

Our open source OSGi platform

Knopflerfish Pro was the first certified open source OSGi release 3 compliant service platform available; furthermore it was a major success. By implementing OSGi release 4 we continue our commitment to develop and distribute the world's most excellent OSGi framework in Knopflerfish Pro.

Commercial Open Source

Knopflerfish Pro is the commercial version of the Knopflerfish distribution. It is a fully supported product, primarily intended for professional use. Knopflerfish Pro gives companies the assurance required to use open source software in commercial systems. A range of SLA's (Service Level Agreements) are available, starting with basic mail and phone support, up to full 24/7 production support.

Knopflerfish Pro Components

Knopflerfish Pro framework is feature complete in all mandatory parts and almost all optional parts. As a user of Knopflerfish Pro you get access to exclusive services such as:

- Desktop – A graphical tool for managing a running framework. The desktop can be extended using plugins.
- Log utilities – Utility classes for easier logging.
- Misc utilities – Misc utility classes for text, job and IO handling.
- Console – provides means for command-based tools to plug-in and publish their console commands.
- TTY Console – console plug-in using stdin/stdout.
- TCP Console – console plug-in using a TCP port.
- Log commands – console plug-in for handling the OSGi log.
- Framework commands – console plug-in for interacting with the framework, i.e. installing, starting and stopping bundles and services.
- CM commands – console plug-in for handling the Configuration Management data.
- Ant – a complete Ant build system for developing bundles.

Additional Services

- Dataflow - provides the ability to tie things together and propagate different events through out a system.
- UbiCore Agent – is the link between the UbiCore back-end server and the client device.

Extension Packs

To meet the fast growing demand in the Automotive and Residential industry Makewave offers two expansion packs developed to provide you with plug and play ready applications for ease of use and shorten the lead time to market.

All of the below listed services are based on the OSGi technology and will run on any OSGi R3 or R4 compliant service platform. Some services are reliant on AWT and do subsequently require an HMI to be present.

Residential Applications & Services

Application	Description
Media Server / Juke Box	A service that allows an end-user to easily pick and select songs from one central media server, e.g. a residential gateway. Media may be selected via web interface and/or PDA using WLAN.
Home Portal	Home page or home portal of the Residential Gateway (RG). Through this top page the end-user navigates to access other available services, make service settings and subscribe / unsubscribe to services.
Audio Player	An Audio player service (MP3)
Video Player	A Video player service (MPEG4)
Web Camera	Web Camera Service, taking, collecting and transmitting web camera images

For more information, please contact info@makewave.com, or visit <http://www.makewave.com>

Residential Applications & Services (cont.)

Application	Description
Home Alarm	Home alarm applications that receive alarm signals from alarm sensors and inform the end-user and/or authorities automatically. May easily be combined with a Web Camera service.
Home Monitoring	An application that monitors one or several sensors in a home. When a sensor value passes a threshold, a notification is sent to end-user. E.g. refrigerator temperature passes +10 degrees centigrade. Notifications may be sent on email, SMS or other means (highly configurable)
Meter Reading	Remotely read meter values. E.g. electrical, gas or water. Meter values may be stored locally for bulk transmits to central server.
Home Control	Remotely control the home environment, such as HVAC systems. An end-user can remotely access his home and control the temperature. E.g. turning on the air condition at home just before leaving from work, or turning on the heat at his/hers country house just before the weekend.
Apartment X10 Simulation	Easy to use apartment simulator which allows you to test your application in a fully function environment. Can be extended with real hardware devices.

Device Drivers

Application	Description
X10 support	General services for supporting X10 devices
EIB support	General services for supporting EIB devices
LonWorsk Support	General service for supporting LonWorks devices
1-wire support	General service for supporting 1-wire devices
UPnP support	General UPnP service for supporting UPnP devices
USB support	Service for simple integration with USB devices
COM port support	Service for simple integration with COM port devices
JINI driver	Device service for integration with Jini devices

Automotive Applications

Application	Description
Off-board Navigation Service	A simple off board navigation service that guides a user from point A to point B either on foot, in a vehicle, or on a boat.
You-are-here	Shows where the user currently is on a map using his GPS position.
Traffic Information	Service that receives or collects relevant traffic information and present to the end-user,. May be position dependent.
Weather Information	Server that collects relevant information on weather and road conditions. Can be position dependent.
GPS service	A service that reads the GPS position from a GPS device. The device may be attached to the serial port or using Bluetooth
GPS Player	A GPS simulator service that can play back GPS patterns. Ideal for demonstrations and debugging
Bluetooth Connection	A service that easily connects arbitrary bluetooth devices to an OSGi platform. Compliant with JSR-82
Road Charging / Tolling	Road charging application, that collects information on vehicles either by their GPS position or passing certain control points where vehicles are identified using DSRC tags.
Remote Diagnostics	An application that remotely can diagnose a vehicle
Vehicle bus drivers	Drivers for accessing the interiors of a vehicle. E.g. CAN and MOST drivers.
Media Player	An in-vehicle media player with advanced play out modes. E.g. random, content based, caching streamed content etc.