



Defense Intelligence Information Enterprise (DI2E)

Technical Profiles

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Office of the Under Secretary of Defense for Intelligence

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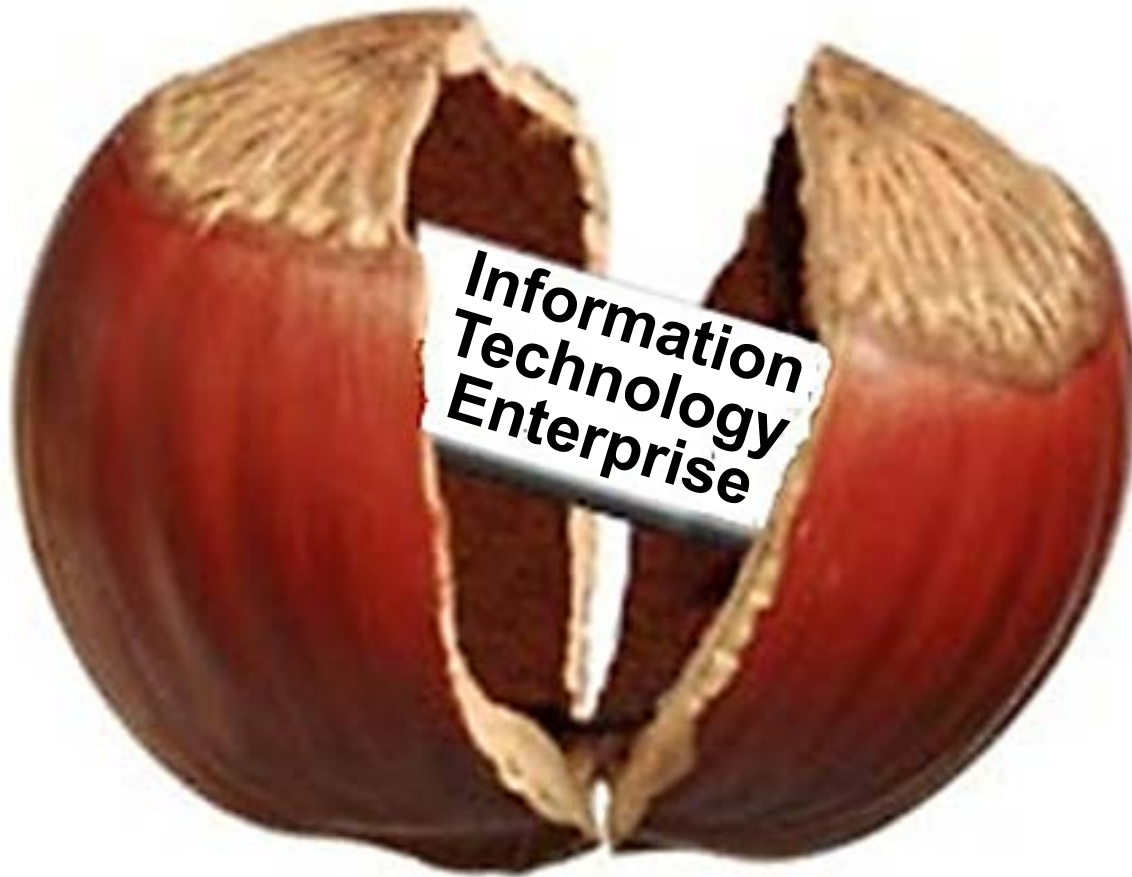


Technical Level of Brief



This is a football.

