Autostart Qt applications at boot on Symbian devices

This article shows how to implement an app autostart feature in Qt using the Symbian C++ Startup List Management API. The procedure extends the process described in How to autostart an application on boot up using Startup List Management API for Qt, making it easier to use for developers who are not as familiar with Symbian C++..

Startup List Management API

Steps for auto-starting an EXE on boot time in Qt.

1. Create an .RSS file in your project's directories.

For example: 06000001.rss

Here a number is used for the name, which is the same as the Package UID (pUID) of the project. This might help later in identifying the resource and is a good reminder when adding the entry in the PKG file. The name is however irrelevant at this point.

Add the following code to the new .rss file:

```
#include <startupitem.rh>

RESOURCE STARTUP_ITEM_INFO startexe
    {
    executable_name = "!:\\sys\\bin\\QtAutoStartApp.exe";
    recovery = EStartupItemExPolicyNone;
    }
```

In the code above:

- **QtAutoStartApp.exe** is the name of the application to be started and this will of course depend on your choice of name for your project. Must be the same as specified for the **TARGET** statement in the MMP file.

2. Open your .PRO file.

Add the following lines to include the new resource in the build and attach .RSC file to package.

```
symbian {

    # Define rss file for autoboot
    autoStartBlock = \
    "SOURCEPATH      ." \
    "START RESOURCE 06000001.rss" \
    "END"

    MMP_RULES += autoStartBlock

    # Deploy rsc file to package.
    deployRscFile = "\"$${EPOCROOT}epoc32/data/06000001.rsc\" - \
    \"C:/private/101f875a/import/[06000001].rsc\""
    deployFiles.pkg_postrules += deployRscFile
    DEPLOYMENT += deployFiles
}
```

3. That's it. Now just build the project and deploy sis file on device. On the next phone reboot your application will be started automatically.

Notes

- If the EXE exits within a few (about 5?) seconds of starting up, a message is displayed, reading: *Unable to start <name of EXE>. Application may need to be removed.*
- **Startup List Management API does not work with** Self-Signed application**.** It should be signed with a trusted certificate (Open Signed Online or Open Signed Offline during R&D stage and Symbian Signed when released) even if otherwise the capabilities required for the project do not justify it.
- The exe to be started must be installed directly from the root of the package that contains the resource file (not accepted from embedded file)
- Symbian Signed's Test Criteria mandates that the user must have the option to turn the autostart feature on/off. For info on how applications may implement such feature please see CS001564 - Implementing user-selectable autostart feature in Qt for Symbian

Download Example Code

Startup List Management Example in Qt

See also

- CS001564 - Implementing user-selectable autostart feature in Qt for Symbian

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