

ORiN(Open Robot Interface for the Network)

Open Network Interface between PC and Robot Controller



JARA: Japan Robot Association
TC for Robot Open Network Interface Development

ORiN accelerates to introduce the Networked Robots powered by IT into manufacturing system

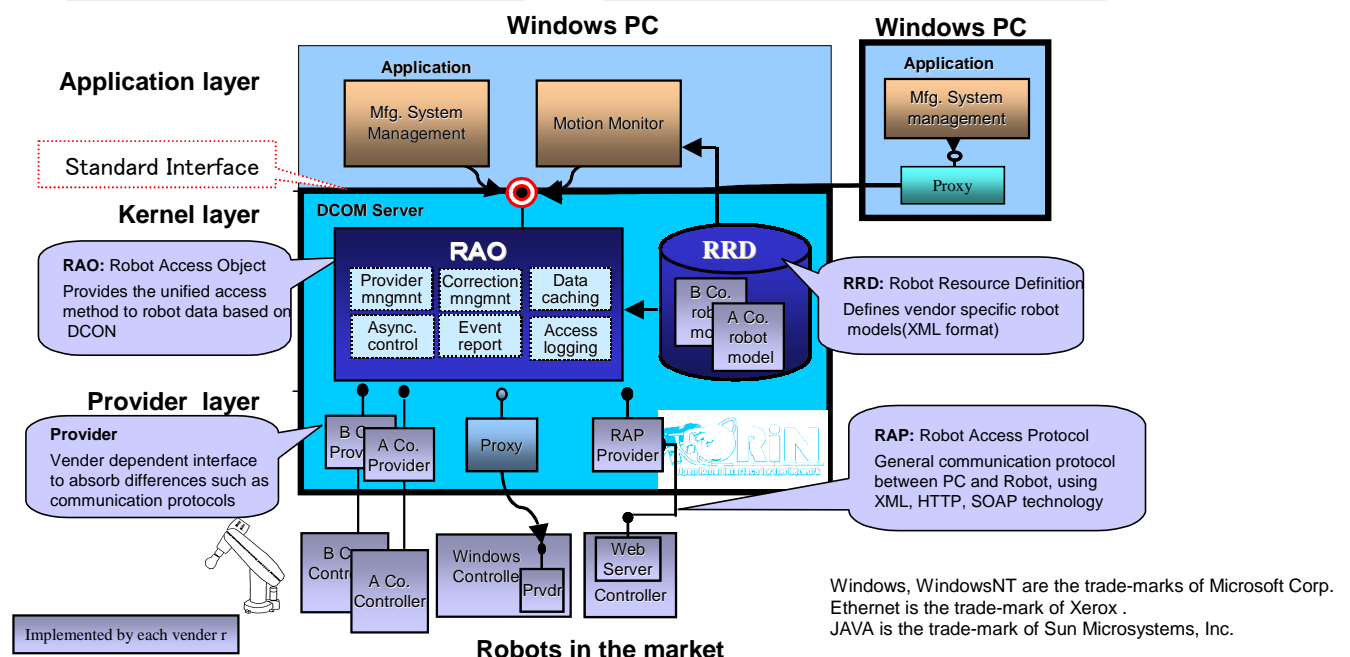
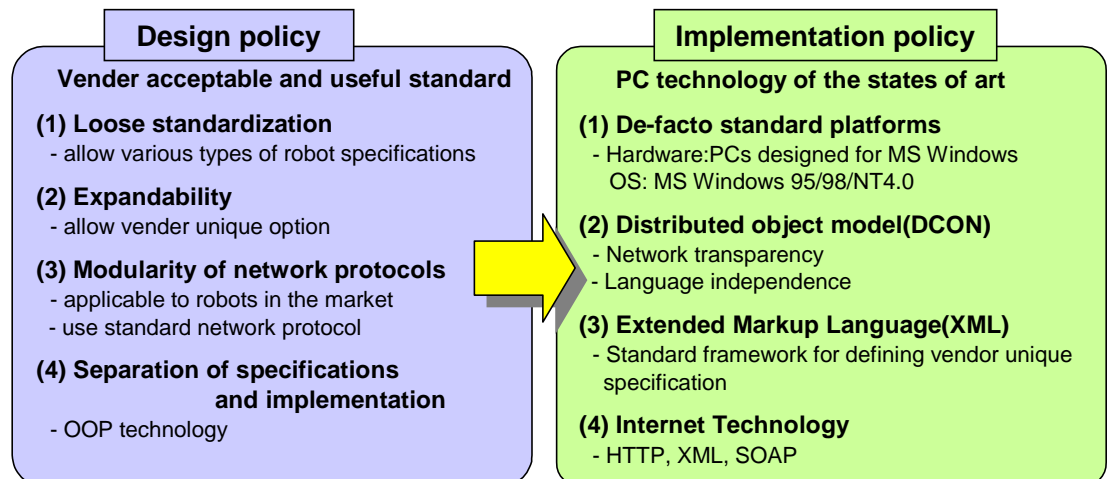
Objective

