How to get list of Time Zones in Qt Maemo application

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The article is believed to be still valid for the original topic scope.

Overview

This example shows how to get list of **Time Zones** in Qt Maemo application using GTK functions (as there are no Qt classes for this operation)

Project .pro file

```
// Maemo specific config
maemo5 {
LIBS += libtime.so
CONFIG += link_pkgconfig
PKGCONFIG += glib-2.0 libcityinfo0-0
INCLUDEPATH += .
}
```

Packing in DEB - control file

```
// in source section add for Build-depends line
libtime-dev, libcityinfo-dev
```

Header

```
#include <cityinfo.h>
#include <clockd/libtime.h>
```

Source

```
// get the refence to QComboBox for filling
void SampleWisget::fillTimeZones(QComboBox* &aBox)
{
    int ret = 0;
    char current_tz[32];
    // get current Time Zone
    ret = time_get_timezone(&current_tz[0],32);
    // convert from char* to QString
    QString defTZ = QString::fromUtf8(current_tz);
    // clear the list
    aBox->clear();
    // get list of Cities
    Cityinfo **cities = cityinfo_get_all();
    // cycle throug all Cities
    for (int i = 0; cities && cities[i]; ++i) {
        // get next city params
        QString name = QString::fromUtf8(cityinfo_get_name(cities[i]));
        QString country = QString::fromUtf8(cityinfo_get_country(cities[i]));
        QString zone = ":" + QString::fromUtf8(cityinfo_get_zone(cities[i]));

        QString timeoffset;
        QString sign;
        // get time offset from UTC for current city
        int offset = time_get_utc_offset(cityinfo_get_zone(cities[i]));
        // define sign for offset
        if (offset > 0)
            sign = "";
        else
            sign = "+";
        // some offset not rounded to hours, so check this and form QString in form
        //  City Name + Country + Time Offset
        if((offset % 3600)==0)
            timeoffset = QString("%2, %1, (UTC %3)").arg(name).arg(country).arg(sign+QString::number(-offset/3600));
        else
            timeoffset = QString("%2, %1, (UTC %3:%4)").arg(name).arg(country).arg(sign+QString::number(-offset/3600)).arg("30");
        // add new record to list (formed QString - to text field, and real offset in seconds - to User field)
        aBox->addItem(timeoffset,-offset);
        // if current city time offset is equal to those got from system - store it's offset
        if (zone == defTZ)
            defTZ = timeoffset;
    }
    // free unneded city list
    cityinfo_free_all(cities);
    // sort the list alphabetically (by the City Name)
    aBox->model()->sort(0);
    // loking for stored time offest in sorted list
    int k = aBox->findText(defTZ);
```


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```
    // setting list position to the city with time offset, which we get in the beginning
    aBox->setCurrentIndex(k);
}
```

Postconditions

The Qt widget with QComboBox filled with TimeZones.

--Avis 9:28, 30 November 2010 (UTC)

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