Open Digital Twin

Release 0.1

Jiping Xin

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欢迎使用开源数字孪生项目!ODT由FENGSim、OpenCAE+和GCGE构成,其中FENGSim包括Cosmic Cube集成开发环境和Airfoil Benchmark架构,Airfoil架构包括FEniCS教程中文版本。OpenCAE+包括OpenCAEPoro和FASP。OpenCAE+和GCGE分别由中国科学院计算数学所张晨松副研究员和谢和虎研究员主持开发。

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CHAPTER

ONE

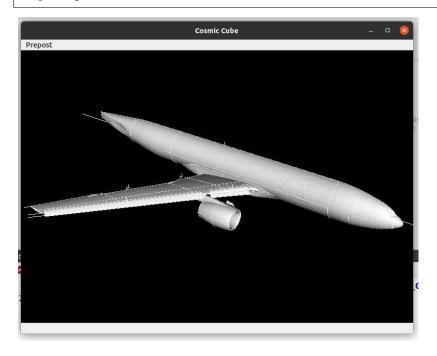
FENGSIM

1.1 Cosmic Cube集成开发环境

1.1.1 命令获取

>>> /bin/bash -c "\$(curl https://raw.githubusercontent.com/OpenDigitalTwin-Dev/

-OpenDigitalTwin/main/cube)"



1.2 Airfoil Benchmark CAX架构

1.2.1 前后处理

ODT_模块名称_函数名称

图形用户界面设计

主界面设计

- 1. 模仿GIMP
- 2. 通过菜单和工具栏进入CAD建模、定义物理模型、网格剖分、求解器、可视化五个模块
 - 梳理菜单和工具栏对应的action
 - 梳理和action connection的函数名称和功能
- 3. 主要操作通过浮动工具栏实现

CAD建模浮动工具栏设计

定义物理模型浮动工具栏设计

网格剖分浮动工具栏设计

求解器浮动工具栏设计

可视化浮动工具栏设计

1.2.2 求解器

M++

FEniCS

CHAPTER

TWO

OPENCAE+

- 2.1 OpenCAEPoro
- **2.2 FASP**

CHAPTER

THREE

GCGE

3.1 GCGE

谢和虎

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CHAPTER

FOUR

ODT

4.1 Class Hierarchy

4.2 File Hierarchy

4.3 Full API

4.3.1 Namespaces

Namespace Ui

Contents

• Classes

Classes

- Class AboutDialog
- Class AdditiveManufacturingDockWidget
- Class CADDockWidget
- Class FEMDockWidget
- Class MachiningDockWidget
- Class MainWindow
- Class MeasureDockWidget
- Class MeshDockWidget
- Class SPCDockWidget
- Class TransportDockWidget
- Class VTKDockWidget

4.3.2 Classes and Structs

Class test

• Defined in file_include_test.h

Class Documentation

class test

Public Functions

test()

Class AboutDialog

• Defined in file_include_ui_AboutDialog.h

Inheritance Relationships

Base Type

• public Ui_AboutDialog (Class Ui_AboutDialog)

Class Documentation

class AboutDialog: public $Ui_AboutDialog$

Class AdditiveManufacturingDockWidget

• Defined in file_include_ui_AdditiveManufacturingDockWidget.h

Inheritance Relationships

Base Type

 $\bullet \ public \ Ui_Additive Manufacturing Dock Widget \ ({\it Class Ui_Additive Manufacturing Dock Widget}) \\$

Class Documentation

 ${\bf class}~{\bf Additive Manufacturing Dock Widget}: ~public~{\it Ui_Additive Manufacturing Dock Widget}$

Class CADDockWidget

• Defined in file_include_ui_CADDockWidget.h

Inheritance Relationships

Base Type

• public Ui_CADDockWidget (Class Ui_CADDockWidget)