Vince Lombardi
Coach of the Green Bay Packers



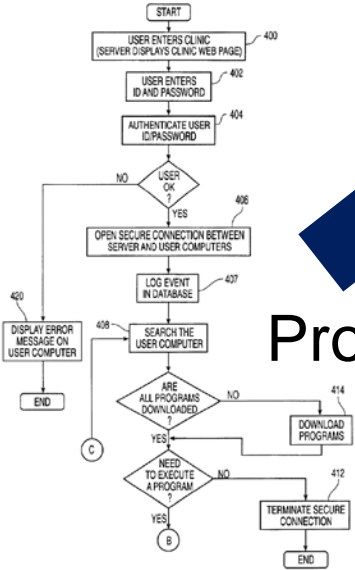


Computer Basics

Computer



Computer Processor

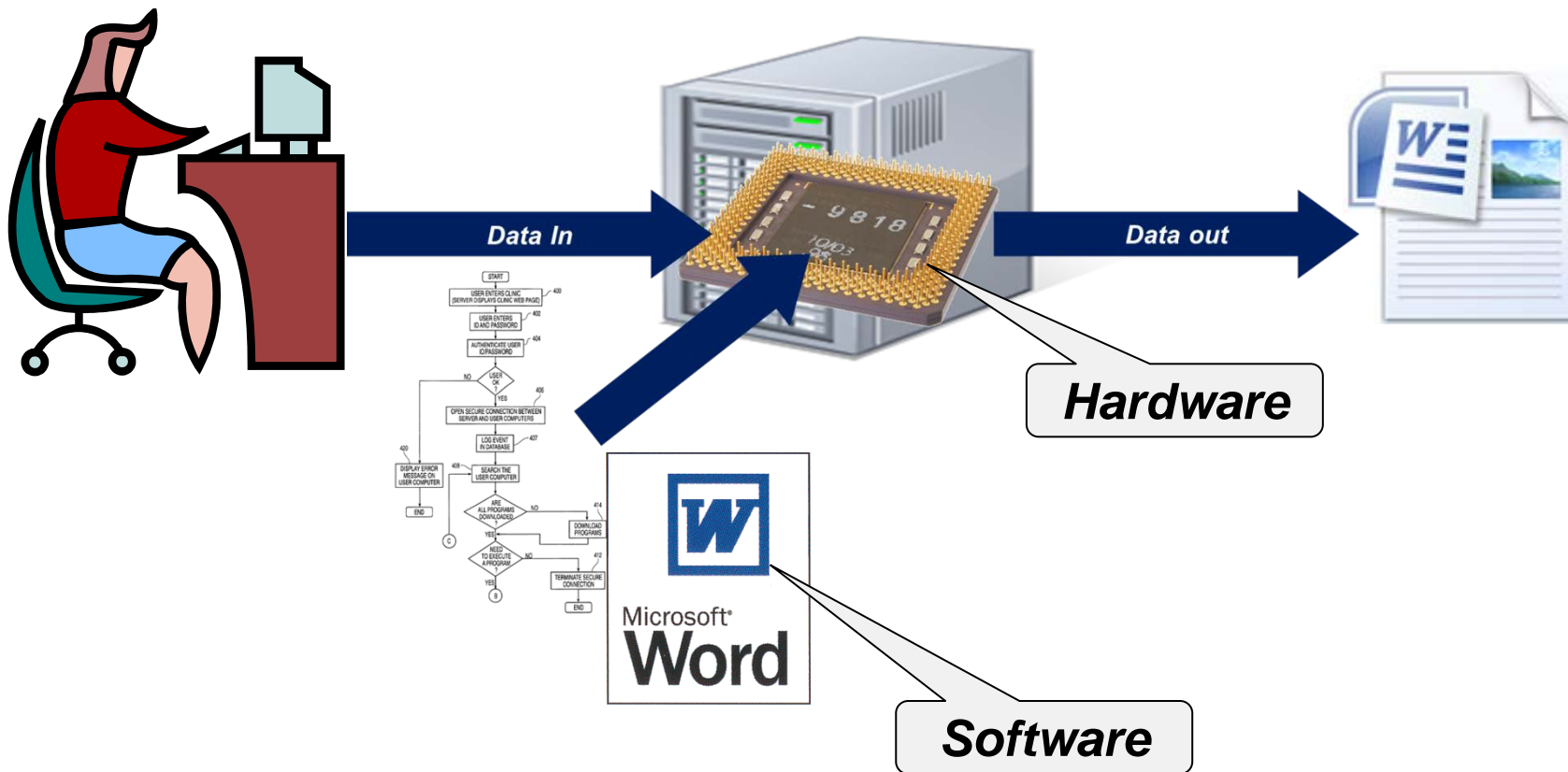


Program

Computers process data governed by programs



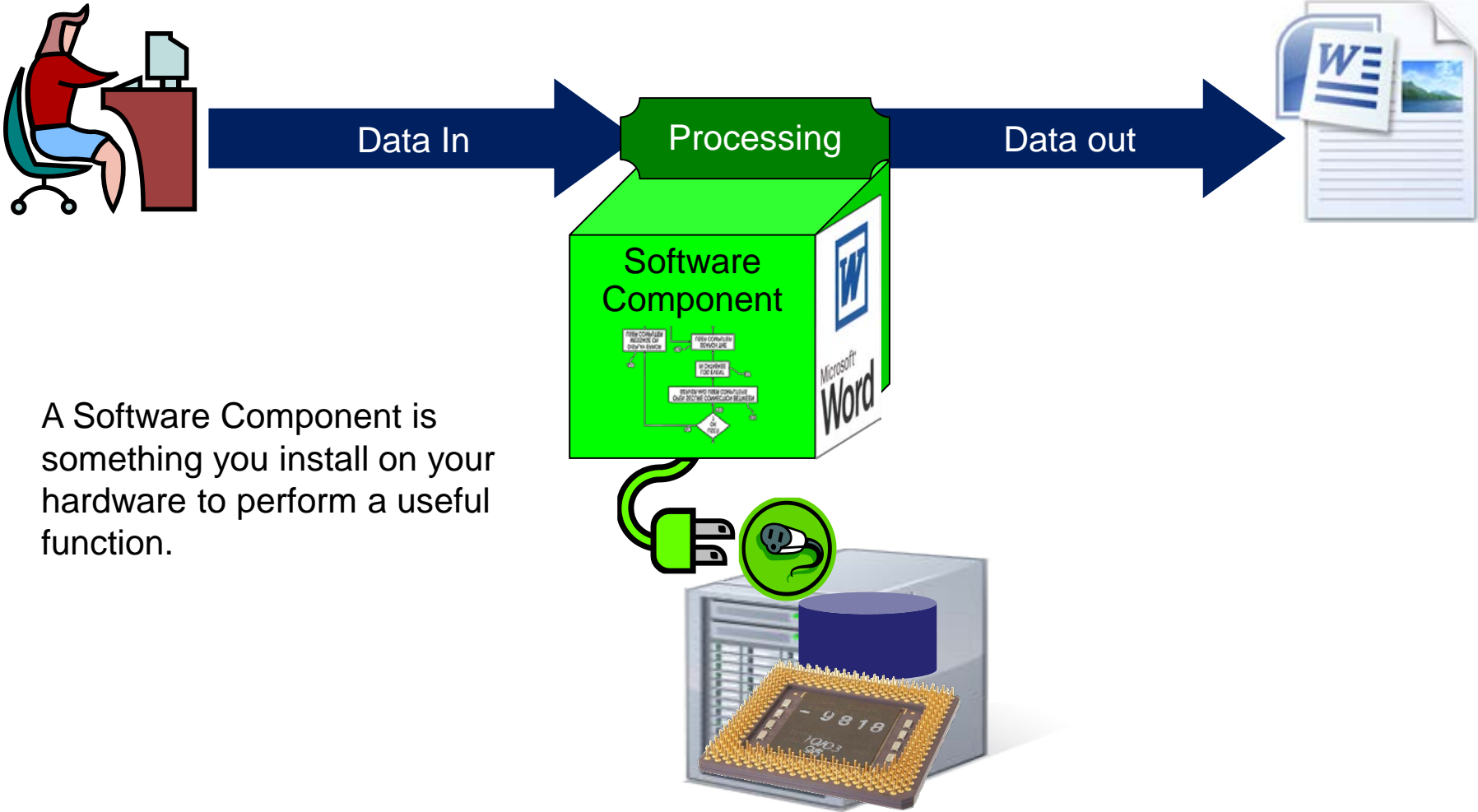