To provide standard methods for accessing robot system information in developing a multi-vendor robot-task executing system

Merits

- Allow robot-data exchange on PCs
- Application provided by third parties
- Low cost multi-vendor system development
- ISO proposal → Global standard

Design and Implementation of ORiN



ORiN Project Members

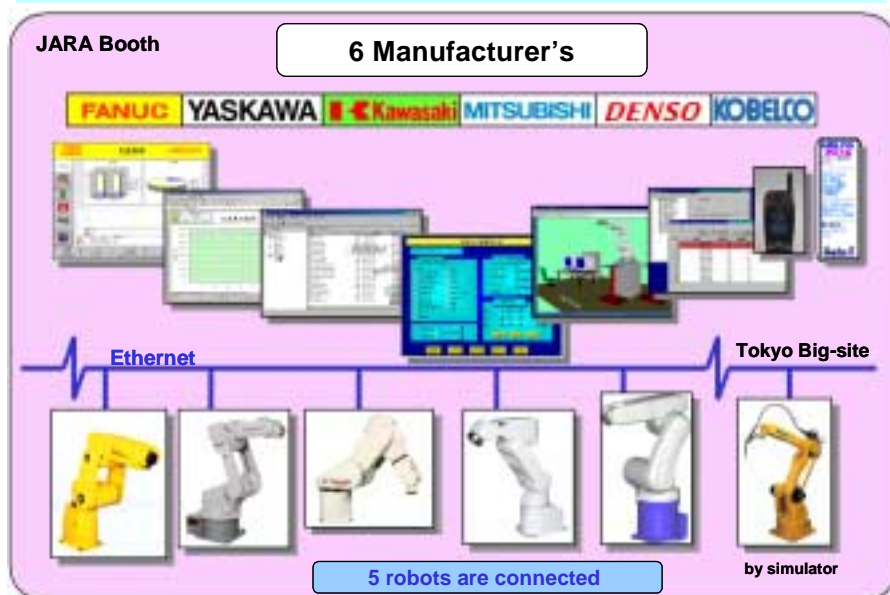
ORiN project is being conducted in the program "Standardization of Communication Interface for Open Robot used for such as Manufacturing System" which is consigned to JARA by NEDO since Aug. in 1999.

NEDO: New Energy and Industrial Technology Development

ORiN Applications

No.	Application Examples	Objective
1	Production control system	Quantitative data analysis and TQC of the facilities
2	Robot motion monitor & simulator	Tuning-up, Confirmation, Remote maintenance and Training
3	Facility maintenance system	Mobile accessing to the fields. rapid recovery and problem solving
4	Production control and motion control	Remote operation control and synchronization
5	File management on the robot controller	Automatic user data backup Automatic system program upgrade
6	RAP (Robot Access Control)	Remote maintenance using the Internet technology

ORiN Demonstration in the "2001 International Robot Exhibition"



Schedule

- | | |
|---------------------------------------|--|
| 1999: Prototyping and Evaluation | • ORiN evaluation kit ver.0.5 |
| 2000: ORiN spec. Ver. 0.5, Open spec | • Demonstration in the 1999 International Robot Exhibition |
| 2001: ORiN spec. Ver. 1.0, Open spec: | • Demonstration in major exhibitions and conferences |
| | • Standardization promotion, Draft proposal to ISO |
| | • Demonstration in the 2001 International Robot Exhibition |

How to Get Specification and Software Evaluation Kit

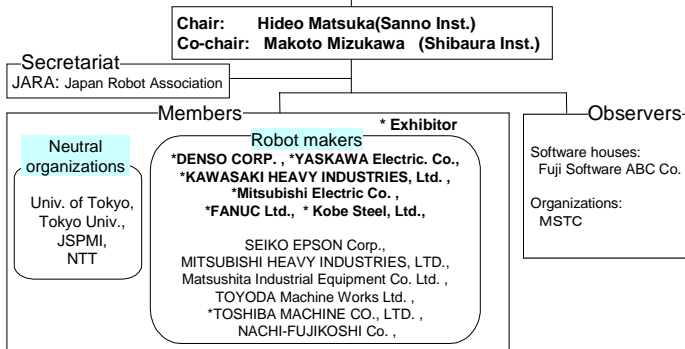
- Please contact ORiN project members about the software demonstrated in the '2001 International Robot Exhibition'. Evaluation kit will be provided from each robot manufacturers.
- Specification (ver. 1.0) will be disclosed in JARA WEB site.

For more Information

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URL: <http://www.jara.jp/>

TC for Robot Open Network Interface Development



Production Control System



Motion Monitor



Maintenance by i-mode