Class Documentation

 ${\tt class}~ \textbf{CADDockWidget}: {\tt public}~ \textit{Ui_CADDockWidget}$

Class FEMDockWidget

• Defined in file_include_ui_FEMDockWidget.h

Inheritance Relationships

Base Type

• public Ui_FEMDockWidget (Class Ui_FEMDockWidget)

Class Documentation

class FEMDockWidget: public Ui_FEMDockWidget

Class MachiningDockWidget

 $\bullet \ Defined \ in \ file_include_ui_MachiningDockWidget.h$

Inheritance Relationships

Base Type

• public Ui_MachiningDockWidget (Class Ui_MachiningDockWidget)

Class Documentation

class MachiningDockWidget: public Ui_MachiningDockWidget

Class MainWindow

• Defined in file_include_ui_MainWindow.h

Inheritance Relationships

Base Type

• public Ui_MainWindow (Class Ui_MainWindow)

Class Documentation

class MainWindow: public Ui_MainWindow

Class MeasureDockWidget

• Defined in file_include_ui_MeasureDockWidget.h

Inheritance Relationships

Base Type

• public Ui_MeasureDockWidget (Class Ui_MeasureDockWidget)

Class Documentation

class MeasureDockWidget: public Ui_MeasureDockWidget

Class MeshDockWidget

• Defined in file_include_ui_MeshDockWidget.h

Inheritance Relationships

Base Type

• public Ui_MeshDockWidget (Class Ui_MeshDockWidget)

Class Documentation

 $class \ \textbf{MeshDockWidget}: public \ \textit{Ui_MeshDockWidget}$

Class SPCDockWidget

• Defined in file_include_ui_SPCDockWidget.h

Inheritance Relationships

Base Type

• public Ui_SPCDockWidget (Class Ui_SPCDockWidget)

Class Documentation

 ${\tt class} \ \textbf{SPCDockWidget} : {\tt public} \ \textit{Ui_SPCDockWidget}$

Class TransportDockWidget

• Defined in file_include_ui_TransportDockWidget.h

Inheritance Relationships

Base Type

• public Ui_TransportDockWidget (Class Ui_TransportDockWidget)

Class Documentation

```
class \ \textbf{TransportDockWidget}: public \ \textit{Ui\_TransportDockWidget}
```

Class VTKDockWidget

• Defined in file_include_ui_VTKDockWidget.h

Inheritance Relationships

Base Type

• public Ui_VTKDockWidget (Class Ui_VTKDockWidget)

Class Documentation

```
class VTKDockWidget: public Ui\_VTKDockWidget
```

Class Ui_AboutDialog

• Defined in file_include_ui_AboutDialog.h

Inheritance Relationships

Derived Type

• public Ui::AboutDialog (Class AboutDialog)

Class Documentation

class Ui_AboutDialog

```
Subclassed by Ui::AboutDialog
```

Public Functions

```
in line\ void\ \textbf{setupUi}\ (QDialog\ *AboutDialog)
```

inline void retranslateUi(QDialog *AboutDialog)

Public Members

```
QHBoxLayout~ \hbox{\tt *horizontalLayout}
```

ClickedLabel *label

Class Ui_AdditiveManufacturingDockWidget

• Defined in file_include_ui_AdditiveManufacturingDockWidget.h

Inheritance Relationships

Derived Type

public Ui::AdditiveManufacturingDockWidget (Class AdditiveManufacturingDockWidget)

Class Documentation

class Ui_AdditiveManufacturingDockWidget

Subclassed by Ui::AdditiveManufacturingDockWidget

Public Functions

```
inline void setupUi(QWidget *AdditiveManufacturingDockWidget)
inline void retranslateUi(QWidget *AdditiveManufacturingDockWidget)
```

Public Members

QLabel *label

```
QVBoxLayout *verticalLayout

QTabWidget *tabWidget

QWidget *tab

QVBoxLayout *verticalLayout_7

QHBoxLayout *horizontalLayout_6
```

