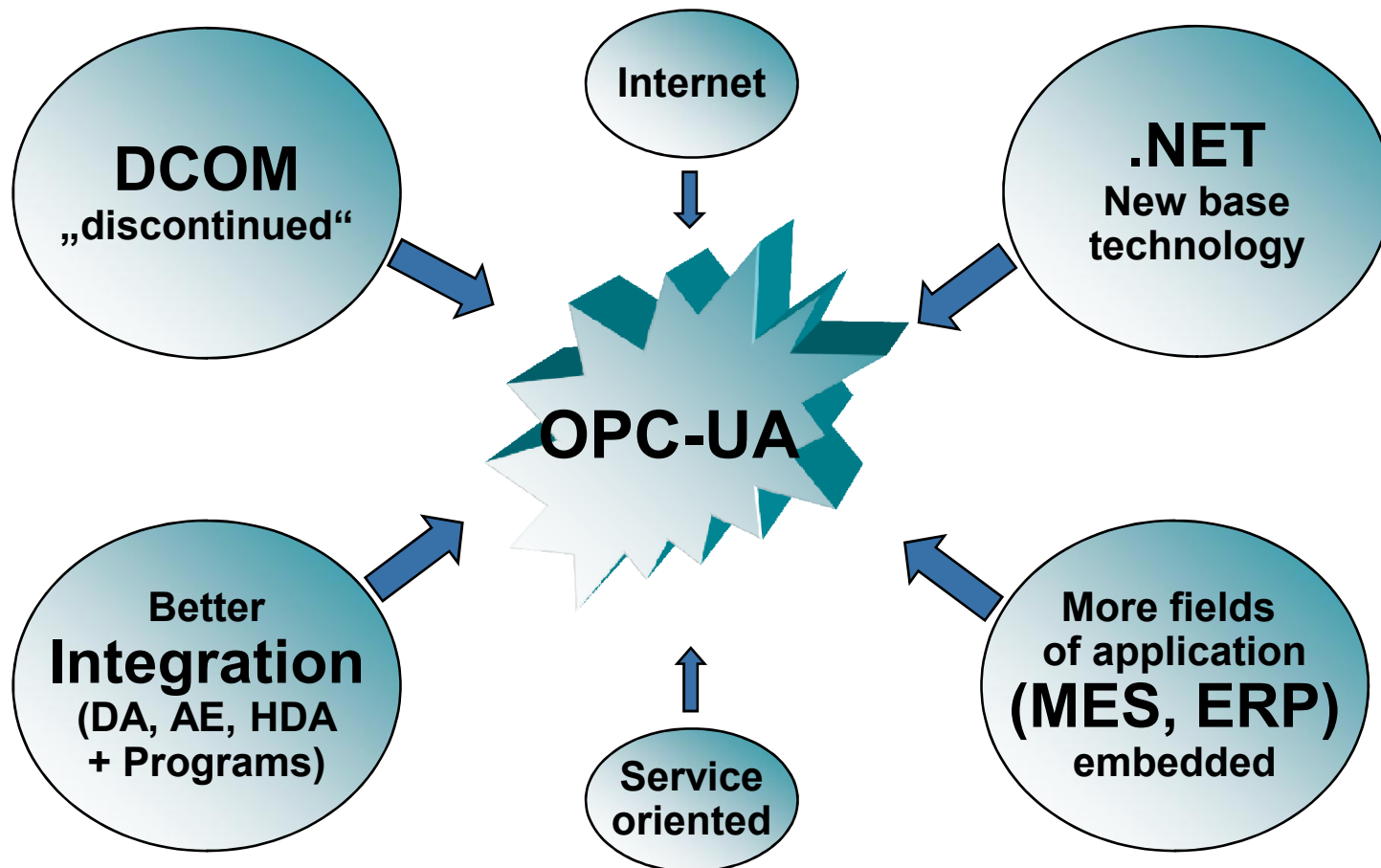


