# Getting Host's IP addresses and Interfaces

This code example shows how to use the QNetworkInterface class to list the host's IP addresses and network interfaces. `QNetworkInterface` represents one network interface attached to the host where the program is being run. Each network interface may contain zero or more IP addresses, each of which is optionally associated with a netmask and/or a broadcast address.

## Functions

- This convenience function returns all IP addresses found on the host machine.

```
QNetworkInterface *inter=new QNetWorkInterface();
inter->allAddresses();
```

- Returns a listing of all the network interfaces found on the host machine.

```
QNetworkInterface *inter=new QNetWorkInterface();
inter->allInterfaces();
```

## Source Code

### Header File

```
#ifndef NET_H
#define NET_H

#include <QtGui/QWidget>
#include<QNetworkInterface>
#include<QList>
#include<QLabel>
#include<QHBoxLayout>
#include<QString>
#include<QHostAddress>
#include<QListWidget>
namespace Ui
{
    class netClass;
}

class net : public QWidget
{
    Q_OBJECT

public:
    net(QWidget *parent = 0);
    ~net();

private:
    QNetworkInterface *inter;
    QLabel *lbl;
    QHBoxLayout *lay;
    QListWidget *item;

};

#endif // NET_H
```

### Source File

```
#include "net.h"
#include "ui_net.h"

net::net(QWidget *parent)
    : QWidget(parent)
{
  QList<QHostAddress> list;
   lbl=new QLabel(this);
   lay=new QHBoxLayout(this);
   item=new QListWidget(this);
  inter=new QNetworkInterface();
   list=inter->allAddresses();
    QString str;
for (int i = 0; i < list.size(); ++i) {

  str = list.at(i).toString();
  item->addItem(str);
}

   lay->addWidget(item);
   setLayout(lay);
}

net::~net()
{
 // No need to delete any object that got a parent that is properly deleted.
 delete inter;

}
```

## Source File for getting network Interface


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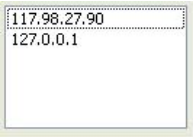
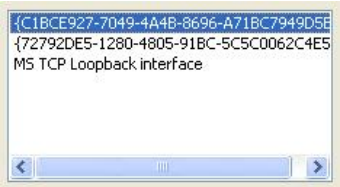
```
#include "net.h"
#include "ui_net.h"

net::net(QWidget *parent)
    : QWidget(parent)
{
  QList<QNetworkInterface> list;
   lbl=new QLabel(this);
   lay=new QHBoxLayout(this);
   item=new QListWidget(this);
  inter=new QNetworkInterface();
   list=inter->allInterfaces();
    QString str;
for (int i = 0; i < list.size(); ++i) {

  str = list.at(i).name();
  item->addItem(str);
}

   lay->addWidget(item);
   setLayout(lay);
}

net::~net()
{
 delete inter;
}
```

## Screenshot

- Showing Host IP's




- Showing Network Interface




The code example could be found at: File:Net.zip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