

# Determining the application path using Symbian C++

## Description

The end user can install applications either on the C: (phone memory) or E: (memory card, flash, or hard disk) drive. Applications may need to be aware of their installation location. The way the installation location is determined depends on the S60 platform version.

## Solution

### S60 3rd Edition (and later)

From S60 3rd Edition onwards, all application binaries (EXE and DLL files) are stored under `\sys\bin`. To access this directory, the application needs `AllFiles` capability. Resources and data cannot be stored in this directory. Instead, applications have their own restricted view on the file system consisting of the directory subtree `\private\<SID>\`, where SID is a security identifier, unique to each process. Applications use their private directory to hold `.ini`, `.mbm`, `.rsc`, and data files. Other processes cannot access the directory without the `AllFiles` capability.

`CompleteWithAppPath()` will always return `lsys\bin` as the application installation path on S60 3rd Edition. To access application data files located in the application's private directory, a different way to construct the path is needed:

```
TFileName appPath;
TBuf<2> appDrive;

// Returns private path of this application
// in following format: \Private\<SID of the application>\
// (does not contain drive specification).
iEikonEnv->FsSession().PrivatePath( appPath );

// Extract drive letter into appDrive
appDrive.Copy(iEikonEnv->EikAppUi()->Application()->AppFullName().Left(2));

// Insert drive letter into path
appPath.Insert(0, appDrive);
```

### S60 2nd Edition

On S60 2nd Edition, use the `CompleteWithAppPath( TDes& aFileName )` method from `aknutils.h`. All the components that are specified in the given descriptor (drive letter, path, and file name including the extension) are returned in the result; any missing components (path and drive letter) are taken from the application path (`<drive>:\system\apps\<application_name>` directory).

```
#include <aknutils.h>

// Insert the full application path into the file name (fileName)
TFileName fullPath(fileName);
CompleteWithAppPath(fullPath);    // from aknutils.h
```

## Version Hint

**Windows Phone:** [[Category:Windows Phone]]

[[Category:Windows Phone 7.5]]

[[Category:Windows Phone 8]]

**Nokia Asha:** [[Category:Nokia Asha]]

[[Category:Nokia Asha Platform 1.0]]

**Series 40:** [[Category:Series 40]]

[[Category:Series 40 1st Edition]] [[Category:Series 40 2nd Edition]]

[[Category:Series 40 3rd Edition (initial release)]] [[Category:Series 40 3rd Edition FP1]] [[Category:Series 40 3rd Edition FP2]]

[[Category:Series 40 5th Edition (initial release)]] [[Category:Series 40 5th Edition FP1]]

[[Category:Series 40 6th Edition (initial release)]] [[Category:Series 40 6th Edition FP1]] [[Category:Series 40 Developer Platform 1.0]] [[Category:Series 40 Developer Platform 1.1]] [[Category:Series 40 Developer Platform 2.0]]

**Symbian:** [[Category:Symbian]]

[[Category:S60 1st Edition]] [[Category:S60 2nd Edition (initial release)]] [[Category:S60 2nd Edition FP1]] [[Category:S60 2nd Edition FP2]] [[Category:S60 2nd Edition FP3]]

[[Category:S60 3rd Edition (initial release)]] [[Category:S60 3rd Edition FP1]] [[Category:S60 3rd Edition FP2]]

[[Category:S60 5th Edition]]

[[Category:Symbian^3]] [[Category:Symbian Anna]] [[Category:Nokia Belle]]