QSpacerItem *horizontalSpacer_7

QPushButton *pushButton_4 QPushButton *pushButton_10 QHBoxLayout *horizontalLayout_8 QLabel *label_2 QSpacerItem *horizontalSpacer_8 QPushButton *pushButton_14 QPushButton *pushButton_17 QHBoxLayout *horizontalLayout_9 QLabel *label_3 QSpacerItem *horizontalSpacer_9 QPushButton *pushButton_18 QPushButton *pushButton_19 QGridLayout *gridLayout QDoubleSpinBox *doubleSpinBox QSpacerItem *horizontalSpacer_11 QDoubleSpinBox *doubleSpinBox_2 QLabel *label_7 QSpacerItem *horizontalSpacer_12 QLabel *label_6 QHBoxLayout *horizontalLayout_10 QLabel *label_4

QSpacerItem *horizontalSpacer_10

QPushButton *pushButton_20

QPushButton *pushButton_21

QHBoxLayout *horizontalLayout_12

QLabel *label_8

QSpacerItem *horizontalSpacer_13

QComboBox *comboBox

QGridLayout *gridLayout_2

QLabel *label_10

QPushButton *pushButton_24

QLabel *label_9

QPushButton *pushButton_25

QSpacerItem *horizontalSpacer_15

QSpacerItem *horizontalSpacer_16

QHBoxLayout *horizontalLayout_14

QLabel *label_11

QSpacerItem *horizontalSpacer_14

QDoubleSpinBox *doubleSpinBox_3

QHBoxLayout *horizontalLayout_13

QSpacerItem *horizontalSpacer_17

QSpacerItem *verticalSpacer_8

```
QWidget *tab_2
QVBoxLayout *verticalLayout_8
QHBoxLayout *horizontalLayout_11
QLabel *label_5
QHBoxLayout *horizontalLayout_15
QLineEdit *lineEdit_2
QSpacerItem *horizontalSpacer_18
QPushButton *pushButton_22
QPushButton *pushButton_23
QHBoxLayout *horizontalLayout_16
QLabel *label_12
QTableWidget *tableWidget
QGridLayout *gridLayout_4
QLabel *label_15
QDoubleSpinBox *doubleSpinBox_5
QLabel *label_17
QDoubleSpinBox *doubleSpinBox_6
QLabel *label_13
QLabel *label_16
QLabel *label_18
QLabel *label_14
```

QDoubleSpinBox *doubleSpinBox_7 QDoubleSpinBox *doubleSpinBox_8 QDoubleSpinBox *doubleSpinBox_4 QSpinBox *spinBox QHBoxLayout *horizontalLayout_18 QProgressBar *progressBar QSpacerItem *horizontalSpacer_19 QPushButton *pushButton_26 QPushButton *pushButton_27 QSpacerItem *verticalSpacer_9 QHBoxLayout *horizontalLayout_17 QPushButton *pushButton_28 QSlider *horizontalSlider QToolBox *toolBox QWidget *page_5 QVBoxLayout *verticalLayout_2 QHBoxLayout *horizontalLayout QSpacerItem *horizontalSpacer_5 QPushButton *pushButton QPushButton *pushButton_3

QSpacerItem *verticalSpacer

```
QWidget *page_6
QVBoxLayout *verticalLayout_3
QHBoxLayout *horizontalLayout_2
QSpacerItem *horizontalSpacer_6
QPushButton *pushButton_7
QPushButton *pushButton_2
QPushButton *pushButton_9
QSpacerItem *verticalSpacer_2
QWidget *page_7
QVBoxLayout *verticalLayout_4
QHBoxLayout *horizontalLayout_3
QSpacerItem *horizontalSpacer_2
QPushButton *pushButton_13
QPushButton *pushButton_5
QPushButton *pushButton_12
QSpacerItem *verticalSpacer_3
QWidget *page_3
QVBoxLayout *verticalLayout_5
QHBoxLayout *horizontalLayout_4
QSpacerItem *horizontalSpacer_3
QPushButton *pushButton_15
```

```
QPushButton *pushButton_8
QPushButton *pushButton_11
QHBoxLayout *horizontalLayout_5
QSpacerItem *horizontalSpacer
QLineEdit *lineEdit
QSpacerItem *verticalSpacer_4
QWidget *page_4
QVBoxLayout *verticalLayout_6
QHBoxLayout *horizontalLayout_7
QSpacerItem *horizontalSpacer_4
QPushButton *pushButton_6
QPushButton *pushButton_16
QSpacerItem *verticalSpacer_5
QSpacerItem *verticalSpacer_6
```