Programs Control Computers



Applications are how users provide and get data from computers



Software Component

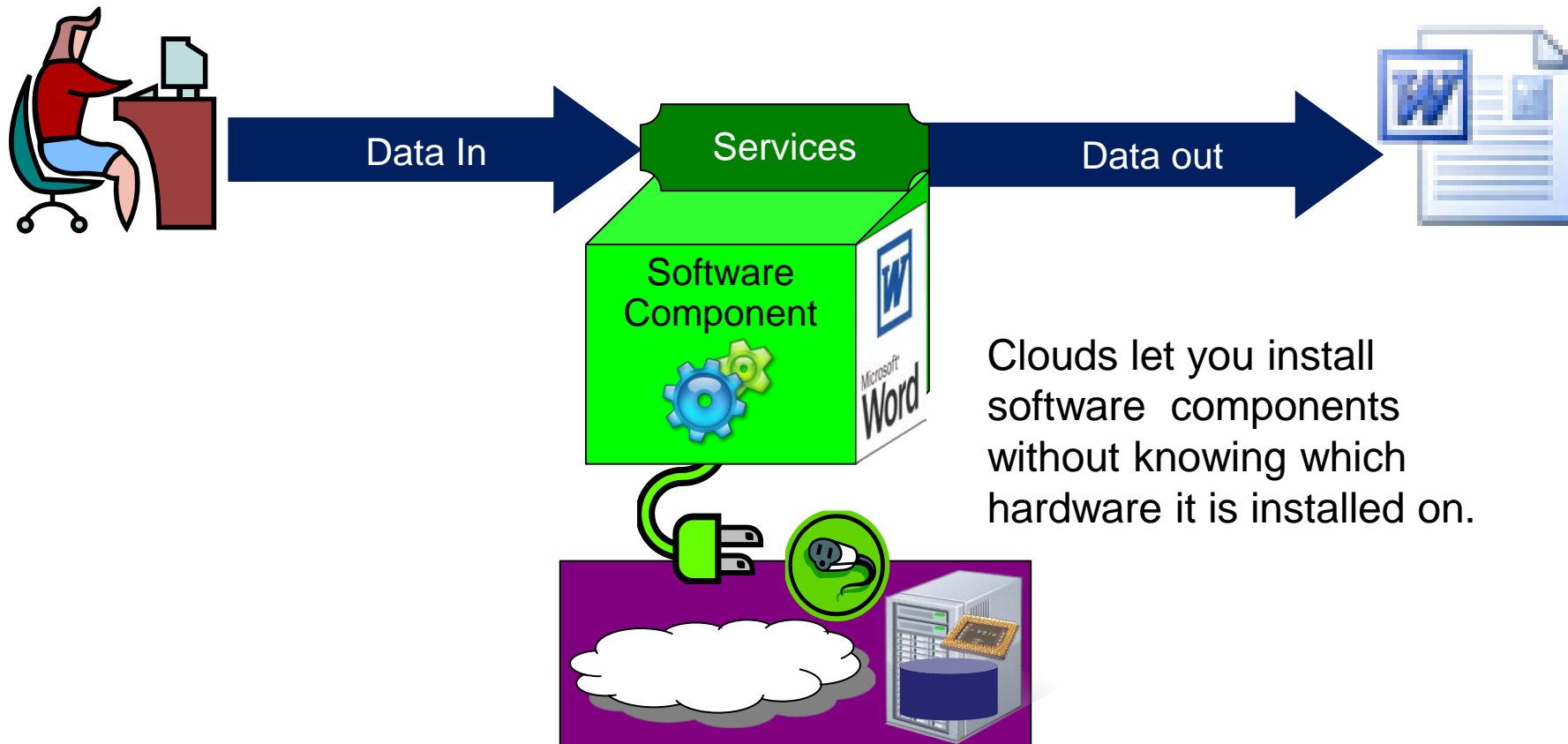


A Software Component is something you install on your hardware to perform a useful function.

