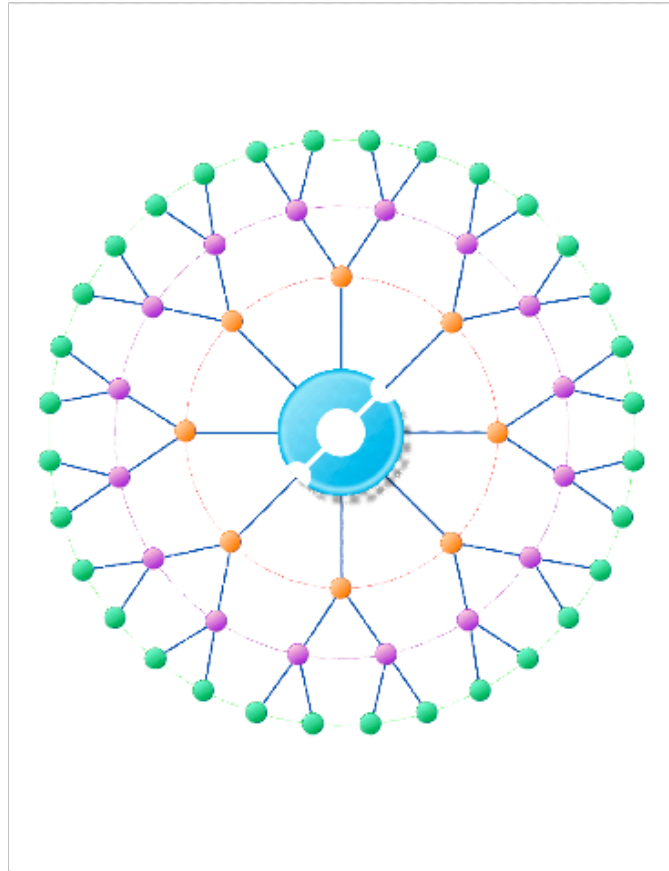


O3neida



A network of networks to advance
Distributed Industrial Automation



History of IEC 61499 Standard

- A standardization project of IEC Technical Committee 65 (TC65) to standardize the use of **function blocks** in **distributed** industrial-process measurement and control systems (IPMCSs).
- Work item approved 1991; assigned to Working Group 6 (WG6) 1993
 - Experts from USA, Germany, Japan, UK, Sweden, France, Italy
 - Also responsible for IEC 61131-3 (Programmable Controller Languages) and 61131-8 (Programmable Controller Language Guidelines)