Class Ui_CADDockWidget

• Defined in file_include_ui_CADDockWidget.h

Inheritance Relationships

Derived Type

• public Ui::CADDockWidget (Class CADDockWidget)

Class Documentation

$class \ \textbf{Ui_CADDockWidget}$

Subclassed by Ui::CADDockWidget

Public Functions

```
in line\ void\ \textbf{setupUi}\ (QWidget\ ^*CADDockWidget)
```

inline void retranslateUi(QWidget *CADDockWidget)

Public Members

QAction *actionSphere

QAction *actionCube

QAction *actionTorus

QAction *actionCone

QAction *actionCylinder

QAction *actionPoint

QAction *actionLine

QAction *actionSquare

QAction *actionUnion

QAction *actionSection

QAction *actionCut

QAction *actionSweep

QAction *actionExtrude

 $QAction ~ \hbox{*actionMirror}$

QAction *actionSelectFace

QAction *actionSelectDomain QAction *actionPart1 QAction *actionPart2 QVBoxLayout *verticalLayout_5 QGridLayout *gridLayout QPushButton *pushButton_4 QSpacerItem *horizontalSpacer_2 QSpacerItem *horizontalSpacer QPushButton *pushButton_9 QPushButton *pushButton QPushButton *pushButton_2 QPushButton *pushButton_3 QPushButton *pushButton_7 QPushButton *pushButton_6 QPushButton *pushButton_5 QPushButton *pushButton_13 QPushButton *pushButton_0 QSpacerItem *verticalSpacer_4 QTabWidget *tabWidget QWidget *tab QVBoxLayout *verticalLayout_2

QGridLayout *gridLayout_3 QPushButton *pushButton_33 QComboBox *comboBox_2 QLabel *label_4 QGridLayout *gridLayout_4 QLabel *label QDoubleSpinBox *doubleSpinBox_4 QLabel *label_3 QDoubleSpinBox *doubleSpinBox_5 QDoubleSpinBox *doubleSpinBox_6 QLabel *label_2 QVBoxLayout *verticalLayout QSpacerItem *verticalSpacer QSpacerItem *verticalSpacer_3 QWidget *tab_3 QVBoxLayout *verticalLayout_3 QGridLayout *gridLayout_5 QVBoxLayout *verticalLayout_4 QSpacerItem *verticalSpacer_6 QGridLayout *gridLayout_11 QLabel *label_7

QLabel *label_8 QDoubleSpinBox *doubleSpinBox_2 QDoubleSpinBox *doubleSpinBox_3 QDoubleSpinBox *doubleSpinBox QLabel *label_6 QPushButton *pushButton_36 QLabel *label_5 QComboBox *comboBox QSpacerItem *verticalSpacer_5 QWidget *tab_2 QVBoxLayout *verticalLayout_6 QHBoxLayout *horizontalLayout QComboBox *comboBox_4 QPushButton *pushButton_10 QPushButton *pushButton_11 QGridLayout *gridLayout_2 QDoubleSpinBox *doubleSpinBox_8 QDoubleSpinBox *doubleSpinBox_7 QPushButton *pushButton_8 QComboBox *comboBox_3

