Virtual File System

1.0

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Chapter 1

Namespace Index

1.1 Namespace List

Here is a list of all namespaces with brief descriptions:

Ui 9

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

inode 11
node_ops 14
QMainWindow
    MainWindow 12
vir_file_sys 15
vnode 15

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

inode 11
MainWindow 12
node_ops 14
vir_file_sys 15
vnode 15

Chapter 4

File Index

4.1 File List

Here is a list of all files with brief descriptions:

file_system.cpp 19
file_system.h 20
main.cpp 23
mainwindow.cpp 24
mainwindow.h 25

Chapter 5

Namespace Documentation

5.1 Ui Namespace Reference

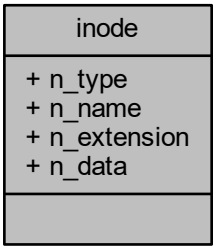
Chapter 6

Class Documentation

6.1 inode Struct Reference

`#include <file_system.h>`

Collaboration diagram for inode:



Public Attributes

- ntype n_type
- QString n_name
- QString n_extension
- QString n_data

6.1.1 Detailed Description

Definition at line 27 of file file_system.h.

6.1.2 Member Data Documentation

6.1.2.1 QString inode::n_data

Definition at line 32 of file file_system.h.

6.1.2.2 QString inode::n_extension

Definition at line 31 of file file_system.h.

6.1.2.3 QString inode::n_name

Definition at line 30 of file file_system.h.

6.1.2.4 ntype inode::n_type

Definition at line 29 of file file_system.h.

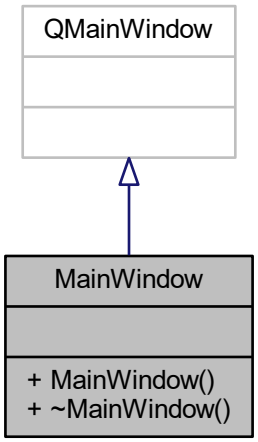
The documentation for this struct was generated from the following file:

- file_system.h

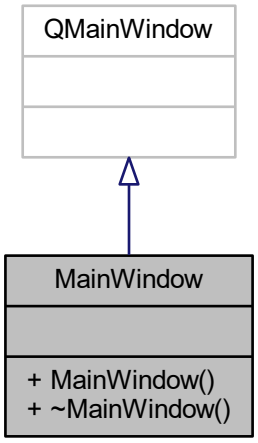
6.2 MainWindow Class Reference

`#include <mainwindow.h>`

Inheritance diagram for MainWindow:



Collaboration diagram for MainWindow:



Public Member Functions

- MainWindow (QWidget ∗parent=0)
- ∼MainWindow ()

6.2.1 Detailed Description

Definition at line 11 of file mainwindow.h.

6.2.2 Constructor & Destructor Documentation

6.2.2.1 MainWindow::MainWindow (QWidget ∗ *parent* = 0) [explicit]

Definition at line 10 of file mainwindow.cpp.

```
10                                      :
11     QMainWindow(parent),
12     ui(new Ui::MainWindow)
13 {
14     ui->setupUi(this);
15     QTreeWidgetItem *item = new QTreeWidgetItem();
16     selected_widget = item;
17
18     QTreeWidgetItem *d_item = new QTreeWidgetItem();
19     drive_item = d_item;
20 }
```

6.2.2.2 MainWindow::∼MainWindow ( )

Definition at line 22 of file mainwindow.cpp.

```
23 {
24     delete ui;
25 }
```

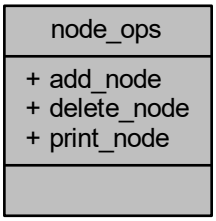
The documentation for this class was generated from the following files:

- mainwindow.h
- mainwindow.cpp

6.3 node_ops Struct Reference

`#include <file_system.h>`

Collaboration diagram for node_ops:



Public Attributes

- void(∗ add_node)(inode_t ∗)
- void(∗ delete_node)(inode_t ∗)
- void(∗ print_node)(inode_t)

6.3.1 Detailed Description

Definition at line 35 of file file_system.h.