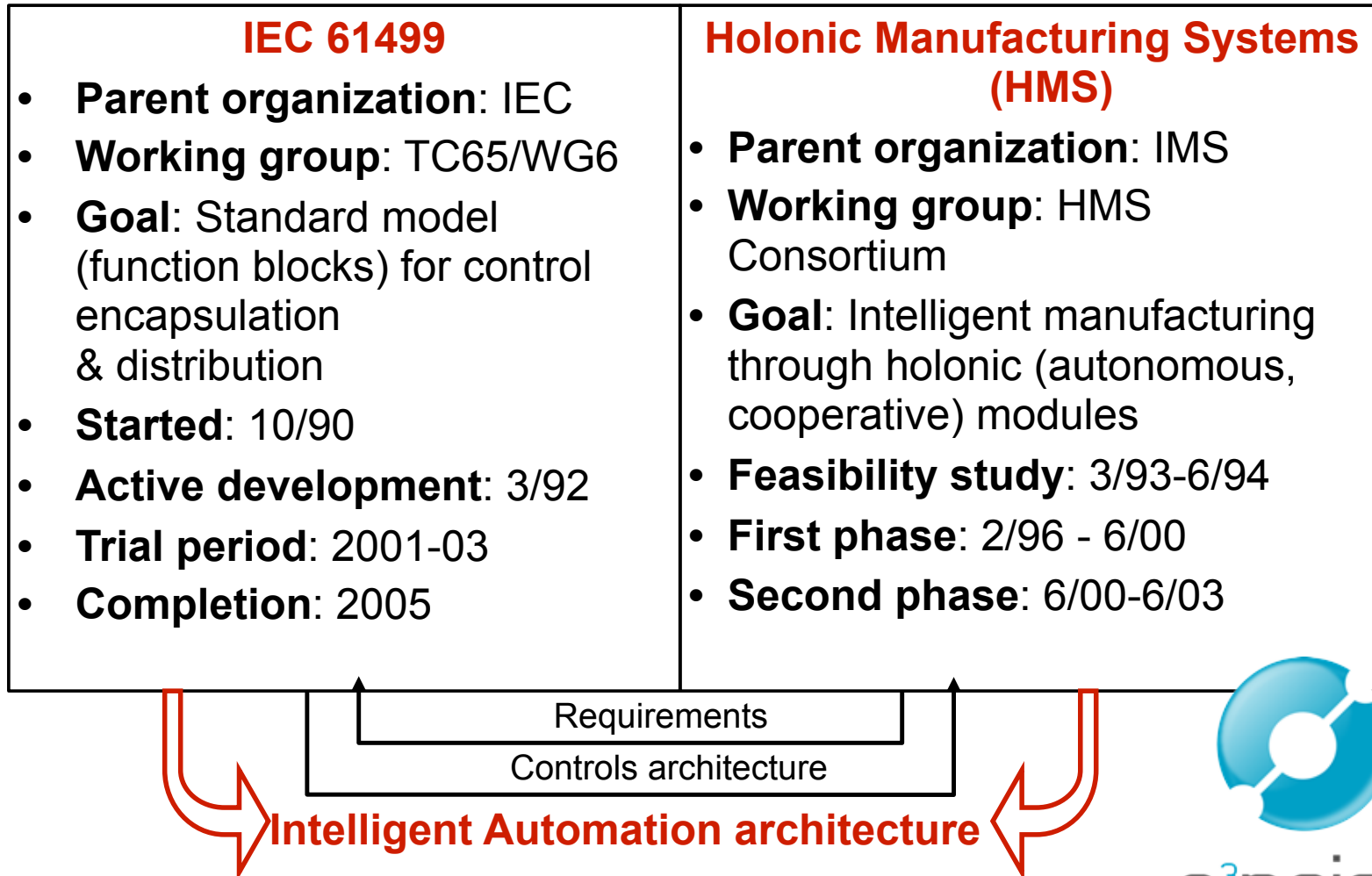


History of IEC 61499 Standard

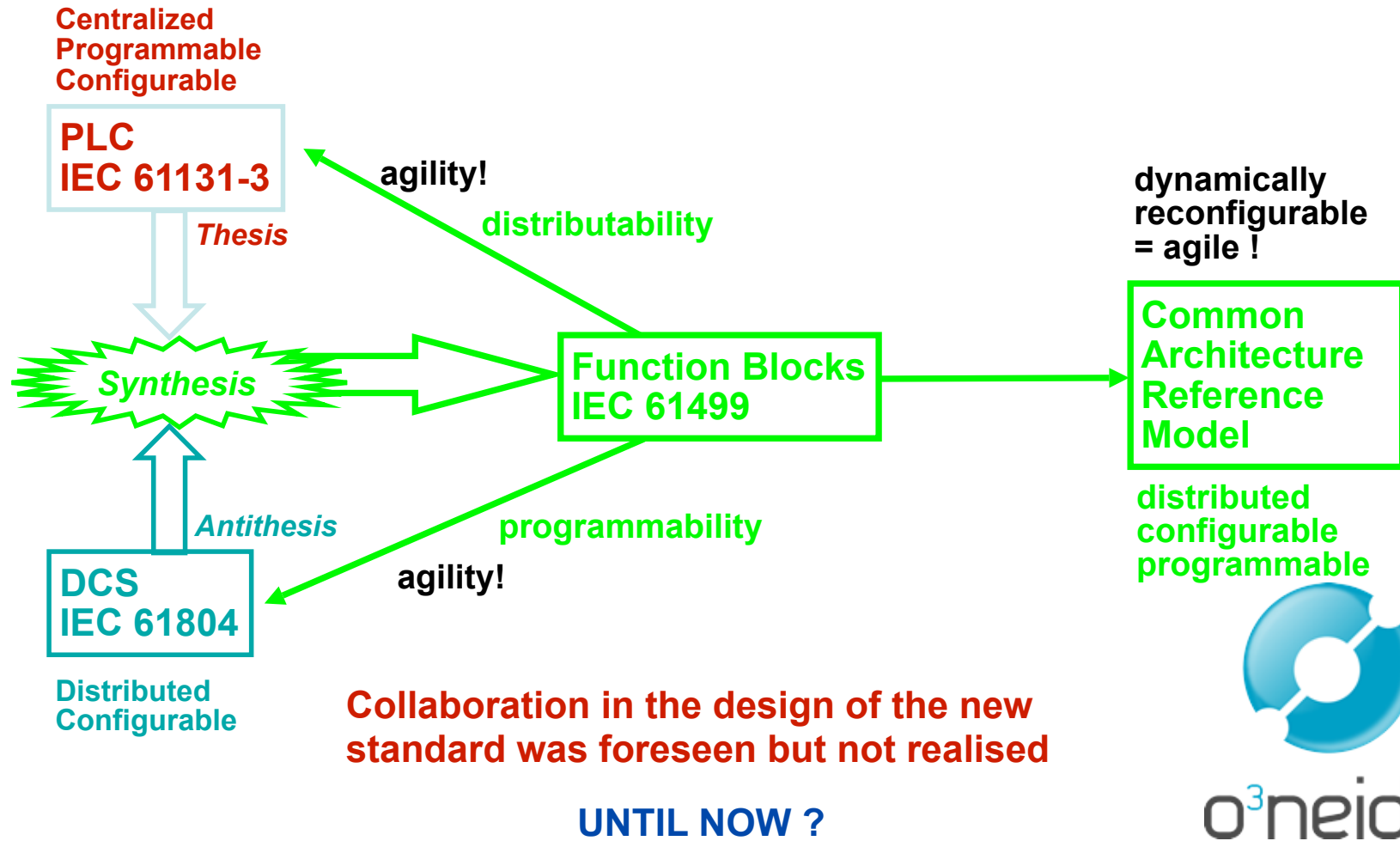
- **Part 1, Architecture**
 - PAS (Publicly Available Specification), 2000
 - Standard => 2004
- **Part 2, Software Tool Requirements**
 - PAS 2001 => Standard 2004
- **Part 3, Application Guidelines**
 - TR (Technical Report) => 2003
- **Part 4, Rules for Compliance Profiles**
 - PAS 2002 => Standard 2005



