ Created using Delacor QMH Event Scriptor 5.0.0.112.

[Adquisicion_Helper_Loop.Mib:Module Did Init.vi](#)

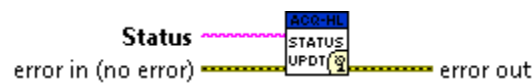
Event type: Broadcast

**Description:**

Send the Module Did Init event to any VI registered to listen to this module's broadcast events. ____ Based on Delacor QMH Project Template 5.0.0.82.

[Adquisicion_Helper_Loop.Mib:Status Updated.vi](#)

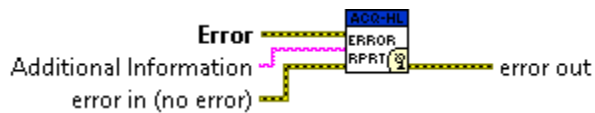
Event type: Broadcast

**Description:**

Send the Status Updated event to any VI registered to listen to events from the owning module. ____ Based on Delacor QMH Project Template 5.0.0.82.

[Adquisicion_Helper_Loop.Mib:Error Reported.vi](#)

Event type: Broadcast

**Description:**

Send the Error Reported event to any VI registered to listen to events from the owning module. ____ Based on Delacor QMH Project Template 5.0.0.82.

[Adquisicion_Helper_Loop.Mib:Module Did Stop.vi](#)

Event type: Broadcast

**Description:**

Send the Module Did Stop event to any VI registered to listen to this module's broadcast events. ____ Based on Delacor QMH Project Template 5.0.0.82.

[Adquisicion_Helper_Loop.Mib:Update Module Execution Status.vi](#)

Event type: Broadcast

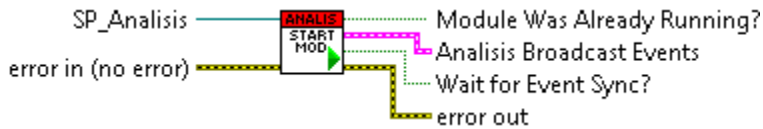
**Description:**

Broadcast event to specify whether or not the module is running. ____ Based on Delacor QMH Project Template 5.0.0.82.

3.1.2. Analisis.Mlib

Analisis.Mlib:Start Module.vi

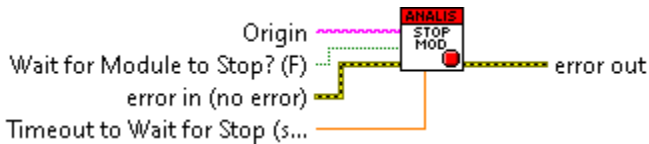
Event type: Not a DQMH Event

**Description:**

Launches the Module Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Analisis.Mlib:Stop Module.vi

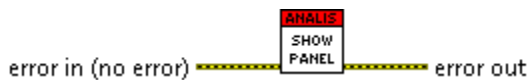
Event type: Not a DQMH Event

**Description:**

Send the Stop request to the Module's Main.vi. If **Wait for Module to Stop?** is TRUE, this VI will wait until the module main VI stops, and will timeout at the **Timeout to Wait for Stop** value. This value defaults to "-1", which means the VI will not timeout, and will always wait until the module main VI stops before completing execution. Note: The **Timeout to Wait for Stop** value is ignored if 'Wait for Module to Stop?' is set to FALSE. ____ Based on Delacor QMH Project Template 5.0.0.82.

Analisis.Mlib:Show Panel.vi

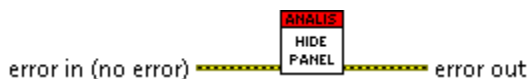
Event type: Request

**Description:**

Send the Show Panel request to the Module's Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Analisis.Mlib:Hide Panel.vi

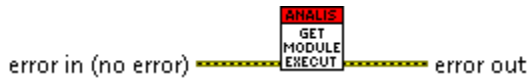
Event type: Request

**Description:**

Send the Hide Panel request to the Module's Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Analysis.Mlib:Get Module Execution Status.vi

Event type: Request

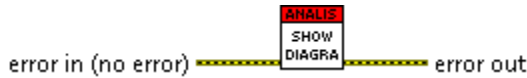


Description:

Fire the Get Module Execution Status request. ____ Based on Delacor QMH Project Template 5.0.0.82.