6.3.2 Member Data Documentation

6.3.2.1 void(∗ node_ops::add_node) (inode_t ∗)

Definition at line 37 of file file_system.h.

6.3.2.2 void(∗ node_ops::delete_node) (inode_t ∗)

Definition at line 38 of file file_system.h.

6.3.2.3 void(∗ node_ops::print_node) (inode_t)

Definition at line 39 of file file_system.h.

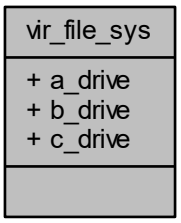
The documentation for this struct was generated from the following file:

- file_system.h

6.4 vir_file_sys Struct Reference

`#include <file_system.h>`

Collaboration diagram for vir_file_sys:



Public Attributes

- QList< vnode_t > a_drive
- QList< vnode_t > b_drive
- QList< vnode_t > c_drive

6.4.1 Detailed Description

Definition at line 50 of file file_system.h.

6.4.2 Member Data Documentation

6.4.2.1 QList<vnode_t> vir_file_sys::a_drive

Definition at line 52 of file file_system.h.

6.4.2.2 QList<vnode_t> vir_file_sys::b_drive

Definition at line 53 of file file_system.h.

6.4.2.3 QList<vnode_t> vir_file_sys::c_drive

Definition at line 54 of file file_system.h.

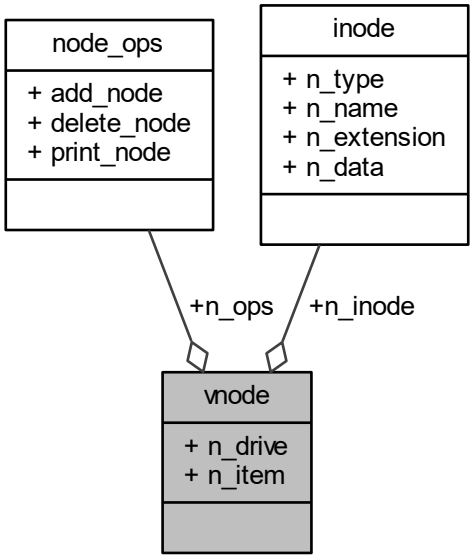
The documentation for this struct was generated from the following file:

- file_system.h

6.5 vnode Struct Reference

`#include <file_system.h>`

Collaboration diagram for vnode:



Public Attributes

- drive_t n_drive
- inode_t n_inode
- nops n_ops
- QTreeWidgetItem * n_item

6.5.1 Detailed Description

Definition at line 42 of file file_system.h.

6.5.2 Member Data Documentation

6.5.2.1 drive_t vnode::n_drive

Definition at line 44 of file file_system.h.

6.5.2.2 inode_t vnode::n_inode

Definition at line 45 of file file_system.h.

6.5.2.3 QTreeWidgetItem* vnode::n_item

Definition at line 47 of file file_system.h.

6.5.2.4 nops vnode::n_ops

Definition at line 46 of file file_system.h.

The documentation for this struct was generated from the following file:

- file_system.h

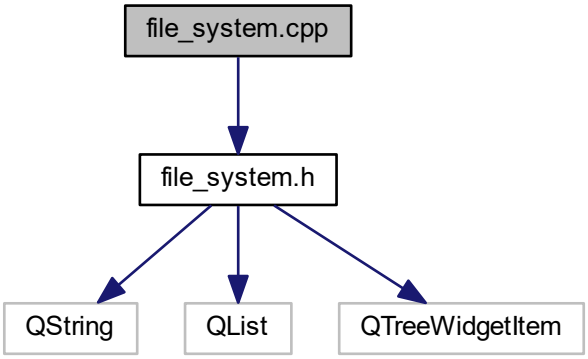
Chapter 7

File Documentation

7.1 file_system.cpp File Reference

```
#include "file_system.h"
```

Include dependency graph for file_system.cpp:



