

```

ref
virtual long add_ref(void);
virtual long release(void);

```

```

<<枚举>>
data_from
DATA_FROM_KNOWN = 0,
DATA_FROM_USER,

```

```

<<枚举>>
value_type
VAL_TYPE_BOOL = 0, // bool*
VAL_TYPE_INT, // int*
-VAL_TYPE_FLOAT, // double*
VAL_TYPE_STRING, // wchar_t*
VAL_TYPE_CUSTOM, // custom data

```

```

ui_helper - All IO operations are blocking

virtual parameter* get_user_input(data_from from, value_type type, const wchar_t* title, const wchar_t* desc = NULL);
virtual void test_callback(const wchar_t* name, test_event ev, void* data, size_t flag);
virtual int io_bulk_int(usb_io_type type, void* buf, size_t len/*[in]-size of buf, [out]-data bytes in buf*/);
virtual int io_control(int type, int req, int val, int ind, void* buf, size_t len/*[in]-in data size, [out]-transferred bytes*/);

```

```

<<枚举>>
test_event
TEST_EVENT_TIPS = 0,
TEST_EVENT_xxx,
TEST_EVENT_RESULT,

```

```

parameter
virtual size_t get_size(void);
virtual void* get_data(void);

```

```

<<枚举>>
usb_io_type
USB_IO_BULK_READ = 0,
USB_IO_BULK_WRITE,
USB_IO_INTERRUPT_READ,
USB_IO_INTERRUPT_WRITE,

```



测试列表

// 存储在服务器或者由管理人员提前配置的指定机型测试项配置（需要测试哪些项目的列表）— **cfg-master**

```
{
  "global":
  {
    "vid-org": 0x3072,           // 初始状态VID
    "pid-org": 0x200,          // 初始状态PID
    "vid-to": 0x3072,         // 要写入的目标VID
    "pid-to": 0x239,          // 要写入的目标PID
    "report-url": "user@factory-quality-center" // 数据上报/数据库连接字符串参数
  },
  "1":
  {
    "name": "test-1",         // 全局唯一名字
    "title": "歪斜检测",     // 测试项目标题
    "man": false,             // false - 程序联机检测项目; true - 全人工手动检测项目
    "err-level": "fatal"     // "fatal" - stop all testing works when error, "warning" - warning/ignore this item and continue testing
  }
}
```

测试项

// 各专用测试DLL 返回支持的测试项 配置— **cfg-performer**

```
{
  "1":
  {
    "name": "test-1",         // 全局唯一，与cfg-master中name对应
    "ver": 1                 // 如果有多个DLL同时支持某一个测试项，则取版本号高的测试
  }
}
```