Architectural Co-Evolution



The Original 1499 Vision



The Original 1499 Vision

- **Encapsulation/Reuse Mechanisms**
 - Function Blocks, Subapplications, Adapters, Resource Types, Device Types
- **Service Interface Function Blocks**
 - Provide Functional Completeness
 - Communications, I/O, HMI, etc.
- **Portability Mechanism: XML**
- **Distributed Architecture**
- **Dynamic Reconfigurability**



The New Vision

- Original Goals Retained
 - Interoperability
 - Reconfigurability
 - Portability
- Flesh Out Compliance Profiles
- Open Source Tools and Solutions developed within O3NEIDA and by O3NEIDA Industry Partners



Current Activities

- O3NEIDA Compliance Profile Working Group
- ICS Triplex ISAGRAF tool
- NXT Controls tool
- Tate Controls and other NZ based tools
- O3NEIDA 4DIAC Initiative
- Liaison at IEC Technical WG between O3NEIDA and PLC Open



Open to All

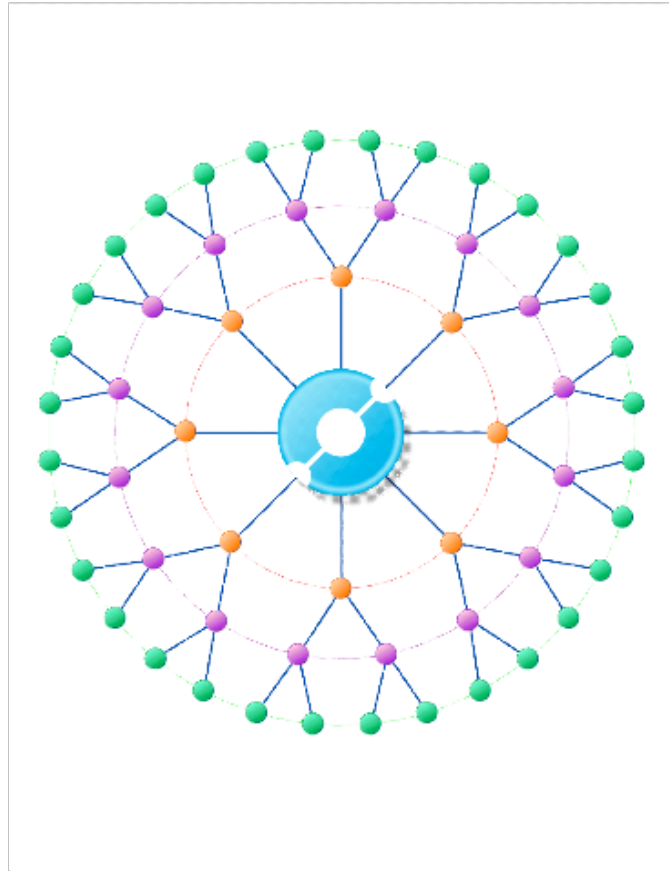
We invite you to review

www.ooneida.org

for a full listing of our various activities



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OOONEIDA and O3neida Europe

- OOONEIDA a Canadian not for profit
- O3neida Europe a Belgian asbl
- Future node planned for Asia