Software Components are installable programs



Cloud



Clouds let you install software components without knowing which hardware it is installed on.

The hardware in the cloud must still be compatible with the software being installed.

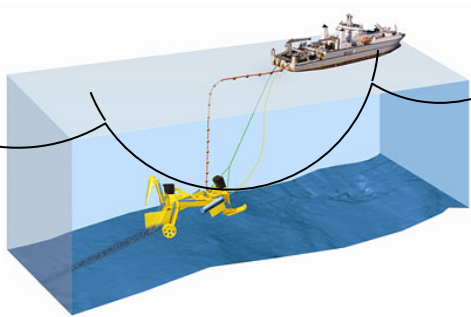


Example:
Intel vs SPARC

Clouds hide the hardware



Internet: Access to Remote Data



Data being transmitted over the network

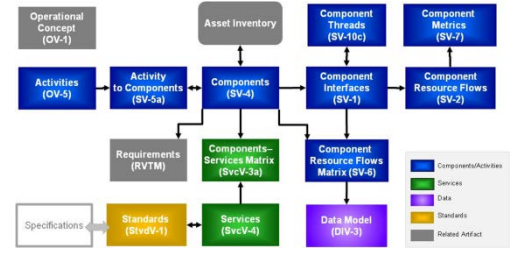
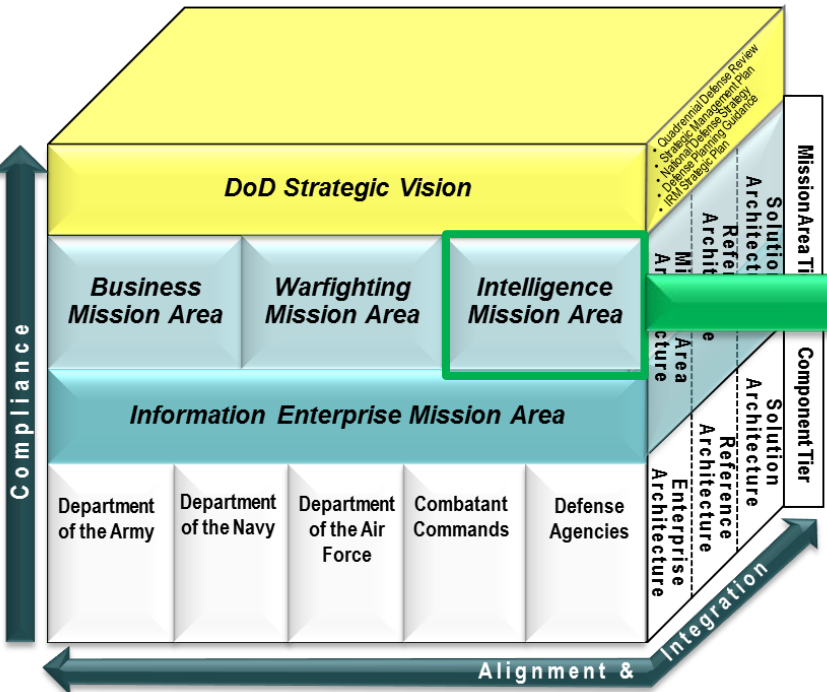
Reusable data is critical to an effective Enterprise

Services send data over the wire

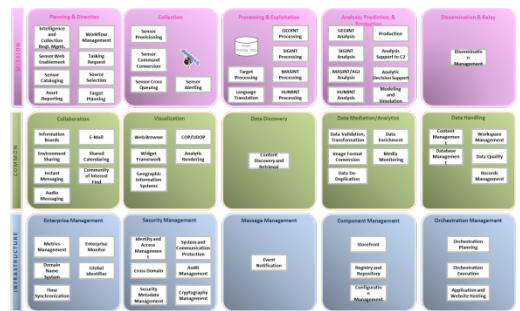


DI2E Architecture

DoD Enterprise Architecture (EA)



