

## XF Default Port

---

This folder provides default implementations for some platform independent XF classes. You can use these classes to construct the XF needed.

If these classes do not suit your needs, they can be reimplemented for your platform. Create an additional folder in the 'port' folder and implement there the classes you need for your platform.

## Available Default Port Classes

---

Class name	File location	Define to set
XF	xf/port/default/xf-default.cpp	USE_XF_DEFAULT_IMPLEMENTATION
XFResourceFactoryDefault	xf/port/default/resourcefactory-default.cpp	USE_XF_RESOURCE_FACTORY_DEFAULT_IMPLEMENTATION
XFTimeoutManagerDefault	xf/port/default/timeoutmanager-default.cpp	USE_XF_TIMEOUTMANAGER_DEFAULT_IMPLEMENTATION
XFDispatcherDefault	xf/port/default/dispatcher-default.cpp	USE_XF_DISPATCHER_DEFAULT_IMPLEMENTATION
XFDispatcherActiveDefault	xf/port/default/dispatcher-active.cpp	USE_XF_DISPATCHER_ACTIVE_DEFAULT_IMPLEMENTATION

If you need more information about the classes mentioned above, please have a look into their header files and the doxygen comments in code.

## Platform Dependend Default Port class

---

In the following folders you can pick some platform dependend port classes:

Platform	Folder
CMSIS-OS	<a href="#">default-cmsis-os</a>
IDF	<a href="#">default-idf</a>
QT	<a href="#">default-qt</a>

## Example *config/xf-config.h* File

---

Following you will find some examples giving you a basic idea which define to set in the application specific *config/xf-config.h* file.

The *IDF Stm32Cube* port uses quite all default implementations:

```
// Defines to set to use the IDF Stm32Cube port
#define USE_XF_DEFAULT_IMPLEMENTATION 1
#define USE_XF_DISPATCHER_DEFAULT_IMPLEMENTATION 1
#define USE_XF_TIMEOUTMANAGER_DEFAULT_IMPLEMENTATION 1
#define USE_XF_RESOURCE_FACTORY_DEFAULT_IMPLEMENTATION 1
```

```
#define USE_XF_MUTEX_DEFAULT_IDF_IMPLEMENTATION 1
#define USE_XF_EVENT_QUEUE_DEFAULT_IDF_IMPLEMENTATION 1
#define USE_XF_PORT_IDF_STM32CUBE_PORT_FUNCTIONS_IMPLEMENTATION 1

#include "default-idf/eventqueue-default.h"
#ifdef __cplusplus
    using XFEventQueue = XFEventQueueDefault;
#endif // __cplusplus
```

If you want to build an XF on Windows, macOS or Linux use the *IDF Qt* port. Following defines need to be set in the application specific *config/xf-config.h* file:

```
// Defines to set to use the IDF Qt port
#define USE_XF_TIMEOUTMANAGER_DEFAULT_IMPLEMENTATION 1
#define USE_XF_DISPATCHER_ACTIVE_DEFAULT_IMPLEMENTATION 1
#define USE_XF_MUTEX_DEFAULT_QT_IMPLEMENTATION 1
#define USE_XF_THREAD_DEFAULT_QT_IMPLEMENTATION 1

#define USE_XF_PORT_IDF_QT_XF_IMPLEMENTATION 1
#define USE_XF_PORT_IDF_QT_RESOURCE_FACTORY_IMPLEMENTATION 1
#define USE_XF_PORT_IDF_QT_EVENT_QUEUE_IMPLEMENTATION 1
#define USE_XF_PORT_IDF_QT_PORT_FUNCTIONS_IMPLEMENTATION 1

#include "idf-qt/eventqueue.h"
```