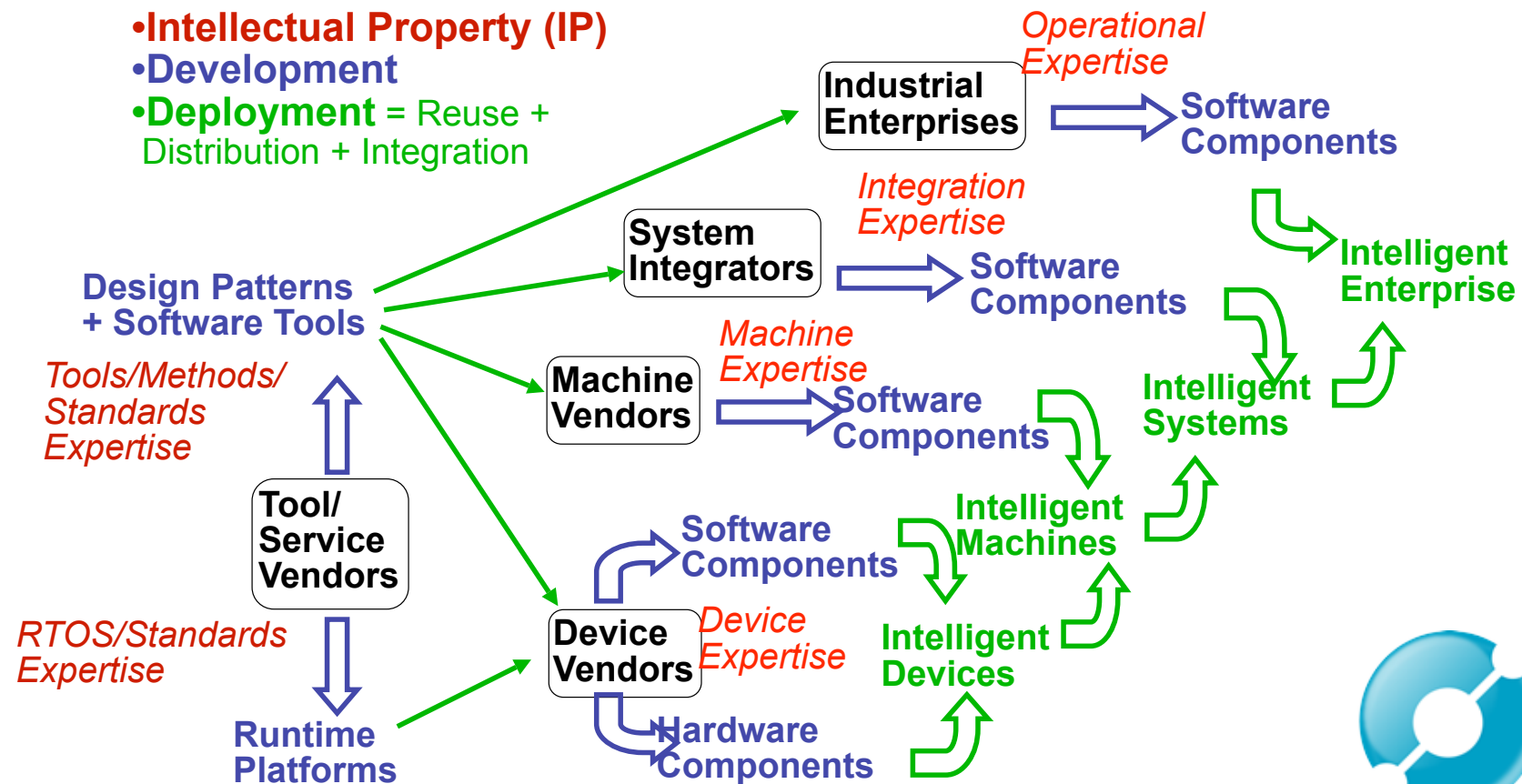


A Think Tank

- Industry, Academia and Associations
- Networking for Leverage
- We don't represent anybody
- Multiple Projects
 - IEEE Activities
 - ISA Activities
 - R&D Activities
 - Standards Development Activities



Knowledge-Based Automation: Requirements of the IP Value-Add Chain



Open to All

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