QLabel *label_9

```
QLabel *label_10
     QDoubleSpinBox *doubleSpinBox_9
     QSpacerItem *verticalSpacer_2
Class Ui_FEMDockWidget
   • Defined in file_include_ui_FEMDockWidget.h
Inheritance Relationships
Derived Type
   • public Ui::FEMDockWidget (Class FEMDockWidget)
Class Documentation
class \ \textbf{Ui\_FEMDockWidget}
     Subclassed by Ui::FEMDockWidget
     Public Functions
     inline void setupUi(QWidget *FEMDockWidget)
     inline void retranslateUi(QWidget *FEMDockWidget)
     Public Members
     QVBoxLayout *verticalLayout
     QGridLayout *gridLayout_2
     QLabel *label_4
     QComboBox *comboBox_4
```

QPushButton *pushButton_2

QComboBox *comboBox

 $QPushButton \ *\textbf{pushButton}$

```
QLabel *label
     QGridLayout *gridLayout
     QComboBox *comboBox_2
     QComboBox *comboBox_3
     QLineEdit *lineEdit
     QSpacerItem *verticalSpacer
Class Ui_MachiningDockWidget
   • Defined in file_include_ui_MachiningDockWidget.h
Inheritance Relationships
Derived Type
   • public Ui::MachiningDockWidget (Class MachiningDockWidget)
Class Documentation
class Ui_MachiningDockWidget
     Subclassed by Ui::MachiningDockWidget
     Public Functions
     inline void setupUi(QWidget *MachiningDockWidget)
     inline void retranslateUi(QWidget *MachiningDockWidget)
     Public Members
     QVBoxLayout *verticalLayout
     QTabWidget *tabWidget
     QWidget *tab
```

QVBoxLayout *verticalLayout_2

```
QHBoxLayout *horizontalLayout_5
QComboBox *comboBox_5
QPushButton *pushButton_7
QGridLayout *gridLayout
QPushButton *pushButton
QLineEdit *lineEdit
QComboBox *comboBox
QComboBox *comboBox_2
QLineEdit *lineEdit_2
QPushButton *pushButton_2
QHBoxLayout *horizontalLayout_9
QLabel *label_3
QSpacerItem *horizontalSpacer_4
QPushButton *pushButton_11
QHBoxLayout *horizontalLayout_2
QComboBox *comboBox_3
QPushButton *pushButton_3
QHBoxLayout *horizontalLayout_8
QLabel *label
QSpacerItem *horizontalSpacer_3
QPushButton *pushButton_10
```

QHBoxLayout *horizontalLayout_3 QComboBox *comboBox_4 QPushButton *pushButton_4 QHBoxLayout *horizontalLayout_4 QLabel *label_2 QSpacerItem *horizontalSpacer QDoubleSpinBox *doubleSpinBox QPushButton *pushButton_5 QHBoxLayout *horizontalLayout_6 QLabel *label_4 QSpacerItem *horizontalSpacer_2 QComboBox *comboBox_6 QPushButton *pushButton_8 QHBoxLayout *horizontalLayout QLabel *label_5 QSpacerItem *horizontalSpacer_6 QSpinBox *spinBox QSpacerItem *horizontalSpacer_5 QHBoxLayout *horizontalLayout_7 QProgressBar *progressBar

QPushButton *pushButton_9

```
QPushButton *pushButton_12

QSpacerItem *verticalSpacer

QWidget *tab_2

Class Ui_MainWindow

• Defined in file_include_ui_MainWindow.h

Inheritance Relationships

Derived Type

• public Ui::MainWindow (Class MainWindow)

Class Documentation
```

class Ui_MainWindow

Subclassed by *Ui::MainWindow*

Public Functions

```
inline void setupUi(QMainWindow *MainWindow)
inline void retranslateUi(QMainWindow *MainWindow)
```

Public Members

```
QAction *actionCAD
```

QAction *actionMesh

QAction *actionFEM

QAction *actionVisual

QAction *actionAbout

QAction *actionSave

QAction *actionOpen

QAction *actionSPC
QAction *actionAxo
QAction *actionFront
QAction *actionBack
QAction *actionLeft
QAction *actionRight
QAction *actionTop
QAction *actionBottom
QAction *actionFit
QAction *actionNew
QAction *actionMeasure
QAction *actionSystem
QAction *actionAdditiveManufacturing
QAction *actionViewRotationH
QAction *actionViewRotationV
QAction *actionMachining
QAction *actionTransport
OCCWidget *centralWidget
QVBoxLayout *verticalLayout
QMdiArea *mdiArea

