

A New Approach to Migrating VB.Net Applications to Java

A White Paper

Beelucid Software LLC
<http://www.beelucid.com>

Introduction

Beelucid Software LLC has crafted a solution, VBeeJ For Java, to make migration from VB.Net to Java fast and easy. We use patent pending technology and open source solutions to bring your application up so that it compiles and runs more quickly than you would have believed possible.

Migrations Fast and Easy

The VBeeJ For Java Solution creates open source libraries that use .Net names and map .Net functionality to the Java platform. The result is that your Java code is very easy to understand and maintain. One of our recent customers described it this way:

The application contains many Beelucid-constructed classes with methods that map to standard VB.NET functions. This has helped me greatly in reading the source code for maintenance.

Furthermore, when I investigate the source code for the Beelucid classes, I can see what Java functions correspond to the VB.NET functions with which I am familiar.

Migrations Superior Support

Because the VBeeJ For Java Solution is so fast and easy, we can offer a level of support which is unprecedented. When we migrate your application to Java, we can give you documentation and assistance which is specific to your application. This can include videos that describe not only your app in Java, but how to use your app with Eclipse, among other topics. A recent customer described it this way:

Beelucid Software provided fantastic customer support, even after delivery of the translated application. Beelucid was very responsive in addressing my Java environment questions so I could execute and modify the code within my Eclipse IDE. Beelucid also provided very useful suggestions when I asked for help on some tweaks to the program operation.

You can have all the advantages of code reuse when migrating your VB.Net software to Java. Save money and time through VBeeJ For Java migrations. Access the free and high quality tools which are available for Java, such as the Eclipse development IDE, as well as a tremendous amount of free and high quality libraries and other Java code.

Migrations Multiple Targets

The VBeeJ For Java Solution is so powerful that it can handle multiple Java targets. For example, you can select **Java 6.0** as your translation target. You can also select the **Blackberry** as your application target. We will soon support the **Android** as well.

This white paper presents our value and output frameworks, and describes the steps of a typical VBeeJ For Java migration. We show you how a VBeeJ For Java migration works to help you increase software reuse and quality, while decreasing development time.

The VBeeJ For Java Approach

Today, migrating code from VB.Net to Java tends to be an ad hoc process.

First, the developer must address a plethora of errors related to language and platform differences.

Second, it is not possible to leverage the results of past migrations to make new migrations easier. Each migration is its own unique situation. The results of successful migrations are not extensible to or reusable in other contexts. Extensive reworking of converted code is usually necessary, so that the benefits of code reuse are decreased.

Our approach to migration is four fold. Each aspect of our approach increases the value of all the others.

- The VBeeJ For Java Converter takes care of language differences.
- The VBeeJ For Java plugin architecture takes care of platform differences, through a plugin approach to .Net namespaces. For example, a Windows.Forms plugin supports the Forms namespace. These plugins are open source and map clearly to .Net functionality. They are easily extended and very flexible.
- The VBeeJ For Java Converter itself generates the building blocks of these plugins. This makes our migrations robust and fast.
- With each migration, the VBeeJ For Java plugin library becomes more complete, creating a reusable code base to support future migrations.

The VBeeJ For Java Converter has advanced capabilities. It not only fully translates VB.Net to Java, it can create classes, interfaces, and services on the fly to satisfy all references in the VB.Net application to .Net platform types and services. This is achieved with an advanced type inference engine (patent pending). This makes building plugins very fast and robust.