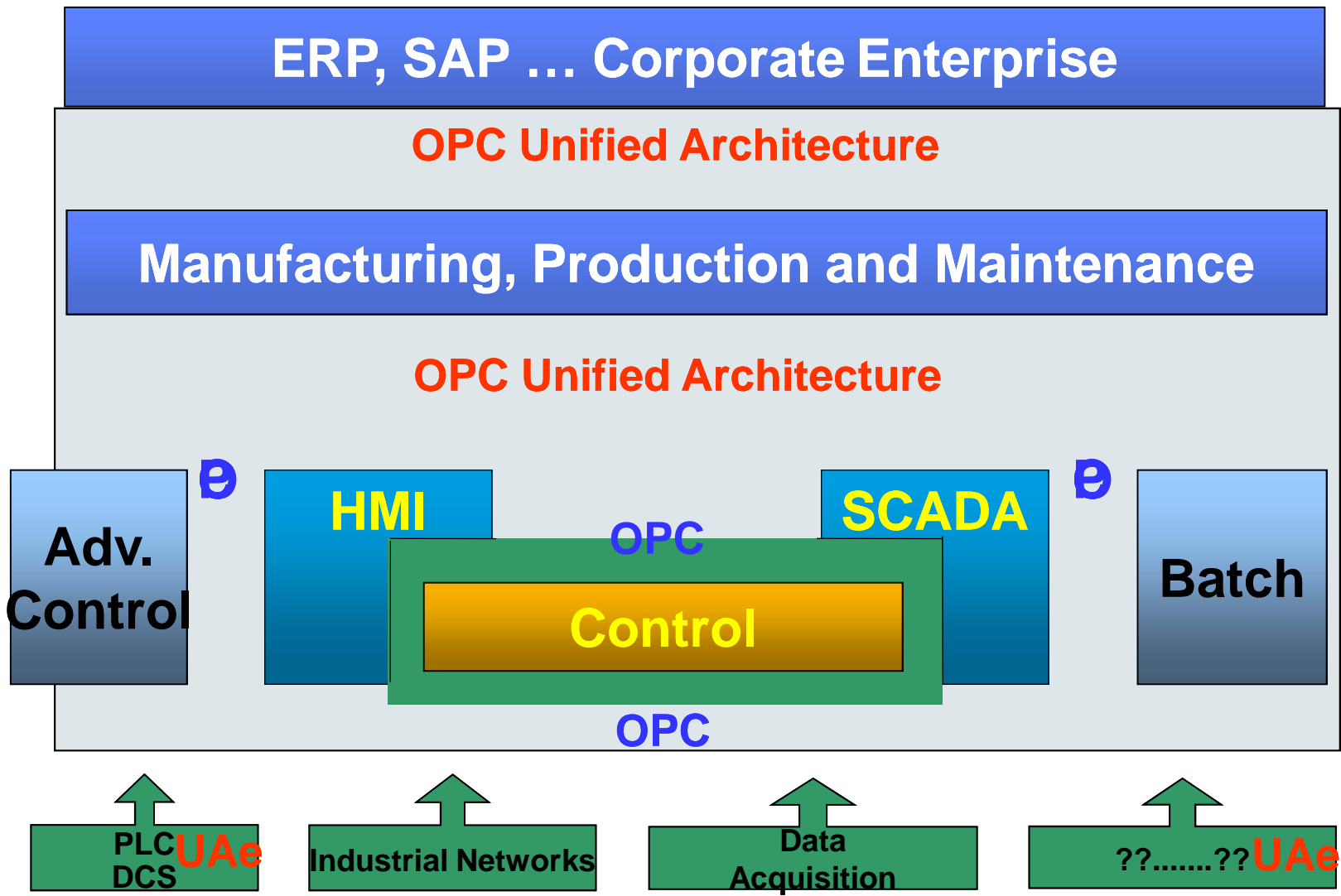
OPC Unified Architecture



Why OPC UA?