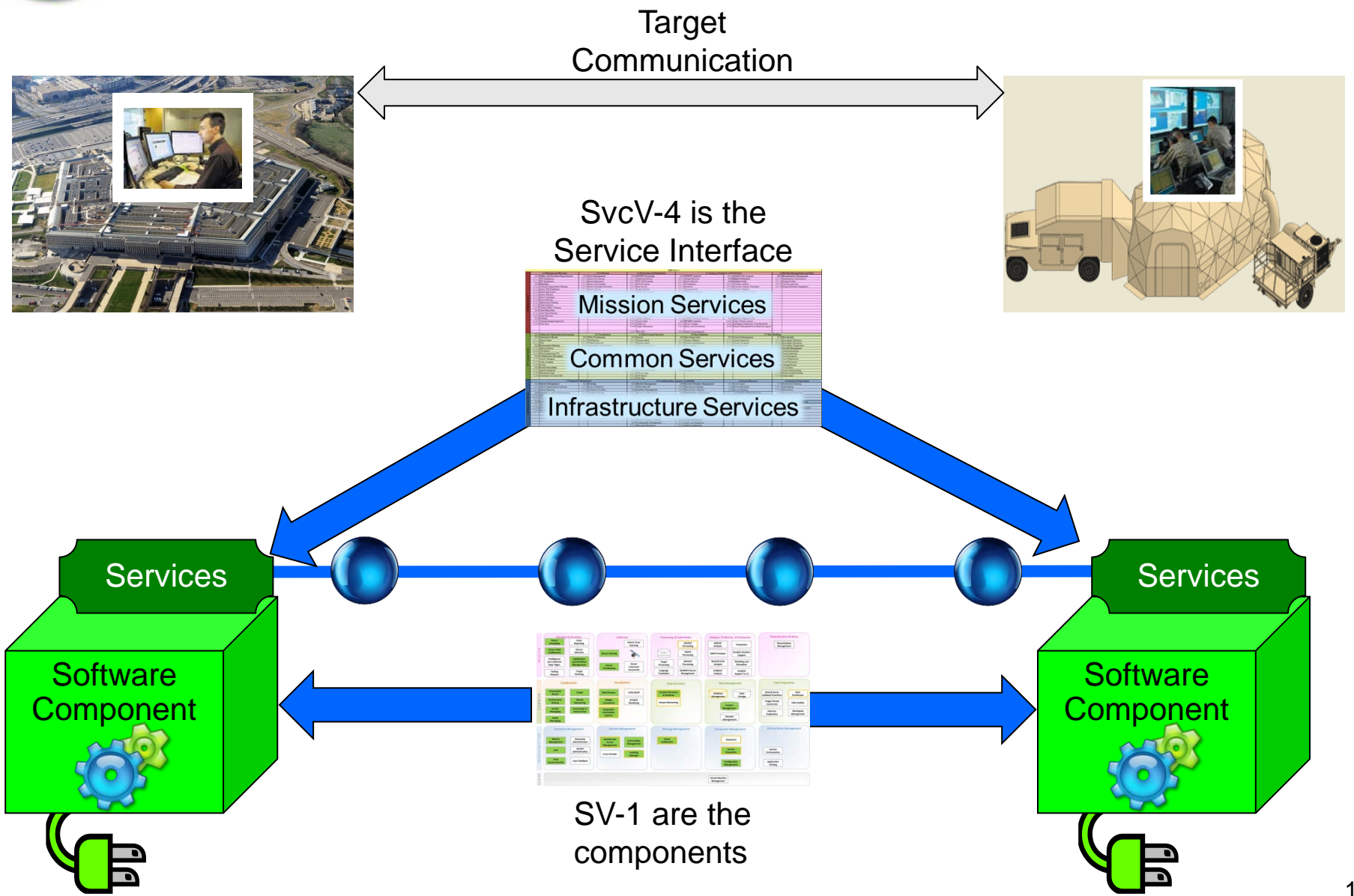
A large grid representing a data model or matrix, likely a Component Resource Flows Matrix. It consists of many rows and columns, with a color gradient from purple at the top to blue at the bottom.



DI2E IS THE INTELLIGENCE MISSION AREA ENTERPRISE ARCHITECTURE



DoDAF

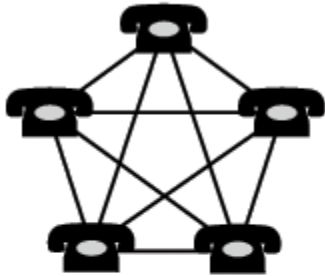




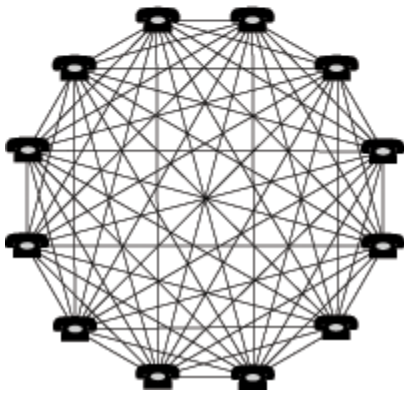
Network Effect: Why Standards & Technical Profiles?



- For networks, the value goes up the more users you have.

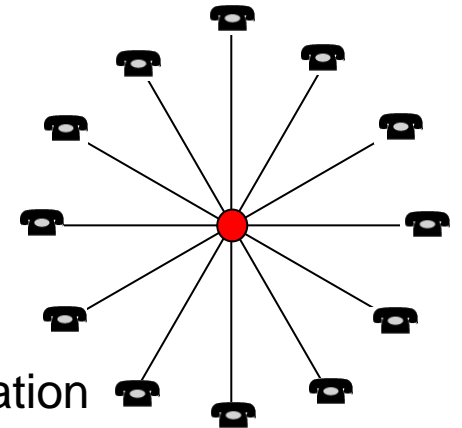


- **Metcalfe's law:** the value of a telecommunications network is proportional to the square of the number of connected users of the system (n^2).