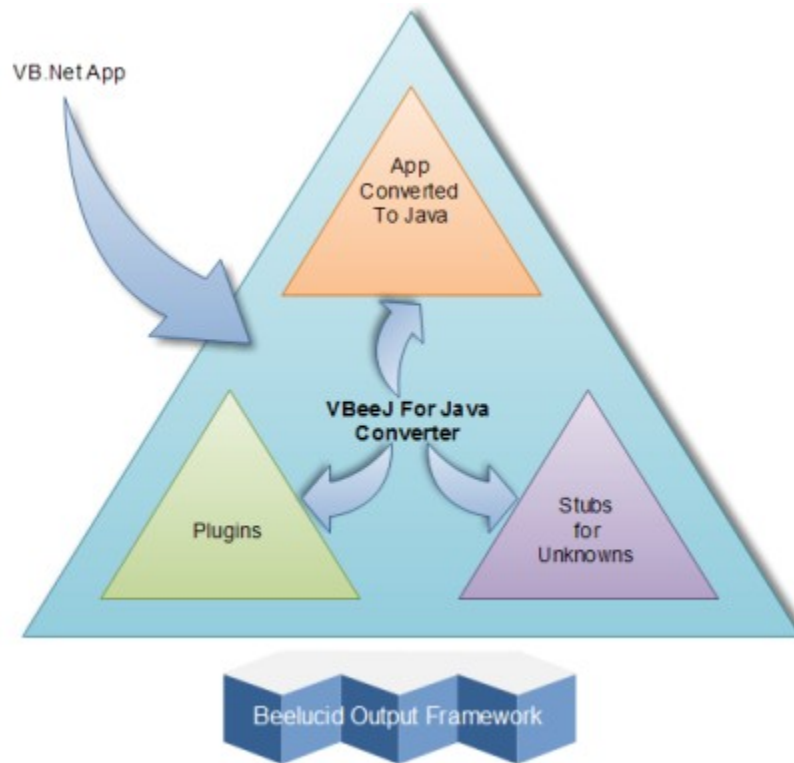
An Overview of the VBeeJ For Java Solution in Action

Here we demonstrate the value of our the VBeeJ For Java Solution by showing how to use our tool set to migrate an application. This is intended to give a concrete positive example that supports our approach but does not capture all the advantages.

To meet your migration requirements, we offer two options:

- Compile only. We will translate your VB.Net code so that it will compile, for an unbeatable price. Your code may contain unimplemented stubs.
- Compile and Execute. We will translate your code so that it executes and passes a mutually agreed upon test, for an extremely reasonable price.

The discussion below applies to the compile and execute option. Note that current prices are available at <http://www.beelucid.com>.



When the VBeeJ For Java Converter is run on the application to be migrated, VBeeJ For Java executes the following steps.

- VBeeJ For Java converts the application source code into Java. Comments and identifier names are preserved. This code has a line by line correspondence to the original application.
- VBeeJ For Java analyzes the references in the application that are not satisfied by the application itself. These are references to .Net services. VBeeJ For Java determines which references can be satisfied by a plugin (which can be either built in to VBeeJ For Java or dynamically loaded) and which cannot be satisfied by any plugin.
- If a plugin satisfies those references, VBeeJ For Java will output the plugin. This is open source Java code, in source form, that implements .Net services on the Java platform.
- If there is no plugin that satisfies those references, VBeeJ For Java will build and output the classes and interfaces and stubs that will satisfy those references. Some application specific effort may be required here, to fully migrate your app.

The result of the above steps is a migrated VB.Net application that will compile and execute in Java.

Conclusion

You can migrate from VB.Net to Java and obtain the benefits of code reuse. With the VBeeJ For Java Solution, there is new potential for your VB.Net code on the Java platform. Our approach is flexible and scalable. You can migrate whole applications or a few classes. You gain the freedom of being able to leverage your software to meet your business requirements.

Get a Free Trial version of VBeeJ For Java

Here at Beelucid Software LLC we have developed the VBeeJ For Java Solution to help you leverage the value of your VB.Net software on the Java platform.

We offer a free trial version of the VBeeJ For Java Converter. For the complete VBeeJ For Java Solution, sign up for our VBeeJ For Java conversion services at <http://www.beelucid.com>.

The free trial version of the VBeeJ For Java Converter can be downloaded from <http://www.beelucid.com>. With it, you can convert an unlimited number of source programs of 250 lines or less. The free trial version also includes a subset of our built-in plugin adapter library.

Please learn more by running the demo that is part of the free trial installation. One click shows you how successfully VBeeJ for Java can translate VB.Net to Java. The demo also creates Java source for the Xml and other plugins, such as IO, Collections, and more.