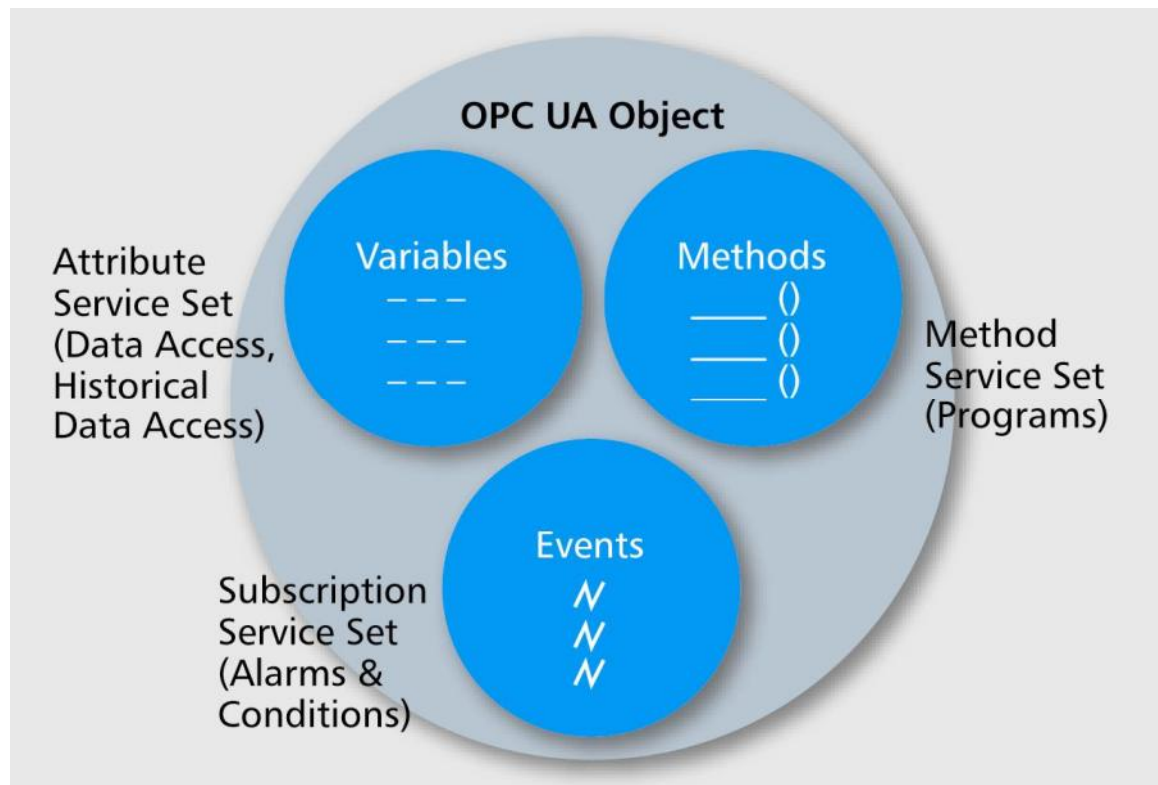


Interoperability Plug&Play Standard



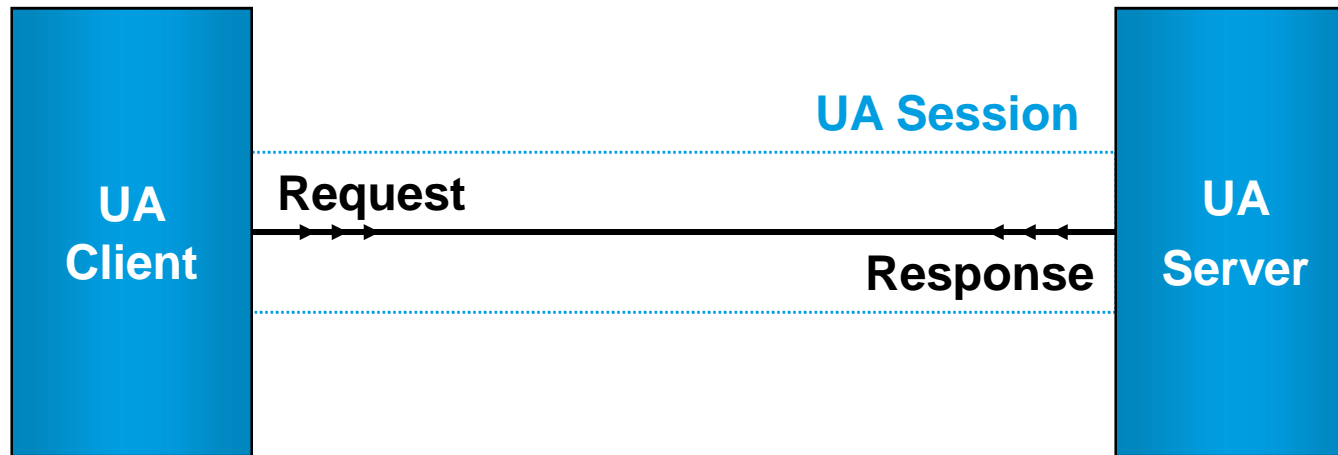
UAe: Unified Architecture embedded

Ease-of-Use: Unification means Simplification



Data Access, Alarms & Conditions, Historical Data and Programs in one OPC UA Address Space

