

A proven architecture that always stays up to date

Java as the basis of the AEOS security management platform

Since 1999 Nedap uses the Java architecture as the basis of its security management platform AEOS. Not only is Java tested, refined, extended, and proven over the last decades, it was an obvious choice for several reasons:

- AEOS can operate on all types of different devices, because Java is platform independent.
- Java can be applied to both embedded devices and server environments.

Java updates on a regular basis

Oracle acquired Sun Microsystems, developer of Java, in 2010. Since that time Oracle has released newer versions of Java – Java 6 followed by Java 7, in order to meet Oracle's security strategy. The latest Java version contains important enhancements to improve performance, stability and security of the Java applications that run on your machine. Installing this free update will ensure that your Java applications continue to run safely and efficiently (for more information, go to: <http://www.java.com/en/security/developer-info.jsp>).

The consequences of Java updates for AEOS

We want to inform you that it is important to take into account that a particular version of AEOS is compatible with a particular version of Java. New Java security patches are assessed and tested with AEOS as soon as they become available. We will inform you about possible compatibility issues as soon as possible and when compatibility issues occur, these will be solved and released. We therefore recommend you not to download the latest Java version on your client immediately after it's available as we cannot predict what the consequences for AEOS will be. Always wait for an AEOS release first to ensure that the updated Java version and AEOS are compatible. Currently, Java 7 is compatible with AEOS since the release of AEOS 3.0.6.

We also strongly recommend not to use different Java versions on one machine. The different Java versions cannot detect that your system's resources are being used by each other. Consequently, port conflicts may not be detected and unexpected behavior may occur.

Specifics of AEOS and Java

The AEOS architecture is a platform which facilitates the deployment of 'Internet of Things' based products. Devices (sensors/actuators) are connected to embedded controllers which run embedded Linux and a Java VM, in which behavior components can be deployed. The components provide intelligence and persistence on the edge, implement hardware abstraction, and can be combined logically to build solutions tailored to a specific market requirement. The Jini service model is used for remote discovery and publishing of (device) services. Integration with a central RDBMS through a Java message queue (middleware) on a Java EE application server allows the deployment of products with a web-based, multi-user management, and monitoring system. The architecture provides a security model, distribution model, communication protocols, a monitoring and control framework, and a graphical editor to define system behavior. The AEOS architecture thus provides a platform for efficiently developing and deploying new device based products with intelligence on the edge.

Interesting background reading on the development of the Java platform can be found online:

- <http://oracle.com.edgesuite.net/timeline/java/>
- http://en.wikipedia.org/wiki/Java_version_history

Ensuring you're always up to date too

We will inform you about the compatibility of AEOS with JAVA after each AEOS update via our technical release notes. We offer upgrade assurance to allow you to always have access to the latest AEOS version. If you have questions after a Java update, please do not hesitate to contact our support desk.