Analysis.Mlib:Show Diagram.vi

Event type: Request

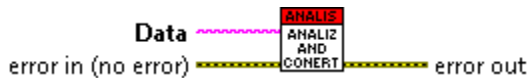


Description:

This VI tells the Module to show its block diagram to facilitate troubleshooting (add probes, breakpoints, highlight execution, etc). ____ Based on Delacor QMH Project Template 5.0.0.82.

Analysis.Mlib:Analyze and Conert Data.vi

Event type: Request

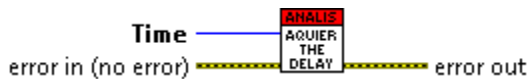


Description:

Analyze and convert the data from adquisition to show it in the right parameters ____ Created using Delacor QMH Event Scriptor 5.0.0.112.

Analysis.Mlib:Aquiere the delay time configurated.vi

Event type: Request

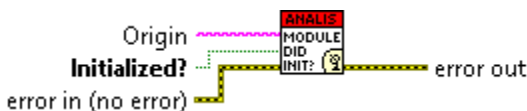


Description:

Aquiere the delay time configurated by user ____ Created using Delacor QMH Event Scriptor 5.0.0.112.

Analysis.Mlib:Module Did Init.vi

Event type: Broadcast



Description:

Send the Module Did Init event to any VI registered to listen to this module's broadcast events. ____ Based on Delacor QMH Project Template 5.0.0.82.

Analysis.Mlib:Status Updated.vi

Event type: Broadcast

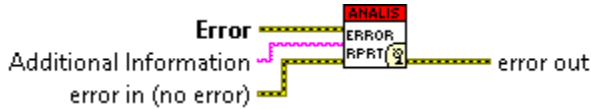


Description:

Send the Status Updated event to any VI registered to listen to events from the owning module. ____ Based on Delacor QMH Project Template 5.0.0.82.

[Analysis.Mlib>Error Reported.vi](#)

Event type: Broadcast



Description:

Send the Error Reported event to any VI registered to listen to events from the owning module. ____ Based on Delacor QMH Project Template 5.0.0.82.

[Analysis.Mlib:Module Did Stop.vi](#)

Event type: Broadcast

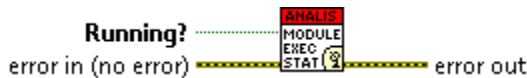


Description:

Send the Module Did Stop event to any VI registered to listen to this module's broadcast events. ____ Based on Delacor QMH Project Template 5.0.0.82.

[Analysis.Mlib:Update Module Execution Status.vi](#)

Event type: Broadcast



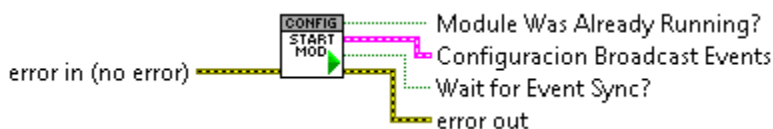
Description:

Broadcast event to specify whether or not the module is running. ____ Based on Delacor QMH Project Template 5.0.0.82.

[3.1.3. Configuracion.Mlib](#)

[Configuracion.Mlib:Start Module.vi](#)

Event type: Not a DQMH Event

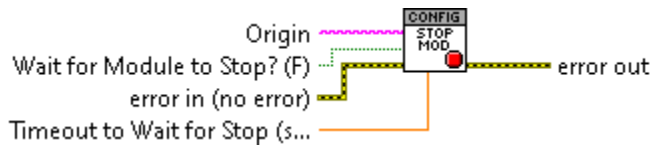


Description:

Launches the Module Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Configuracion.Mib:Stop Module.vi

