

Development of Cross-Platform Smart-M3 Knowledge Processors using SmartSlog SDK

Aleksandr Lomov
Petrozavodsk State University
Petrozavodsk, Russia
lomov@cs.karelia.ru

Abstract

SmartSlog is SDK for developing Smart-M3 knowledge processors (KPs) in terms of OWL classes, properties and individuals. KPs can be installed on diverse IoT devices (from different classes, on different platforms, by different vendors). For a developer, use of a common development tool is better even if there are many target devices. In this demo we show how SmartSlog can be used for programming KPs for a wide range of devices.

Recently SmartSlog SDK supports two programming languages: ANSI C and C#. The C# version is written with .NET framework 4.0 and produced KPs can run on desktops with Windows 7&8 and smartphones with Windows Phone.

The ANSI C version uses cross-platform lightweight C libraries, and can be used with wide-range of Linux-based platforms, Windows OS, Android platform with NDK. The demo shows a mash-up consisting of several KPs developed with SmartSlog SDK. The KPs run on different devices and collaborate by information sharing based on a common OWL data representation model.