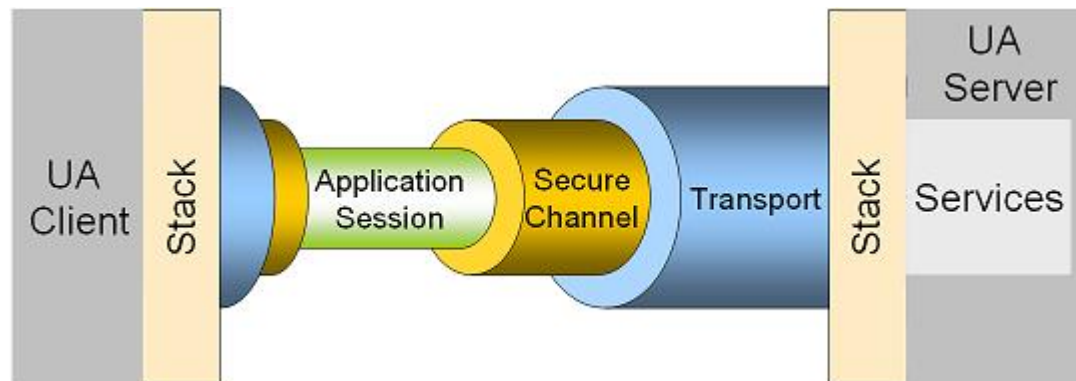
High Reliability and Redundancy



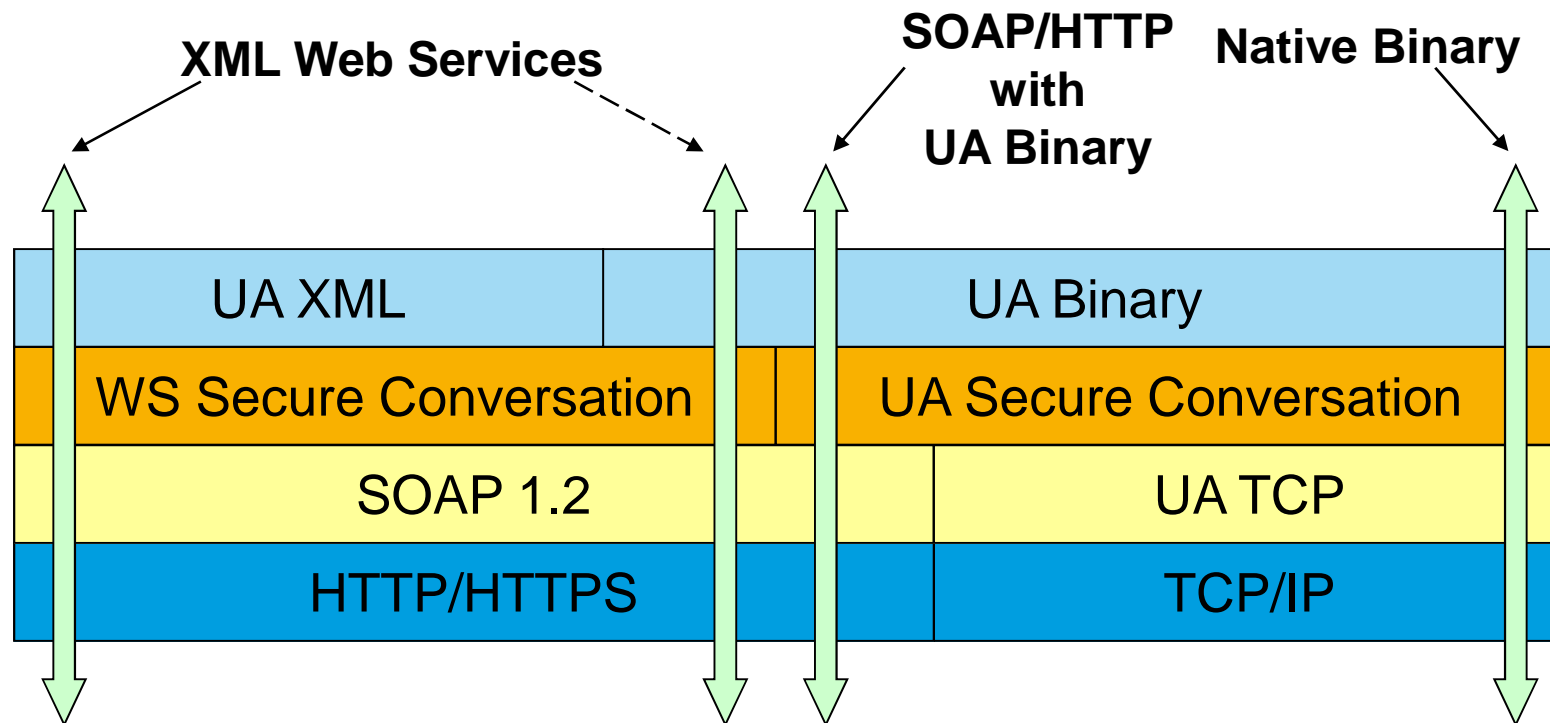
- Keep alive monitoring of the OPC client and server
- Buffering of data and acknowledgements prevents loss of data during temporary communication breaks
- Fast recovery in case of communication errors
- Redundancy concept