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QMenuBar *menuBar

```
QMenu *menuFile

QMenu *menuView

QMenu *menuAbout

QStatusBar *statusBar

QToolBar *toolBarFENGSim

QDockWidget *dockWidget

QWidget *dockWidgetContents

QVBoxLayout *verticalLayout_2

QPushButton *pushButton
```

Class Ui_MeasureDockWidget

 $\bullet \ Defined \ in \ file_include_ui_MeasureDockWidget.h$

Inheritance Relationships

Derived Type

• public Ui::MeasureDockWidget (Class MeasureDockWidget)

Class Documentation

$class \ {\bf Ui_MeasureDockWidget}$

Subclassed by Ui::MeasureDockWidget

Public Functions

```
inline void setupUi(QWidget *MeasureDockWidget)
inline void retranslateUi(QWidget *MeasureDockWidget)
Public Members
QAction *actionStraightness
QAction *actionFlatness
QAction *actionSurface
QAction *actionLine
QAction *actionCircularity
QAction *actionCylindricity
QAction *actionLineProfile
QAction *actionSurfaceProfile
QVBoxLayout *verticalLayout
QHBoxLayout *horizontalLayout_3
QLabel *label
QSpacerItem *horizontalSpacer_8
QPushButton *pushButton_3
QPushButton *pushButton_6
QHBoxLayout *horizontalLayout_7
QLabel *label_4
```

QSpacerItem *horizontalSpacer_3

QHBoxLayout *horizontalLayout_4

QPushButton *pushButton QPushButton *pushButton_2 QSpacerItem *horizontalSpacer_4 QDoubleSpinBox *doubleSpinBox QSpacerItem *horizontalSpacer_9 QPushButton *pushButton_5 QScrollBar *horizontalScrollBar QVBoxLayout *verticalLayout_2 QLabel *label_9 QHBoxLayout *horizontalLayout_12 QLabel *label_8 QDoubleSpinBox *doubleSpinBox_2 QSpacerItem *horizontalSpacer_5 QPushButton *pushButton_4 QPushButton *pushButton_7 QHBoxLayout *horizontalLayout_10 QLabel *label_5 QSpacerItem *horizontalSpacer QPushButton *pushButton_8 QPushButton *pushButton_9 QHBoxLayout *horizontalLayout_11

```
QLabel *label_6
QSpacerItem *horizontalSpacer_6
QHBoxLayout *horizontalLayout_8
QLabel *label_11
QDoubleSpinBox *doubleSpinBox_3
QSpacerItem *horizontalSpacer_2
QPushButton *pushButton_19
QPushButton *pushButton_11
QProgressBar *progressBar
QHBoxLayout *horizontalLayout
QLabel *label_2
QPushButton *pushButton_10
QPushButton *pushButton_13
QProgressBar_2
QSpacerItem *verticalSpacer
```

Class Ui MeshDockWidget

• Defined in file_include_ui_MeshDockWidget.h

Inheritance Relationships

Derived Type

• public Ui::MeshDockWidget (Class MeshDockWidget)

Class Documentation

$class \ {\bf Ui_MeshDockWidget}$

```
Subclassed by Ui::MeshDockWidget
```

Public Functions

```
inline void setupUi(QWidget *MeshDockWidget)
inline void retranslateUi(QWidget *MeshDockWidget)
```

Public Members

```
QVBoxLayout *verticalLayout
```

```
QTabWidget *tabWidget
```