Event type: Not a DQMH Event

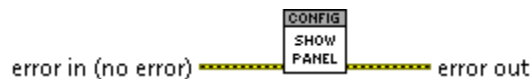


Description:

Send the Stop request to the Module's Main.vi. If **Wait for Module to Stop?** is TRUE, this VI will wait until the module main VI stops, and will timeout at the **Timeout to Wait for Stop** value. This value defaults to "-1", which means the VI will not timeout, and will always wait until the module main VI stops before completing execution. Note: The **Timeout to Wait for Stop** value is ignored if 'Wait for Module to Stop?' is set to FALSE. ____ Based on Delacor QMH Project Template 5.0.0.82.

Configuracion.Mib:Show Panel.vi

Event type: Request

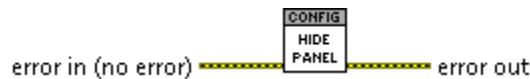


Description:

Send the Show Panel request to the Module's Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Configuracion.Mib:Hide Panel.vi

Event type: Request

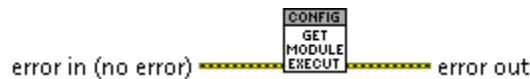


Description:

Send the Hide Panel request to the Module's Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Configuracion.Mib:Get Module Execution Status.vi

Event type: Request

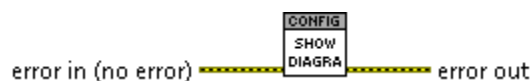


Description:

Fire the Get Module Execution Status request. ____ Based on Delacor QMH Project Template 5.0.0.82.

Configuracion.Mib:Show Diagram.vi

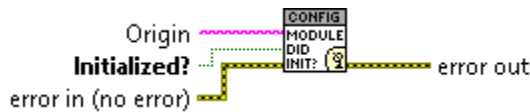
Event type: Request



Description:

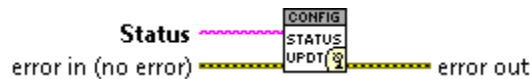
This VI tells the Module to show its block diagram to facilitate troubleshooting (add probes, breakpoints, highlight execution, etc). ____ Based on Delacor QMH Project Template 5.0.0.82.

Configuracion.Mib:Module Did Init.vi

Event type: Broadcast**Description:**

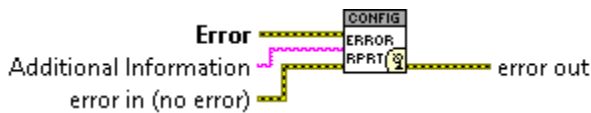
Send the Module Did Init event to any VI registered to listen to this module's broadcast events. ____ Based on Delacor QMH Project Template 5.0.0.82.

Configuracion.Mib:Status Updated.vi

Event type: Broadcast**Description:**

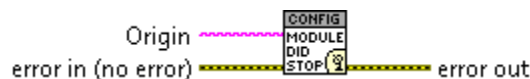
Send the Status Updated event to any VI registered to listen to events from the owning module. ____ Based on Delacor QMH Project Template 5.0.0.82.

Configuracion.Mib:Error Reported.vi

Event type: Broadcast**Description:**

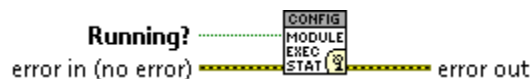
Send the Error Reported event to any VI registered to listen to events from the owning module. ____ Based on Delacor QMH Project Template 5.0.0.82.

Configuracion.Mib:Module Did Stop.vi

Event type: Broadcast**Description:**

Send the Module Did Stop event to any VI registered to listen to this module's broadcast events. ____ Based on Delacor QMH Project Template 5.0.0.82.

Configuracion.Mib:Update Module Execution Status.vi

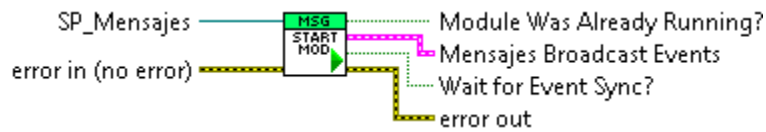
Event type: Broadcast**Description:**

Broadcast event to specify whether or not the module is running. ____ Based on Delacor QMH Project Template 5.0.0.82.