Security

- UA security (mandatory)
- Security model with three levels
 - User Level Security – user authentication
 - Application Level Security – exchange of digital signed certificates
 - Transport Level Security – (optional) encryption of messages



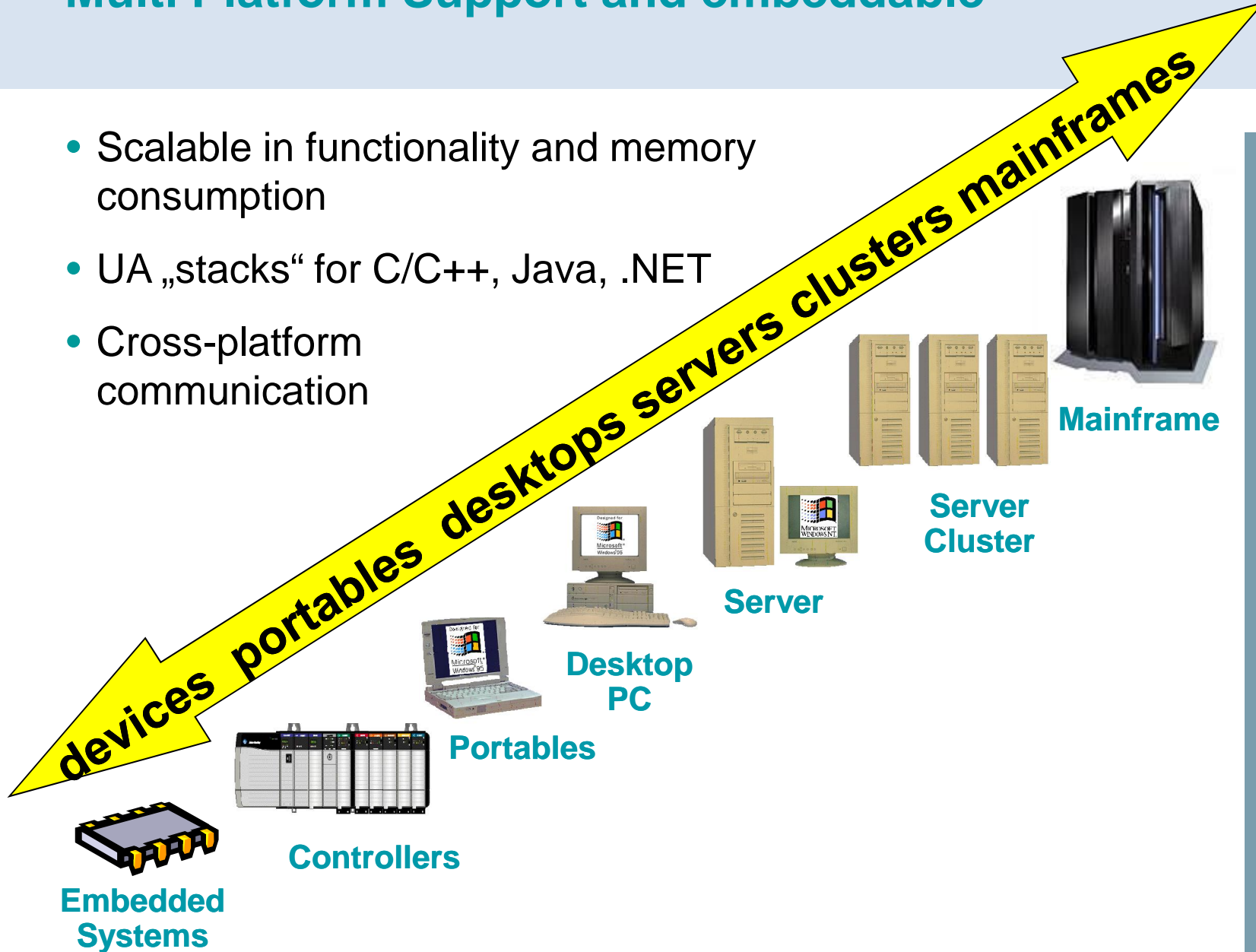
Enhanced Performance



- UA XML / SOAP communication for maximum interoperability
- UA Binary / TCP/IP communication for **maximum performance**; to be expected first in OPC UA products

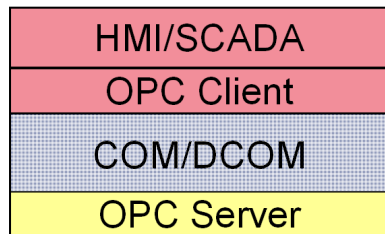
Multi Platform Support and embeddable

- Scalable in functionality and memory consumption