Functions

- void init_fsys (vfs_t *fs)
- void add_node (vnode_t *node)
- void delete_node (vnode_t *node)
- void print_node (vnode_t *node)

7.1.1 Function Documentation

7.1.1.1 void add_node (vnode_t * *node*)

Definition at line 12 of file file_system.cpp.

```
13 {
14
15 }
```

7.1.1.2 void delete_node (vnode_t * *node*)

Definition at line 17 of file file_system.cpp.

```
18 {
19
20 }
```

7.1.1.3 void init_fsys (vfs_t * *fs*)

Definition at line 3 of file file_system.cpp.

```
4 {
5     vnode_t node;
6     node.n_drive = drive_a;
7     node.n_inode.n_type = directory;
8     node.n_inode.n_name = "tmp";
9     fs->a_drive.append(node);
10 }
```

7.1.1.4 void print_node (vnode_t * *node*)

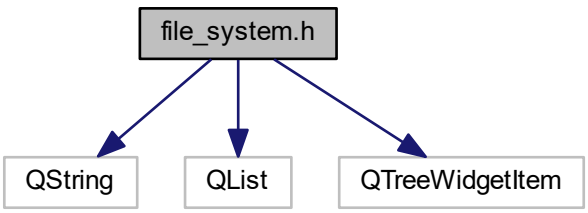
Definition at line 22 of file file_system.cpp.

```
23 {
24
25 }
```

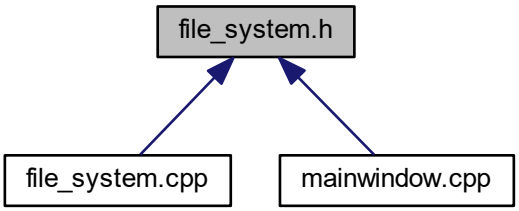
7.2 file_system.h File Reference

```
#include <QString>
#include <QList>
#include <QTreeWidgetItem>
```

Include dependency graph for file_system.h:



This graph shows which files directly or indirectly include this file:



Classes

- struct inode
- struct node_ops
- struct vnode
- struct vir_file_sys

Typedefs

- typedef enum vfs_limits limits_t
- typedef enum drive drive_t
- typedef enum node_type ntype
- typedef struct inode inode_t
- typedef struct node_ops nops
- typedef struct vnode vnode_t
- typedef struct vir_file_sys vfs_t

Enumerations

- enum vfs_limits { max_files = 5, max_directories = 4 }
- enum drive { drive_a, drive_b, drive_c }
- enum node_type { file, directory }

Functions

- void init_fsys (vfs_t *)
- void add_node (vnode_t *)
- void delete_node (vnode_t *)
- void print_node (vnode_t *)

7.2.1 Typedef Documentation

7.2.1.1 typedef enum drive drive_t

7.2.1.2 typedef struct inode inode_t

7.2.1.3 typedef enum vfs_limits limits_t

7.2.1.4 typedef struct node_ops nops

7.2.1.5 typedef enum node_type ntype

7.2.1.6 typedef struct vir_file_sys vfs_t

7.2.1.7 typedef struct vnode vnode_t

7.2.2 Enumeration Type Documentation

7.2.2.1 enum drive

Enumerator

drive_a

drive_b

drive_c

Definition at line 14 of file file_system.h.

```
15 {
16     drive_a,
17     drive_b,
18     drive_c
19 } drive_t;
```

7.2.2.2 enum node_type

Enumerator

file

directory

Definition at line 21 of file file_system.h.

```
22 {
23     file,
24     directory
25 } ntype;
```

7.2.2.3 enum vfs_limits

Enumerator

max_files

max_directories

Definition at line 8 of file file_system.h.

```
9 {
10     max_files = 5,
11     max_directories = 4,
12 } limits_t;
```