3.1.4. Mensajes.Mib

Mensajes.Mib:Start Module.vi

Event type: Not a DQMH Event

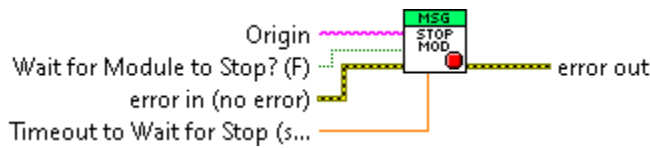


Description:

Launches the Module Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Mensajes.Mib:Stop Module.vi

Event type: Not a DQMH Event

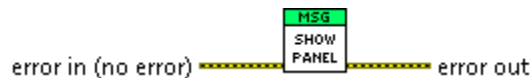


Description:

Send the Stop request to the Module's Main.vi. If **Wait for Module to Stop?** is TRUE, this VI will wait until the module main VI stops, and will timeout at the **Timeout to Wait for Stop** value. This value defaults to "-1", which means the VI will not timeout, and will always wait until the module main VI stops before completing execution. Note: The **Timeout to Wait for Stop** value is ignored if 'Wait for Module to Stop?' is set to FALSE. ____ Based on Delacor QMH Project Template 5.0.0.82.

Mensajes.Mib:Show Panel.vi

Event type: Request

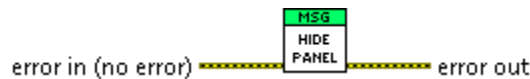


Description:

Send the Show Panel request to the Module's Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Mensajes.Mib:Hide Panel.vi

Event type: Request

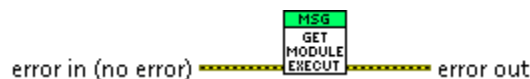


Description:

Send the Hide Panel request to the Module's Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Mensajes.Mib:Get Module Execution Status.vi

Event type: Request

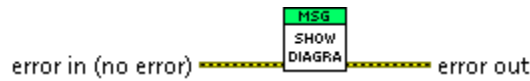


Description:

Fire the Get Module Execution Status request. ____ Based on Delacor QMH Project Template 5.0.0.82.

Mensajes.Mib:Show Diagram.vi

Event type: Request

**Description:**

This VI tells the Module to show its block diagram to facilitate troubleshooting (add probes, breakpoints, highlight execution, etc). ____ Based on Delacor QMH Project Template 5.0.0.82.

Mensajes.Mib:Publicar Mensaje.vi

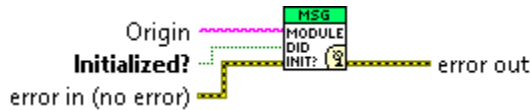
Event type: Request

**Description:**

Publicate a message in a DQMH Message ____ Created using Delacor QMH Event Scripeter 5.0.0.112.

Mensajes.Mib:Module Did Init.vi

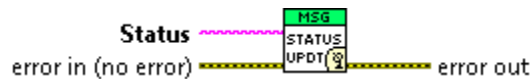
Event type: Broadcast

**Description:**

Send the Module Did Init event to any VI registered to listen to this module's broadcast events. ____ Based on Delacor QMH Project Template 5.0.0.82.

Mensajes.Mib:Status Updated.vi

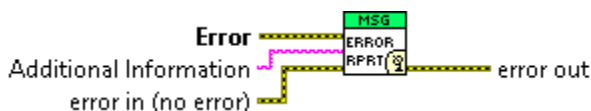
Event type: Broadcast

**Description:**

Send the Status Updated event to any VI registered to listen to events from the owning module. ____ Based on Delacor QMH Project Template 5.0.0.82.

Mensajes.Mib>Error Reported.vi

Event type: Broadcast

**Description:**

Send the Error Reported event to any VI registered to listen to events from the owning module. ____ Based on Delacor QMH Project Template 5.0.0.82.

