

Mobile OS Security

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Mobile OSes

Android

iOS

Windows phone

"Dead":

Maemo/MeeGo

Symbian

Anything not concerning Android is purely hearsay!
(Someone wrote it on the internet)

Common traits

Locked devices, like game consoles (although many newer Androids can be unlocked)

App stores

Windows phone

Marketplace hub (\$99/y to publish for WP, Xbox 360 Live indie). 30% goes to MS.

No 3rd party installations.

Automatic compliance testing/certification upon submission

Sandboxed, managed .NET, capabilities, no direct IPC, no native code

No sd-cards, "security feature"!

iOS

App store (\$99/y to publish). 30% to Apple (also on stuff purchased through links from apps)

Manual review process

No sd-cards (Apple)

All "normal apps" run with the same user but sandboxed through kernel extensions (one common sandbox?). Apple apps special.

Native code

iOS continued

"Important" things are queried on usage instead of upon installation (?)

Android

Android Market, \$25 one time fee w automated processing.
70% developer, 30% to carrier, 0% to Google (?)

Automated publishing

Permissions/Capabilities listed when installing.

Fairly normal Linux with apps running with different uids.
App-determined IPC

Managed code (Dalvik ~ Java), possible to write native.

Android continued

SD-cards allowed