7.2.3 Function Documentation

7.2.3.1 void add_node (vnode_t *)

Definition at line 12 of file file_system.cpp.

```
13 {
14
15 }
```

7.2.3.2 void delete_node (vnode_t *)

Definition at line 17 of file file_system.cpp.

```
18 {
19
20 }
```

7.2.3.3 void init_fsys (vfs_t *)

Definition at line 3 of file file_system.cpp.

```
4 {
5     vnode_t node;
6     node.n_drive = drive_a;
7     node.n_inode.n_type = directory;
8     node.n_inode.n_name = "tmp";
9     fs->a_drive.append(node);
10 }
```

7.2.3.4 void print_node (vnode_t *)

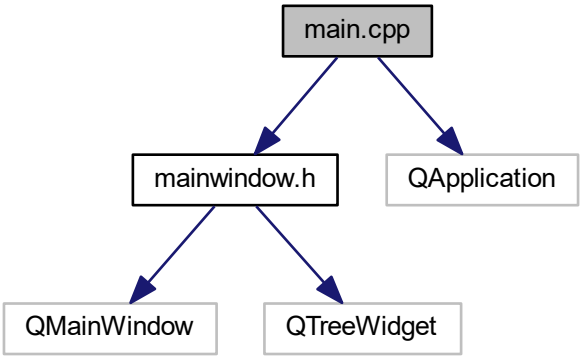
Definition at line 22 of file file_system.cpp.

```
23 {
24
25 }
```

7.3 main.cpp File Reference

```
#include "mainwindow.h"
#include <QApplication>
```

Include dependency graph for main.cpp:



Functions

- int main (int argc, char ∗argv[ ])

7.3.1 Function Documentation

7.3.1.1 int main (int *argc*, char ∗ *argv[ ]*)

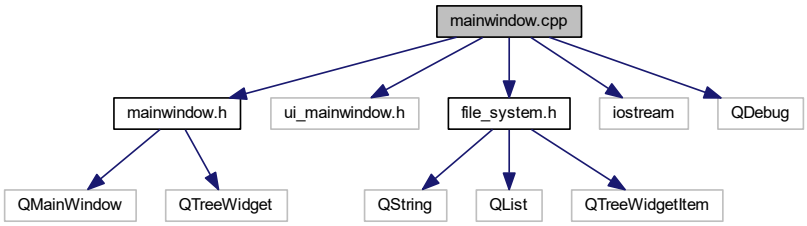
Definition at line 4 of file main.cpp.

```
5 {
6     QApplication a(argc, argv);
7     MainWindow w;
8     w.show();
9
10     return a.exec();
11 }
```

7.4 mainwindow.cpp File Reference

```
#include "mainwindow.h"
#include "ui_mainwindow.h"
#include "file_system.h"
#include <iostream>
#include <QDebug>
```

Include dependency graph for mainwindow.cpp:



Variables

- vfs_t vfs

7.4.1 Variable Documentation

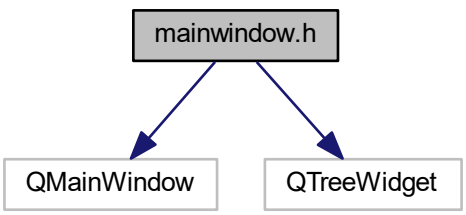
7.4.1.1 vfs_t vfs

Definition at line 8 of file mainwindow.cpp.

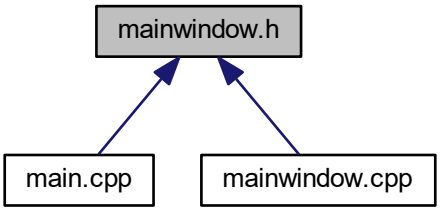
7.5 mainwindow.h File Reference

```
#include <QMainWindow>
#include <QTreeWidget>
```

Include dependency graph for mainwindow.h:



This graph shows which files directly or indirectly include this file:



Classes

- class MainWindow

Namespaces

- Ui

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