Mensajes.Mib:Module Did Stop.vi

Event type: Broadcast

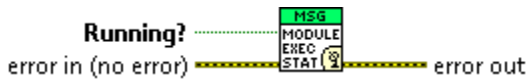


Description:

Send the Module Did Stop event to any VI registered to listen to this module's broadcast events. ____ Based on Delacor QMH Project Template 5.0.0.82.

Mensajes.Mib:Update Module Execution Status.vi

Event type: Broadcast



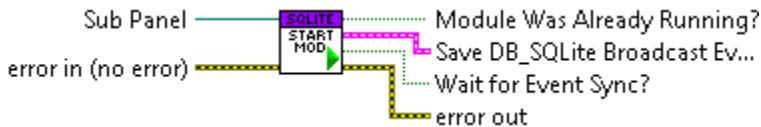
Description:

Broadcast event to specify whether or not the module is running. ____ Based on Delacor QMH Project Template 5.0.0.82.

3.1.5. Save DB_SQLite.Mib

Save DB_SQLite.Mib:Start Module.vi

Event type: Not a DQMH Event

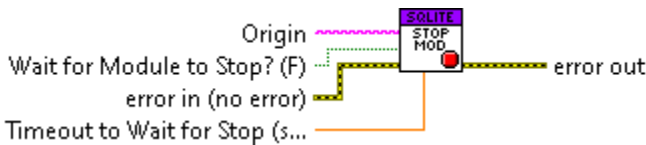


Description:

Launches the Module Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

Save DB_SQLite.Mib:Stop Module.vi

Event type: Not a DQMH Event

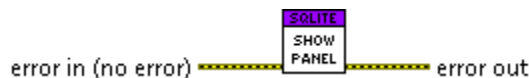


Description:

Send the Stop request to the Module's Main.vi. If **Wait for Module to Stop?** is TRUE, this VI will wait until the module main VI stops, and will timeout at the **Timeout to Wait for Stop** value. This value defaults to "-1", which means the VI will not timeout, and will always wait until the module main VI stops before completing execution. Note: The **Timeout to Wait for Stop** value is ignored if 'Wait for Module to Stop?' is set to FALSE. ____ Based on Delacor QMH Project Template 5.0.0.82.

Save DB_SQLite.Mib:Show Panel.vi

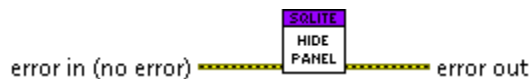
Event type: Request

**Description:**

Send the Show Panel request to the Module's Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

[Save DB_SQLite.Mib:Hide Panel.vi](#)

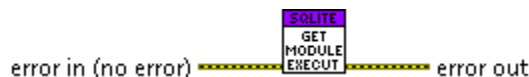
Event type: Request

**Description:**

Send the Hide Panel request to the Module's Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

[Save DB_SQLite.Mib:Get Module Execution Status.vi](#)

Event type: Request

**Description:**

Fire the Get Module Execution Status request. ____ Based on Delacor QMH Project Template 5.0.0.82.

[Save DB_SQLite.Mib:Show Diagram.vi](#)

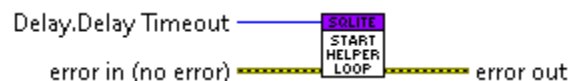
Event type: Request

**Description:**

This VI tells the Module to show its block diagram to facilitate troubleshooting (add probes, breakpoints, highlight execution, etc). ____ Based on Delacor QMH Project Template 5.0.0.82.

[Save DB_SQLite.Mib:Start Helper Loop.vi](#)

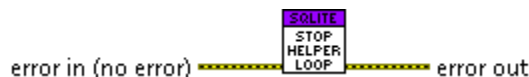
Event type: Request

**Description:**

Start helper loop for continuous tasks ____ Created using Delacor QMH Event Scripiter 5.0.0.112.

[Save DB_SQLite.Mib:Stop helper loop.vi](#)

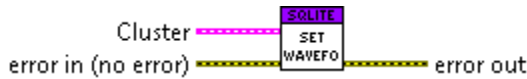
Event type: Request

**Description:**

Stop helper loop for continuous tasks ____ Created using Delacor QMH Event Scripter 5.0.0.112.