- UA „stacks“ for C/C++, Java, .NET
- Cross-platform communication

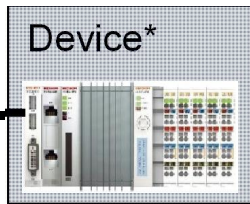
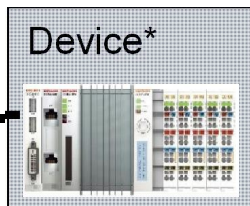


Embedded OPC UA

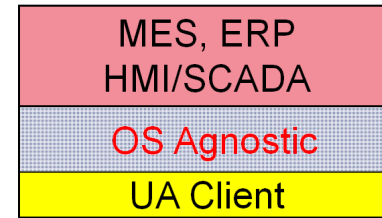
Windows only



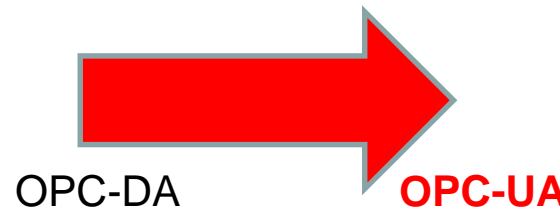
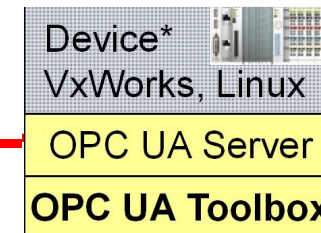
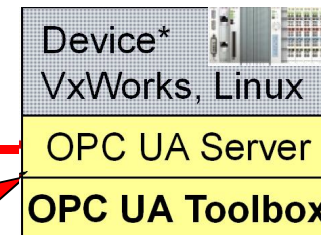
Fieldbus, *proprietary protocol*



Platform independent



UA TCP, Ethernet



**No installation
No extra configuration
No consistence problems
with device/PLC
configuration**

* PLC, DCS, Gateway, Operator Panel, ...

New Concepts with OPC UA

