



## **Orchestra Licensing Policy**

### **Fostering the "Open Innovation" in robotics and automation**

The main objective of Orchestra licensing policy consists in guaranteeing the highest integration, safety and interchange of the know how coming from the industrial world and the academic one, in respect to the Orchestra Control Engine suite.

In this way Sintesi intends to push the Open Innovation, to develop a shared know how in control applications.

Such process of development is freely assigned to the Orchestra Community that has, in particular for research purposes, all the freedom needed to use, modify and distribute the Orchestra software.

The first step to "test" Orchestra is to join the Community, that's very simple: in order to download the software you only need to Login and accept the Orchestra Community License (OCL).

As a Community member it's possible to download the software both the one delivered by Sintesi and the one eventually shared by the Community.

Sintesi combines the official versions with the solutions developed within the Community, in order to guarantee the constant compatibility among the solutions developed in different sectors, in such a way that all the users have advantages from them.

One important characteristic of the Orchestra suite is the Core Components concept. Core Components are the part of the software that Sintesi distributes in source code with the intention to always verify that modifications or new implementations will not drive Orchestra in diverging directions between academic and industrial solutions.

To avoid such situations Sintesi asks to the Community that possible modifications and new implementation related to the Core Components will be delivered as soon as possible to Sintesi that will evaluate them and, if needed, will integrate them in new versions of the Orchestra suite.

For the same reasons Sintesi asks to become co-owner of the modifications related to the Core Components. This request, that could seem excessive, has the objective that there is always coherence between industrial and academic versions of the Core components.

From the other side, based on the Orchestra documentation, each member of the Community is free to develop Modules, in particular Motion Control Modules, and he is the sole owner of his realizations, even if he decides to deliver them subsequently for commercial uses. This is coherent with the Orchestra philosophy: the Core components are the common platform to build applications while the Modules, that integrate the real Community members specific know how, can be distributed for free or for business: the Modules in effect are the arena for

competition. No fee are due to Sintesi for Modules sold by third parties to be installed on a regular commercial Orchestra Community Licence

Accepting the OCL the user obtains rights to download the Orchestra suite from the Orchestra site, to install and execute it on the development machines, to study the documentation. Based on the downloaded components and with the information included in the documentation, the user can adapt the suite to his needs, implementing modifications to Core Components and developing Motion Control Modules, I/O peripherals drivers and eventually Human Machine Interface (HMI) packages.

These implementations derived from the original software delivered by Sintesi can be shared with the Community for research purposes and, following the commercial license rules, also for business.

Accepting the OCL, each Community member has in respect to the other members and related to the software that he has developed and delivered to the Community the same rights that Sintesi grants in respect to its original software.

In order to distribute the software few rules have to be followed: the software can now only be distributed for research purposes and inside the Community always maintaining in source code the components delivered by Sintesi or shared by a Community member in source code.

Accepting the OCL, the user has few obligations in respect to Sintesi. The license in effect asks that Sintesi must be informed as soon as possible about errors discovered in the code delivered by Sintesi. Original Copyright indications must not be changed in files eventually modified and, as said before, modifications to Core Components must be delivered to Sintesi together to the co-ownership rights.

In case the Community member intends to use Orchestra for commercial purposes he has to purchase a Commercial License. By means of this License the Community member obtains the right to use and distribute Orchestra for commercial reasons (i) internally, which means inside his Company, (ii) to other Community members and (iii) to his final Customers.

The Commercial License gives the right to use and distribute internally source and object code copies of the Orchestra suite as delivered by Sintesi with possible modifications.

It's also possible to reproduce and distribute object code copies of the platform outside of Orchestra Community through multiple tiers of distribution, while source code distribution must be limited to the Orchestra Community members.

It's important to note that the Orchestra suite is licensed on a "per end user hardware" basis, which means that one software licensing fee must be purchased for each Orchestra copy in use. Multiple copies of the suite can be used on a single end user hardware provided that a separate license for each copy has been purchased.

Support programs can be purchased separately from the components licensing fee.

The Orchestra suite contains a series of components that can be classified in the following scheme:

- ◆ components delivered in source code and considered "Core Components"
- ◆ components, as the Example library, delivered in source code to help the user in understanding the Orchestra behaviour in order to implement in the shortest time his applications

- ◆ components, as the Motion Control Modules, delivered in object code
- ◆ documentation to explain the suite characteristics and interfaces. The documentation is following the same software license.
- ◆ no fee components : the standard components Orchestra Designer and Orchestra Builder are delivered without a payment of a licensing fee

These are the suite main components available in Orchestra 2.5 and their characteristics:

<b>Components</b>	<b>Source Code</b>	<b>Core Components</b>	<b>Commercial licensing fee</b>
OrchestraCore: Core, HostSupervisor, CoreLib	Open	Yes	Yes
Orchestra Run Time Manager: RTM	Open	Yes	Yes
Orchestra I/O Library: Sercos, Mechatrolink, CanOpen, Profibus, Ethercat	Open	No	Yes
Orchestra Motion Library: Cartesian Interpolation Modules, Kinematics Modules, Bspline and NURBS Interpolation Modules, CNC Framework, Compensation Modules	Closed	No	Yes
OrchestraHMI: HMI, 3D VRML HMI models	Closed	No	Yes
Orchestra Path Programming: Interpreter	Closed	No	Yes
Orchestra Logic Programming : Logic Programming	Closed	No	Yes
OrchestraDesigner: Designer	Closed	No	No
OrchestraBuilder: Builder	Open	Yes	No