[Save DB_SQLite.lmib:Set Waveform.vi](#)

Event type: Request



Description:

Waveform parameters ____ Created using Delacor QMH Event Scripter 5.0.0.112.

[Save DB_SQLite.lmib:Save_Data_From_Analisis.vi](#)

Event type: Request

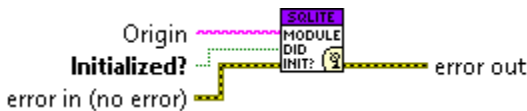


Description:

All the analized data is saved in a DB of SQLite ____ Created using Delacor QMH Event Scripter 5.0.0.112.

[Save DB_SQLite.lmib:Module Did Init.vi](#)

Event type: Broadcast

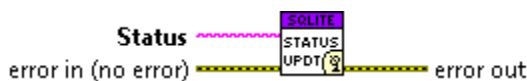


Description:

Send the Module Did Init event to any VI registered to listen to this module's broadcast events. ____ Based on Delacor QMH Project Template 5.0.0.82.

[Save DB_SQLite.lmib:Status Updated.vi](#)

Event type: Broadcast

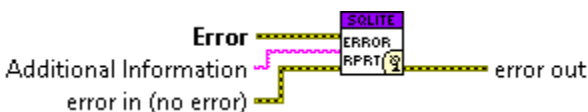


Description:

Send the Status Updated event to any VI registered to listen to events from the owning module. ____ Based on Delacor QMH Project Template 5.0.0.82.

[Save DB_SQLite.lmib:Error Reported.vi](#)

Event type: Broadcast



Description:

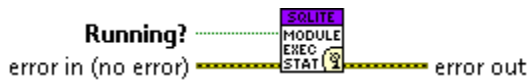
Send the Error Reported event to any VI registered to listen to events from the owning module. ____ Based on Delacor QMH Project Template 5.0.0.82.

Save DB_SQLite.Mlib:Module Did Stop.vi

Event type: Broadcast**Description:**

Send the Module Did Stop event to any VI registered to listen to this module's broadcast events. ____ Based on Delacor QMH Project Template 5.0.0.82.

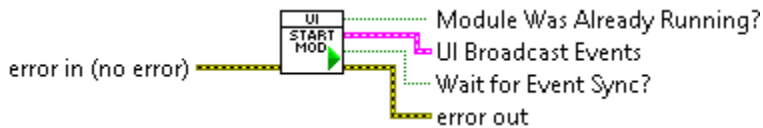
Save DB_SQLite.Mlib:Update Module Execution Status.vi

Event type: Broadcast**Description:**

Broadcast event to specify whether or not the module is running. ____ Based on Delacor QMH Project Template 5.0.0.82.

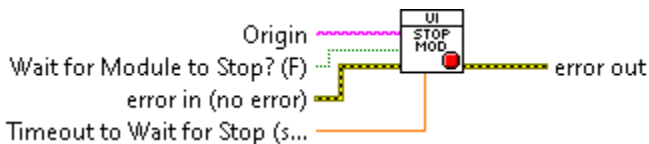
3.1.6. UI.Mlib

UI.Mlib:Start Module.vi

Event type: Not a DQMH Event**Description:**

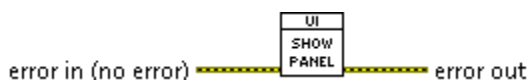
Launches the Module Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

UI.Mlib:Stop Module.vi

Event type: Not a DQMH Event**Description:**

Send the Stop request to the Module's Main.vi. If **Wait for Module to Stop?** is TRUE, this VI will wait until the module main VI stops, and will timeout at the **Timeout to Wait for Stop** value. This value defaults to "-1", which means the VI will not timeout, and will always wait until the module main VI stops before completing execution. Note: The **Timeout to Wait for Stop** value is ignored if 'Wait for Module to Stop?' is set to FALSE. ____ Based on Delacor QMH Project Template 5.0.0.82.

