How to set default access point using Qt Mobility APIs

ID		**Creation date**	29th Mar 2010
Platform	S60 5th Edition	**Tested on devices**	Nokia N97
Category	Qt	**Subcategory**	Qt Mobility API

Keywords (APIs, classes, methods, functions): QNetworkSession, QNetworkConfigurationManager,QConfigurationManager

Tip: Read this article before moving forward: Archived:Setting up environment for Qt Mobility API

Overview

This article demonstrate how to set default access point using the Bearer Management APIs of the Qt's Mobility Package.

Project Configuration File (.pro file)

Add the Qt Mobility project configuration option in the **.Pro** file as shown below

```
CONFIG += mobility
MOBILITY += bearer
```

Header File

Also do add the Qt mobility name space before using any Qt mobility APIs,

```
  QTM_USE_NAMESPACE
```

Declare a QNetworkSession object in the header file which will help in opening the network connections.

```
#include <qmobilityglobal.h>
#include <qnetworksession.h>

QNetworkSession* session;
```

Source File

After declaring the QNetworkSession object we need to use the QNetworkConfigurationManager and QNetworkConfiguration class to ask the user about the access point and make that as a default connection.

A sample function is shown below :

```
    QNetworkConfigurationManager manager;

    const bool selectIap = (manager.capabilities()&
QNetworkConfigurationManager::CanStartAndStopInterfaces);
```


(C) Copyright Nokia 2014. All rights reserved.

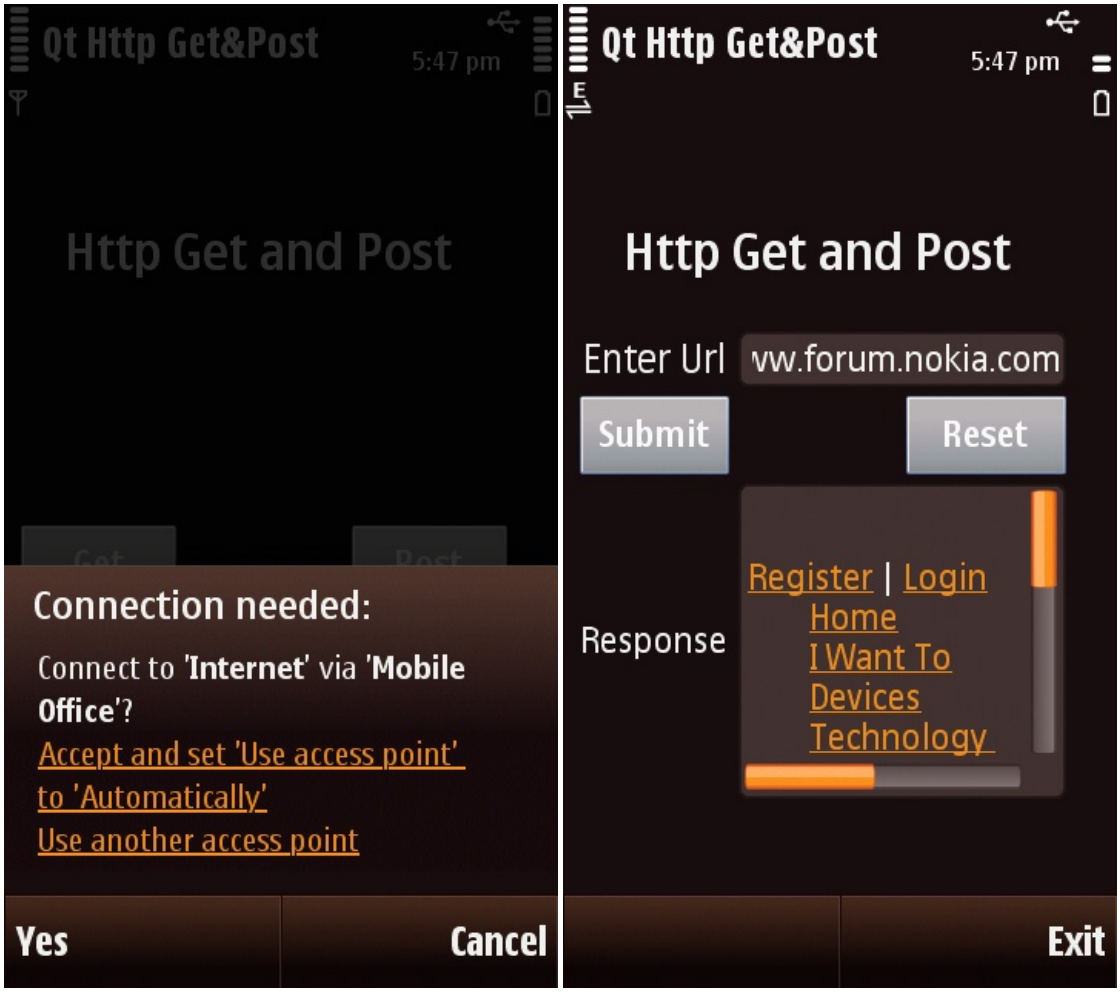
```
    QNetworkConfiguration defaultIap = manager.defaultConfiguration();

    if(!defaultIap.isValid() && (!selectIap && defaultIap.state() !=
QNetworkConfiguration::Active))
     {
        // let the user know that there is no access point available
     }

    session = new QNetworkSession(defaultIap,this);
    session->open();
```

It is worth noting that `QNetworkConfigurationManager::defaultConfiguration()` reflects the device's default connection setting, which can be controlled from the UI. The default connection varies slightly from device to device. For example on 5800 device, navigate to *Menu -> Settings -> Connectivity -> Destinations -> Options -> Default Connection* to control this setting. Notably, it the setting is set as 'Always Ask', user will be prompted every time.

If you need more control over which configuration is used, what you can do is list the configurations (`QNetworkConfigurationManager::allConfigurations()`), choose the one you wish to use, and create a QNetworkSession based on that configuration (similarly as in the example snippet above).

extension

- In one of my previous article I explained the HTTP **GET** and **POST** mechanism using Qt's APIs, that article can be easily extended to ask the user at first to select an access point and make that as default connection.
- The screenshots shown below illustrates the above point clearly:



References

(C) Copyright Nokia 2014. All rights reserved.

- Archived:Setting up environment for Qt Mobility API
- Working with Carbide.c++ IDE for Qt Mobility APIs
- How to do HTTP Get and Post using Qt

(C) Copyright Nokia 2014. All rights reserved.