

Java Compatibility - the why and the how

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Compatibility & Java™ technology

```
int[] result = { 106, 99, 112, 46, 111, 114, 103 };  
(int i = 0; i < result.length; i++) {  
    System.out.print (result[i]);  
}
```

- **Java is a *binary* software standard**
 - This is *the* value proposition of the technology
- **Claiming compatibility must be meaningful & equitable**
- **Three elements define a Java technology**
 - Specification
 - Reference Implementation
 - Technology Compatibility Kit

JCP requires these three elements

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```

Specification

Is specification
unambiguous?

Can you build an
implementation?

TCK

Is TCK correct?
Is RI conformant?

**Reference
Implementation**

Why is conformance important?

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- **Value in the Java brand**
- **Assurance in application portability**
- **A level playing field for all implementers**
- **Assurance for end-users that required (guaranteed) functionality is present**
- **Developers can write to a spec rather than an implementation**
- **Improves quality of the spec**

Conformance requirements

```
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```

- **All required tests must be passed**
- **Non-testable criteria that must be assured by the implementer**
 - Tests cannot be changed
 - Exclude list cannot be changed
- **There can be technology specific conformance rules**

Appeals process

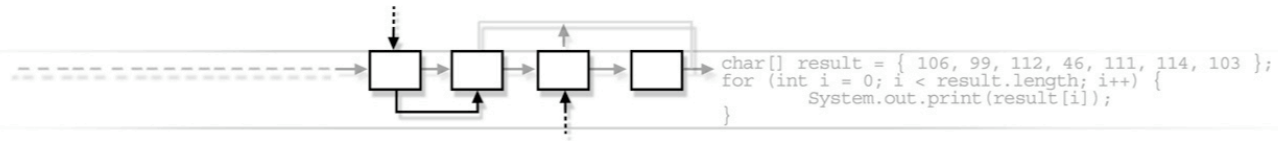
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```

- **What if parties disagree?**

- Is the implementation wrong, is the test wrong, is the spec wrong, ...?

- **JCP describes a mandatory appeals process**

- Appeals process must be provided by spec lead
- JCP Executive Committee can arbitrate via ballot



Thank You!

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