UI.Mlib:Show Panel.vi

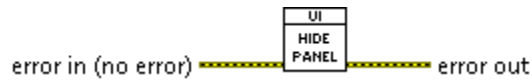
Event type: Request

Description:

Send the Show Panel request to the Module's Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

UI.Mib:Hide Panel.vi

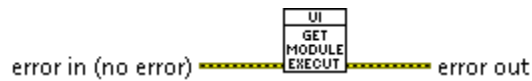
Event type: Request

**Description:**

Send the Hide Panel request to the Module's Main.vi. ____ Based on Delacor QMH Project Template 5.0.0.82.

UI.Mib:Get Module Execution Status.vi

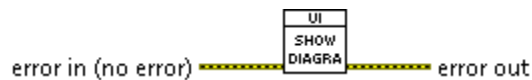
Event type: Request

**Description:**

Fire the Get Module Execution Status request. ____ Based on Delacor QMH Project Template 5.0.0.82.

UI.Mib:Show Diagram.vi

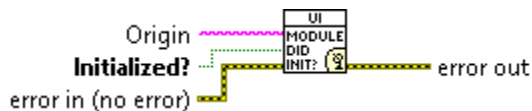
Event type: Request

**Description:**

This VI tells the Module to show its block diagram to facilitate troubleshooting (add probes, breakpoints, highlight execution, etc). ____ Based on Delacor QMH Project Template 5.0.0.82.

UI.Mib:Module Did Init.vi

Event type: Broadcast

**Description:**

Send the Module Did Init event to any VI registered to listen to this module's broadcast events. ____ Based on Delacor QMH Project Template 5.0.0.82.

UI.Mib:Status Updated.vi

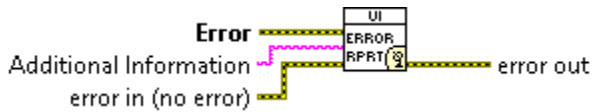
Event type: Broadcast

**Description:**

Send the Status Updated event to any VI registered to listen to events from the owning module. ____ Based on Delacor QMH Project Template 5.0.0.82.

UI.Mib:Error Reported.vi

Event type: Broadcast



Description:

Send the Error Reported event to any VI registered to listen to events from the owning module. ____ Based on Delacor QMH Project Template 5.0.0.82.

UI.Mib:Module Did Stop.vi

Event type: Broadcast



Description:

Send the Module Did Stop event to any VI registered to listen to this module's broadcast events. ____ Based on Delacor QMH Project Template 5.0.0.82.

UI.Mib:Update Module Execution Status.vi

Event type: Broadcast



Description:

Broadcast event to specify whether or not the module is running. ____ Based on Delacor QMH Project Template 5.0.0.82.

3.2. Libraries

This section describes libraries public VIs.

3.3. Classes

This section describes classes public VIs.

4. Legal Information

4.1. Document creation

This document has been generated using the following tools.

4.1.1. Antidoc

Project website: [Antidoc](https://wovalab.gitlab.io/open-source/labview-doc-generator/) (https://wovalab.gitlab.io/open-source/labview-doc-generator/)

Maintainer website: [Wovalab](https://wovalab.com) (https://wovalab.com)

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4.1.2. AsciiDoc for LabVIEW™

Project website: [AsciiDoc toolkit](https://wovalab.gitlab.io/open-source/asciidoc-toolkit/) (https://wovalab.gitlab.io/open-source/asciidoc-toolkit/)

Maintainer website: [Wovalab](https://wovalab.com) (https://wovalab.com)

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4.1.3. Graph Builder

Project website: [Graph Builder](https://gitlab.com/cgambini/graph-builder) (<https://gitlab.com/cgambini/graph-builder>)

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4.2. Product used in the project

The documented project has been developed with the following products.

4.2.1. DQMH®

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Find more details on [Delacor](https://delacor.com/products/dqmh/) (<https://delacor.com/products/dqmh/>) website