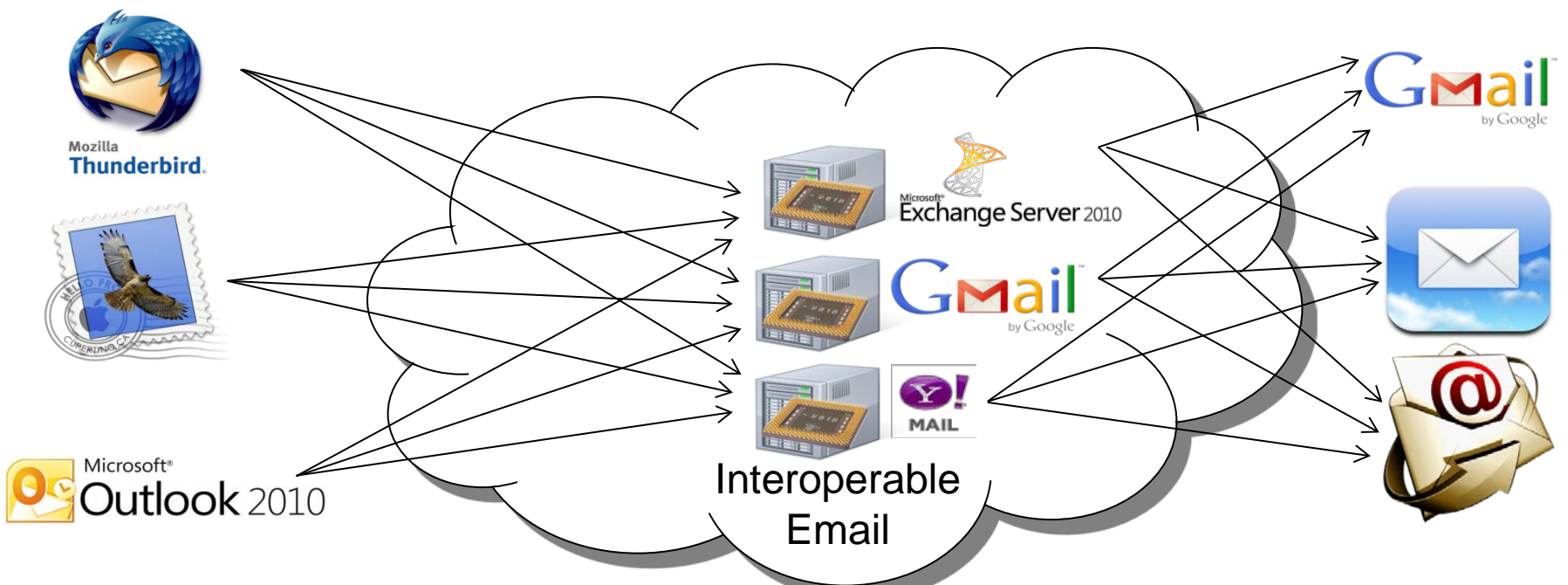
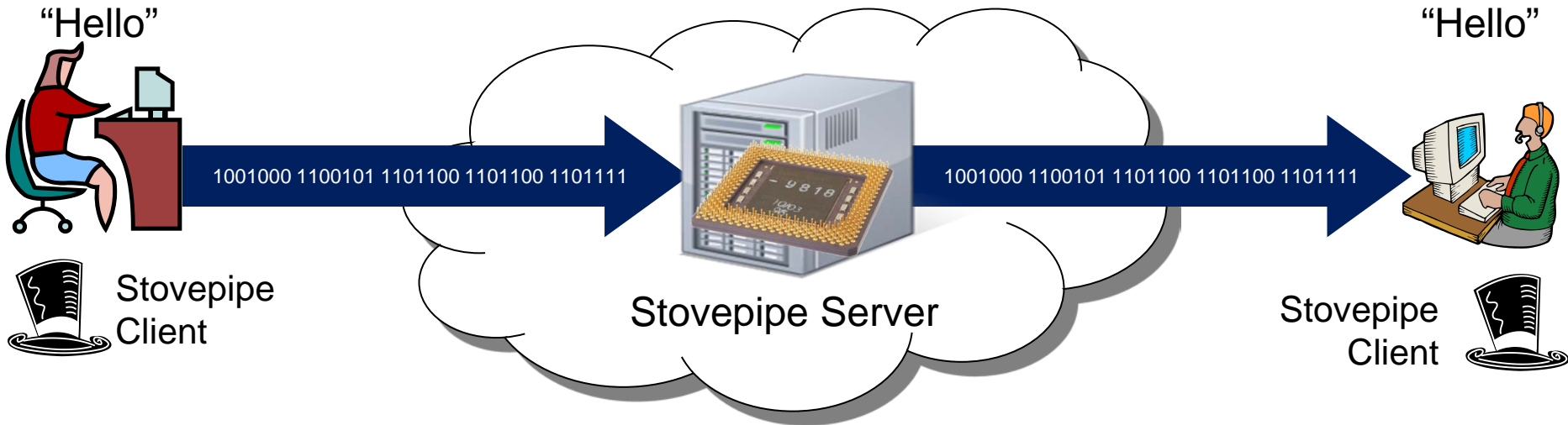
But, you don't want to negotiate a separate interface for each interconnect!

