

# roots trust

## NEWSLETTER

Atavus, Inc.

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### *Java, Java and more Java*



**A Java Eruption!!!** Most of you are probably aware that rootstrust is written in Java. We program in Java, because it allows us to have one program that runs on Windows, Mac OS and Linux. We currently use Java SE 8 (SE = Standard Edition). When we first converted rootstrust from C# to Java in 2012, Java SE 7 was in use, having been introduced the year before. It was superseded in March of 2014 by Java 8. For the next three years Java 8 moved slowly forward via quarterly updates. Then all hell broke loose when in 2017 Java 9 was released, and this Spring Java 10 came into being only to be replaced by Java 11 in September. Java 12 is scheduled to be released in March 2019.

**Pay to Play.** Java, a programming language originally developed by Sun Microsystems but now owned by the Oracle Corporation, for years has been available to anyone, gratis. That will change on January 1, 2019 when users of Java SE 8 will be required to purchase a license in order to download the updates that they today can download free of charge. However, they will still be permitted to download Java 11 **for personal use only** without having to purchase a license. Note that Java 11 is only available for 64-bit platforms.

**Whew!!!** Atavus will not be subject to the new licensing requirement, if we deliver rootstrust with a version of Java SE 8 released prior to January 1. In order to avoid having to pay the crippling licensing fee, we will continue to ship rootstrust with the current version of Java SE (8u192). Any version of rootstrust that you download or purchase on a flash drive will contain this last free version of Java 8.



**The Free Alternative.** Fortunately, there is another version of Java offered by Oracle that can be used free of charge by private individuals and corporations alike. It is called OpenJDK (JDK stands for Java Development Kit). OpenJDK has been available to Linux users for years but up until now was not compatible with rootstrust. OpenJDK, now also available for Windows and Mac OS, is missing some special features used by enterprises, and for that reason it is free. There is virtually no difference between Java SE and OpenJDK for desktop applications like rootstrust. Some versions of OpenJDK are only available for 64-bit operating systems. It is not clear whether future versions of Java SE 8 will be made available in OpenJDK form.

**We will not ship OpenJDK.** If Atavus ships rootstrust with OpenJDK, the licensing agreement requires us to make our source code available to anyone who would like it. We are unwilling to go that route, as rootstrust would lose its proprietary nature.

**Switch or stay.** Starting with Build 397, you have the ability to switch between the Java embedded within rootstrust and the Java that you may have installed on your computer. So, if you do not like running with the “frozen in time” embedded version of Java, you can simply install the latest version of OpenJDK Java or Java 11 on your computer and use it instead of the embedded version. If you do not like having an installed Java on your system, you may be able to replace the embedded Java with the OpenJDK you installed and then uninstall OpenJDK. We will provide instructions for that in January.

**The other Oracle Java.** Oracle makes another product called JavaFX which, unfortunately, will be discontinued on January 1. Besides, JavaFX is missing from OpenJDK. rootstrust uses several features of JavaFX in its implementation of the Evernote-compatible client only available to users of rootstrust on Linux. That client program will eventually have to be rewritten or replaced. In the meantime, it is imperative that Linux users of rootstrust who use the Evernote interface, continue to use the Java SE 8 that is delivered with rootstrust.

**JDK vs. JRE.** As mentioned above, JDK stands for Java Development Kit. That is what we use to develop and debug rootstrust. JRE stands for Java Runtime Environment. That is just the part of the JDK that you need to run a Java program. It is somewhat smaller than the JDK. We deliver rootstrust with the JRE you need for your operating system. The rootstrust Universal USB3 flash drive comes with five JREs, one for each of the supported environments: Windows 64-bit, Windows 32-bit, Mac OS 64-bit, Linux 64-bit and Linux 32-bit. Mac OS no longer supports 32-bit operation. To make things more complicated, Oracle has stopped producing the JRE for versions of Java 9, 10 and 11. rootstrust runs fine on Java 11 when it is installed, but presently it cannot run with embedded Java 11, because it looks for a JRE, and Java 11 has none. We will change that in the near future, so that users will be able to embed Java 11, and later Java 12, in rootstrust, if they so desire.

**The bottom line.** Over the years we have discovered that there are several different types of rootstrust users in regards to Java - those who:

1. don't really care whether rootstrust uses embedded Java or installed Java.
2. absolutely do not want Java installed on their computer.
3. absolutely want rootstrust to run on the latest version of installed Java.
4. want embedded Java, but want the latest version.

Group 1 is the easiest to please. They just have to install rootstrust and run it. Groups 2 and 3 just have to install rootstrust then run the Configuration Manager to select "installed Java". Life will be a little more difficult for Group 4, because after installing rootstrust, they must replace the embedded Java with a Java of their choice.

## *Feature of the Month – Alias*

A poor choice of terms on the part of the folks that wrote the specification, *Alias* in GEDCOM-speak is not the same as *AKA*. *Alias* means alter ego. Let me give you an example of how I have used *Alias*. Tilton Newcome, one of my ancestors, along with his siblings inherited their paternal grandfather's plantation in 1791. The oldest two grandsons inherited land, whereas Tilton, his brother Joseph and their sister Mary inherited only slaves. In 1795 a Polly Newcome married a William Gibson in Talbot County, MD where my Newcome ancestors were the only people having that surname. I suspected that Polly and Mary were one and the same person, but I lacked proof. So I entered both Polly and Mary into my database and linked them via the *Alias* feature. William Gibson died in 1795 about a month after the marriage. In 1798 Polly Gibson married Charles Gibson, a cousin of her deceased husband. Charles died in 1810, and in the probate records Polly was identified as Mary Gibson. In addition, documents identified several of the slaves that she had inherited from her grandfather in 1791. Now I had the proof that Mary and Polly were indeed the same person. So, I dissolved the *Alias* and merged Mary and Polly.

## *Trick of the Month*

A user recently contacted me asking for help. He had assigned a child to the correct father but the wrong mother. He wanted to know how to rectify his error. This was my answer:

*Suppose John Smith was first married to Mary Jones and they had children. Mary died and John married Susan Johnson, and they had children. You mistakenly added child William to the family of John and Susan, but Mary was actually his mother. So, you :*

- 1. Navigate to John Smith*
- 2. Click the "Children' left panel button*
- 3. Select William from the table*
- 4. Mark him for moving (right click pop-up menu or sleepy button beneath table)*
- 5. Navigate to Mary Jones*
- 6. Click the "Children' left panel button*
- 7. Click the 'Move Child' sleepy button*
- 8. Select William from the 'Select Child to Move' form*
- 9. Click 'OK'*
- 10. Move on to the next problem.*

The user reported back to me that the technique was successful.