

# Backporting Java 5 Code

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## Java 5: New features

- Syntactical sugar: Enhanced for-loops, static imports, ...
- Generics
- Enums
- Annotations
- Covariant return types
- Additional classes, methods
- ...

→ Code written for Java 5 does not work for older versions

- Many productive systems still run on older VMs
- With backporting tools, developers can
  - Develop a component for Java 5, and automatically derive a version that runs on legacy environments
  - Use third-party libraries written for Java 5 within their own code

- Transform bytecode - good, working tools, but
  - What if adaptations of source code are required or desired?
  - What if a customer demands the source code for a project?
- The only tool known to us that processes source code, handles only a subset of the new features

## Features

- All new syntactic language features
- API support: Integrated third-party library backports (partly)

## Limitations

- Annotations are completely removed
- No support for reflective inspection of annotations, generics

- I have some real projects prepared
- Try your own code!

## Get It!

- based on Recoder metaprogramming framework
- <http://recoder.sourceforge.net>
- Command line tool part of the framework