Standards and Technical Profiles solve problem by providing a common language for communication



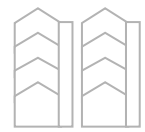


Standards & Technical Profiles Example

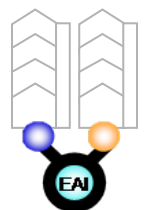




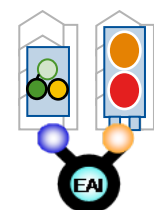
Service Integration Maturity Model (OSIMM)



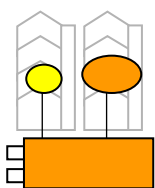
Silo



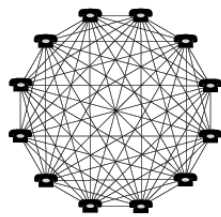
Integrated



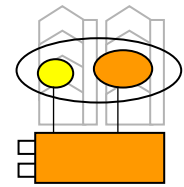
Componentized



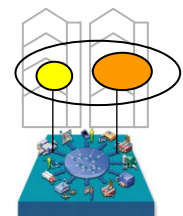
Services



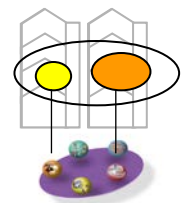
Service integration is the key to agility, affordability and survivability in a networked environment



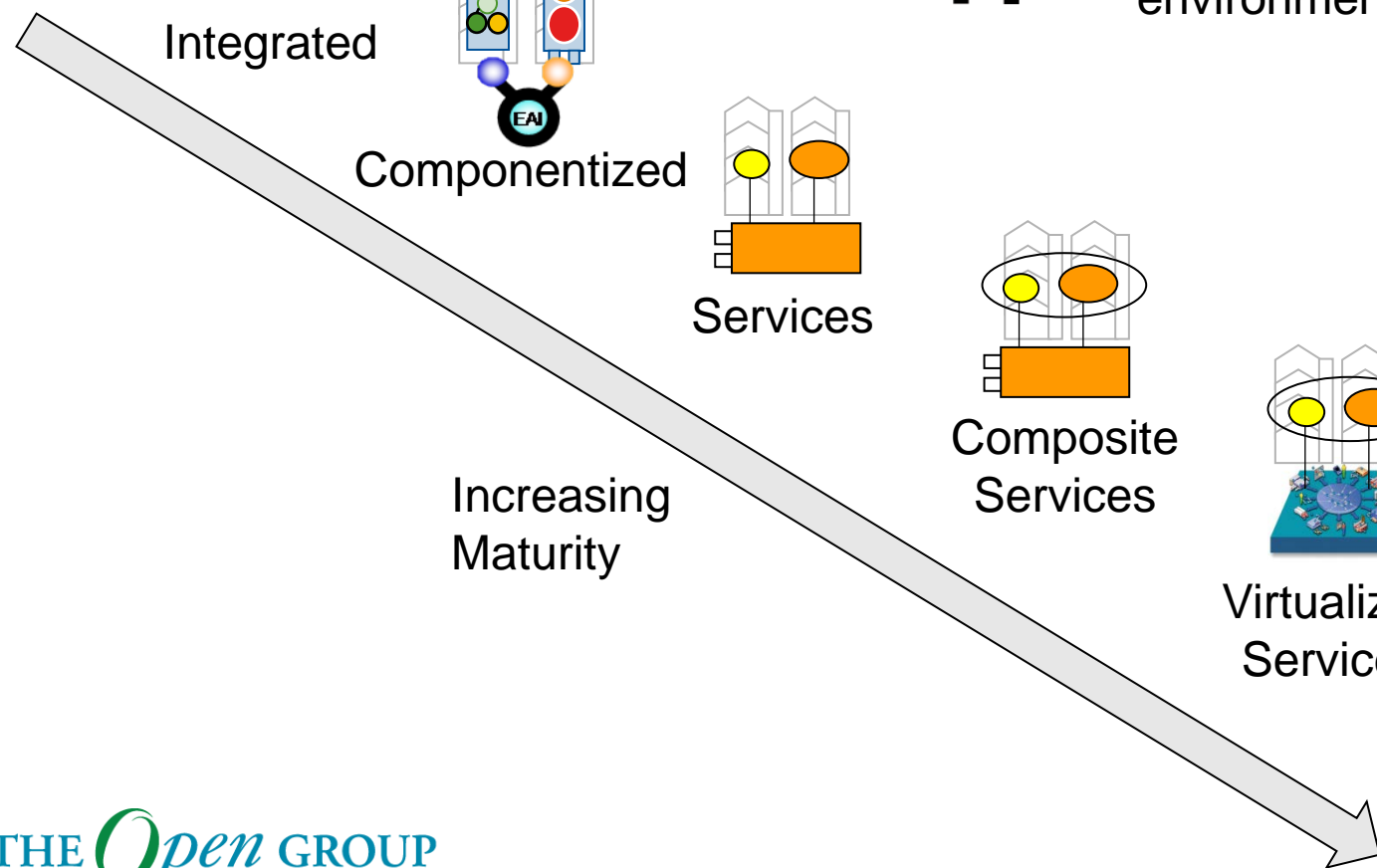
Composite Services



Virtualized Services



Dynamically Re-Configurable Services



Increasing Maturity



Technical Profile

Mission Services
Common Services
Infrastructure Services

Technical Profiles are how you define DI2E Services so that new technologies can quickly be added.



