111 获取视频数据

第三步，实现获取视频数据的功能。

111.1 实现功能

C:\Users\Minwei\Projects\Qt\Monitor\monitordialog.h：

```cpp
...
#include <QNetworkAccessManager>
#include <QNetworkReply>

#include "face.h"
...
class MonitorDialog : public QDialog
{
    ...
signals:
    void recognize(QImage const& frame);
    ...
private slots:
    ...
    void on_m_streamReply_readyRead();
    ...
private:
    ...
    QNetworkAccessManager* m_access;
    QNetworkReply* m_streamReply;
    QByteArray m_streamData;
    Face* m_face;
    QThread* m_thread;
    ...
};
...
```

C:\Users\Minwei\Projects\Qt\Monitor\monitordialog.cpp：

```cpp
...
#include <QThread>
...
MonitorDialog::MonitorDialog(QWidget *parent)
    ...
    , m_access(new QNetworkAccessManager(this))
    , m_streamReply(Q_NULLPTR)
    , m_face(new Face)
    , m_thread(new QThread(this))
    ...
{
    ...
    connect(this, SIGNAL(recognize(QImage const&)),
        m_face, SLOT(recognize(QImage const&)));
    m_face->moveToThread(m_thread);
    m_thread->start();
    ...
```

```
18    }
19
20    MonitorDialog::~MonitorDialog()
21    {
22        ...
23        m_thread->terminate();
24        m_thread->wait();
25        ...
26    }
27
28    void MonitorDialog::on_m_btnStream_clicked()
29    {
30        m_streamReply = m_access->get(QNetworkRequest(QUrl(
31            "http://192.168.0.111:8080?action=stream")));
32
33        connect(m_streamReply, SIGNAL(readyRead()),
34            this, SLOT(on_m_streamReply_readyRead()));
35    }
36    ...
37    void MonitorDialog::on_m_streamReply_readyRead()
38    {
39        m_streamData += m_streamReply->readAll();
40
41        int begin = m_streamData.indexOf("\xff\xd8", 0);
42        if (begin == -1)
43        {
44            m_streamData.clear();
45            return;
46        }
47        int end = m_streamData.indexOf("\xff\xd9", begin + 2);
48        if (end == -1)
49            return;
50
51        QImage frame;
52        if (!frame.loadFromData(m_streamData.mid(begin, end + 2), "JPG"))
53        {
54            m_streamData.clear();
55            return;
56        }
57
58        m_streamData.clear();
59        ui->m_labStream->setPixmap(QPixmap::fromImage(frame));
60        emit recognize(frame);
61    }
62    ...
```

111.2 测试验证

运行效果如图所示:

视频 快照