

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 = "\"$$[EPOCHROOT]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](#)