Technical Design Document (TDD)



Service Specification Packages (SSPs)

- Web Service Definition Language (WSDLs)
- XML Schemas
- Schematron



Conformance Traceability Matrix (CTM)

Conformance Test Kit



Test Procedures



Test Data Set



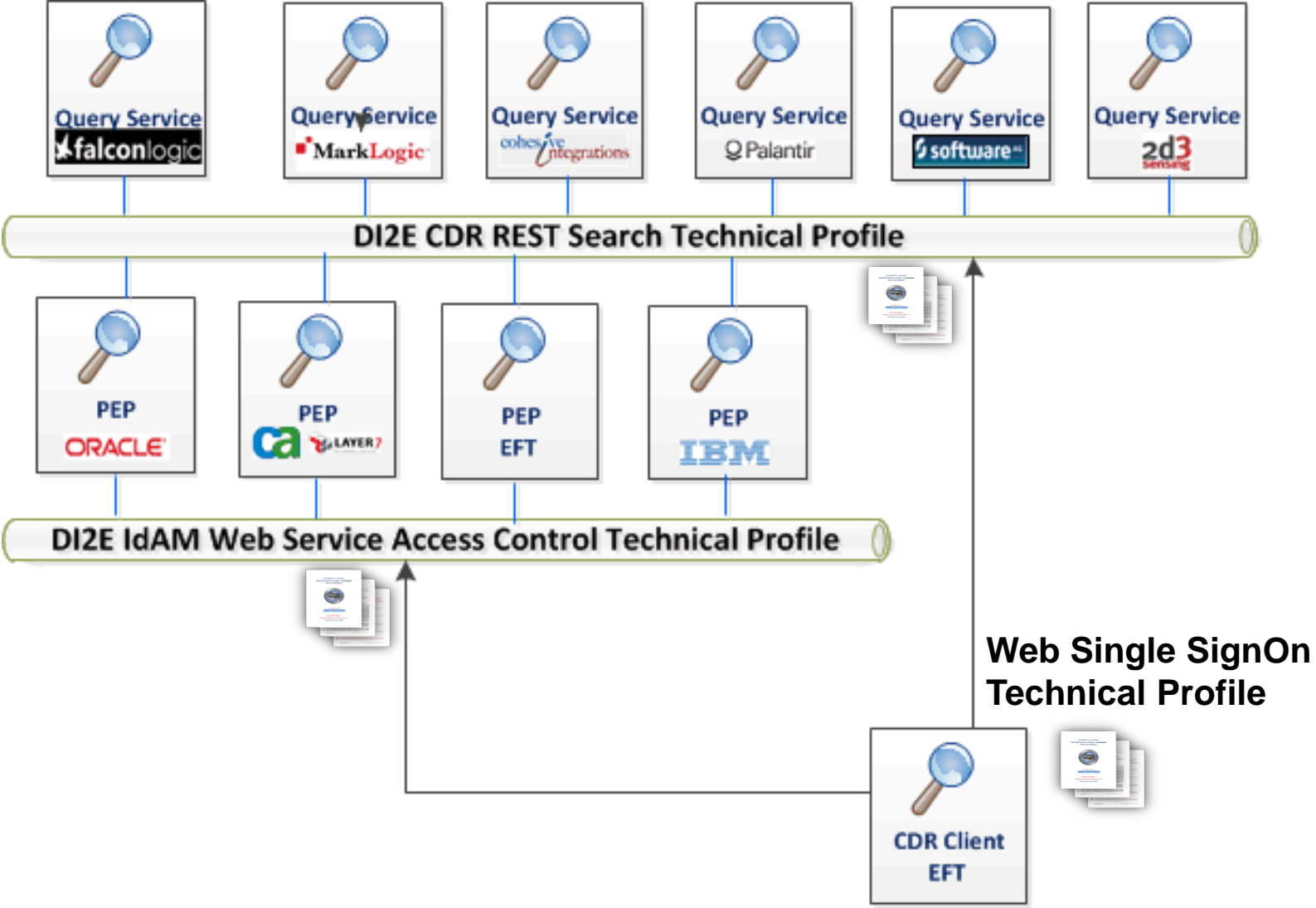
Test Requests



Verification Rules



CDR & IdAM Profiles in Plugfest





Agility Benefits

≈ 4 months

Develop Profiles

Step #1:
Create the Technical Profiles
REST Search
Access Control
Web SSO

≈ 4 weeks

Implement Profile

Step #2:
Vendors implement
Technical Profiles
≈ 4 weeks each

≈ 4 minutes

Step #3:
Integrate

For the CDR test client, integrating new capabilities is automatic with registering in the Plugfest eXchange.

Fun Fact:
The CDR test client had 96.3% code reuse!



Questions?

