

Side by Side Deployment



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Overview



Might want to load different versions of the same class

- IDE extensions require different versions of XML parsers

ClassLoader provides isolation



```
ClassLoader ucl = new URLClassLoader(...);  
Class.forName("com.pluralsight.Quote", true, ucl);
```

Class.forName

Three parameter version of Class.forName

- Class is loaded by the classloader in the 3rd paramter



Calling down the Loader Hierarchy

```
Class rocketCls= Class.forName("Rocket", true, ucl);  
Rocket r = (Rocket) rocketCls.newInstance();
```



Incorrect. Rocket should not
be visible
to caller's loader

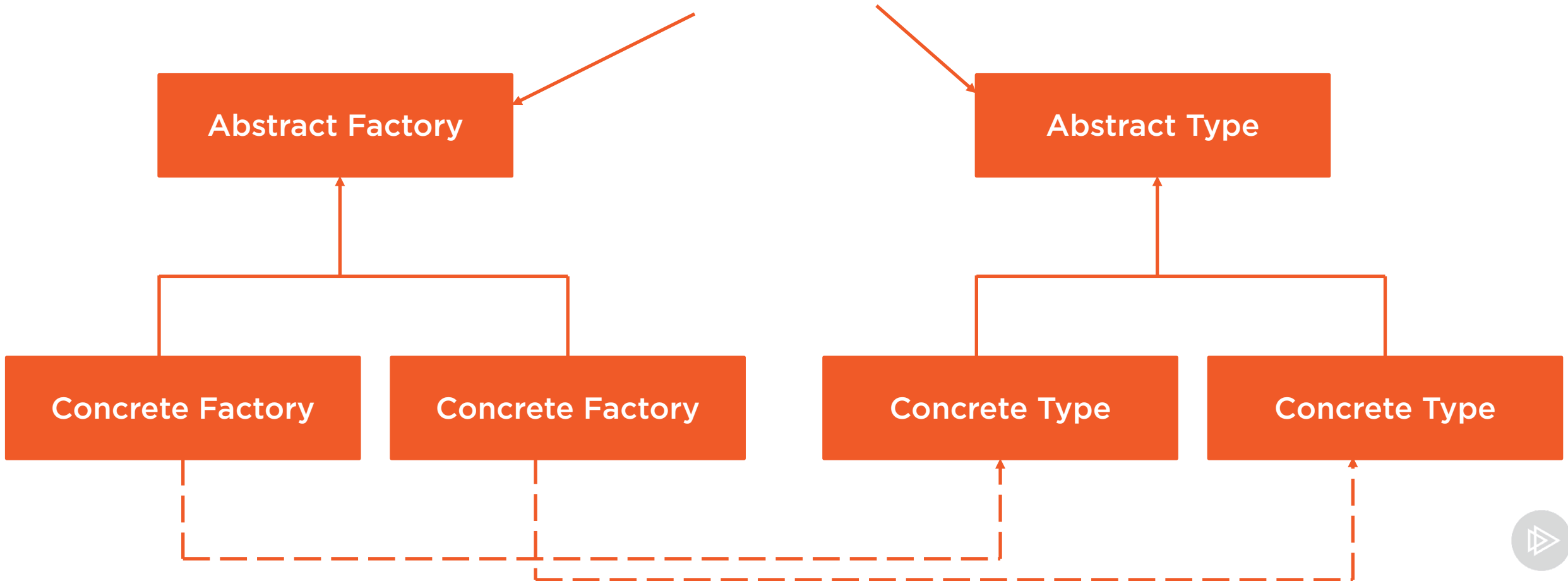
Correct. Rocket
should be visible to
URLClassLoader



```
Class rocketCls= Class.forName("Rocket", true, ucl);  
RocketItf r = (RocketItf) rocketCls.newInstance();
```

Factory Pattern

- **Constructor pattern**



Summary



Use interfaces when dynamically loading classes

- Classes you are loading cannot be on the classpath
- Still need a way of calling methods on those classes

Can create flexible factories

- Use classloader to load factory dynamically