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Building for Heterogeneous Systems

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Its undeniable that heterogeneous systems are more commonly used on embedded products nowadays, for performance reasons it is better to use different operating systems running on different architectures on a single device.

However, each OS has its own build-time and runtime dependencies e.g. different C library (if one at all) as well as developer workflow, pre-configured IDE and such, this requires that a single build system should be capable of cross-compiling different OSs targeting different architectures at the same time.

On Bitbake, this is currently possible by taking advantage of its multiconfig feature along with multiconfig dependencies, but its still problematic to emulate the expected developer experience for non-Linux systems as well as configuring multiconfig builds.
Unifying the developer workflow across OSs and improving the ease of use of features such as multiconfig (or other features used by different build systems) would greatly improve teams efforts on creating new products.

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