QWidget *tab

QVBoxLayout *verticalLayout_3

QGridLayout *gridLayout_2

QDoubleSpinBox *doubleSpinBox

QLabel *label

QPushButton ~*pushButton

QSpacerItem *verticalSpacer

Class Ui_SPCDockWidget

 $\bullet \ \ Defined \ in \ file_include_ui_SPCDockWidget.h$

Inheritance Relationships

Derived Type

• public Ui::SPCDockWidget (Class SPCDockWidget)

Class Documentation

$class \ \textbf{Ui_SPCDockWidget}$

Subclassed by Ui::SPCDockWidget

Public Functions

```
inline void setupUi(QWidget *SPCDockWidget)
inline void retranslateUi(QWidget *SPCDockWidget)
```

Public Members

```
QHBoxLayout~ \hbox{\tt *horizontalLayout}
```

QTreeWidget *treeWidget

Class Ui_TransportDockWidget

• Defined in file_include_ui_TransportDockWidget.h

Inheritance Relationships

Derived Type

• public Ui::TransportDockWidget (Class TransportDockWidget)

Class Documentation

class Ui_TransportDockWidget

Subclassed by Ui::TransportDockWidget

Public Functions

```
inline void setupUi(QWidget *TransportDockWidget)
```

inline void retranslateUi(QWidget *TransportDockWidget)

Public Members

```
QVBoxLayout *verticalLayout
QTabWidget *tabWidget
QWidget *tab
QVBoxLayout *verticalLayout_3
QVBoxLayout *verticalLayout_2
QTableWidget *tableWidget
QHBoxLayout *horizontalLayout_2
QSpacerItem *horizontalSpacer
QPushButton *pushButton
QPushButton *pushButton_2
QPushButton *pushButton_3
QSpacerItem *verticalSpacer
QWidget *tab_2
QVBoxLayout *verticalLayout_4
QHBoxLayout *horizontalLayout_11
QLabel *label
QPushButton *pushButton_10
QHBoxLayout *horizontalLayout_9
QLabel *label_2
```

QDoubleSpinBox *doubleSpinBox

```
QHBoxLayout *horizontalLayout_10
QLabel *label_5
QDoubleSpinBox *doubleSpinBox_2
QHBoxLayout *horizontalLayout
QLabel *label_3
QPushButton *pushButton_5
QHBoxLayout *horizontalLayout_4
QLabel *label_4
QPushButton *pushButton_7
QHBoxLayout *horizontalLayout_7
QLabel *label_6
QPushButton *pushButton_11
QHBoxLayout *horizontalLayout_12
QLabel *label_7
QDoubleSpinBox *doubleSpinBox_3
QHBoxLayout *horizontalLayout_5
QLabel *label_8
QPushButton *pushButton_8
QHBoxLayout *horizontalLayout_6
QLabel *label_9
QPushButton *pushButton_9
```

```
QHBoxLayout *horizontalLayout_3

QSpacerItem *horizontalSpacer_3

QPushButton *pushButton_6

QComboBox *comboBox

QPushButton *pushButton_4

QSpacerItem *verticalSpacer_2

QWidget *tab_3

QVBoxLayout *verticalLayout_5

QTableWidget *tableWidget_2

QSpacerItem *verticalSpacer_3
```

Class Ui_VTKDockWidget

• Defined in file_include_ui_VTKDockWidget.h

Inheritance Relationships

Derived Type

• public Ui::VTKDockWidget (Class VTKDockWidget)

Class Documentation

$class \ \textbf{Ui_VTKDockWidget}$

Subclassed by Ui::VTKDockWidget

Public Functions

```
inline void setupUi(QWidget *VTKDockWidget)
inline void retranslateUi(QWidget *VTKDockWidget)
```

Public Members

QVBoxLayout *verticalLayout

QGridLayout *gridLayout

QLabel *label

QLineEdit *lineEdit

QPushButton *pushButton

QVBoxLayout *verticalLayout_2

QHBoxLayout *horizontalLayout

QLabel *label_2

QPushButton *pushButton_2

QSpacerItem *verticalSpacer

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FIVE

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