

# ***Introduction***

- Swordfish provides an extensible runtime framework aimed at creating service-oriented applications
- Swordfish is internally based on Apache ServiceMix 4 as the core messaging engine
- Swordfish hooks into ServiceMix and adds functionality that is required for enterprise environments, such as service registry integration, remote configuration and monitoring
- Swordfish includes basic tool support and additional components such as a Service Registry and a Process Engine

# Features

- General interceptor framework that hooks into the underlying messaging engine (Apache ServiceMix NMR)
  - Message processing controlled based on meta-data carried inside or external to the message, e.g. policies
- APIs and exemplary plug-ins based on the general framework for specific areas that are significant for enterprise usage:
  - Dynamic Service Resolution: Resolve logical service endpoints into physically addressable endpoints by querying a service registry at runtime
  - Monitoring: Generate monitoring events that allow for detailed tracking of how messages are processed and that can be stored for later analysis or reporting or fed into a CEP (complex event processing) engine (not part of Swordfish)
  - Remote Configuration: Configure framework via a local Configuration Agent that can retrieve configurations from a remote server and uses the OSGi Configuration Admin service to provide them to the framework

## ***Features – cont'd***

- Integrated process engine capable of executing BPEL processes (Apache ODE)
- Basic tools supporting the most important use cases
- Service Registry to dynamically resolve logical service names into service endpoint addresses