



Bentleyuser.dk ÅRSMØDE 2009

Vejle, 09.-11.11.2009

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Bentley Plant Europe



Bentley Plant – What's new

- New acquisitions
 - PlantWave
 - Point Cloud (licensing)
 - gINT
- New products
 - Bentley Substation
 - ProjectWise Dynamic Plot Services (-> Mo 14:30 A3 by J. Simmons)
- New licensing
 - ProjectWise Clash Resolution Visa
 - ProjectWise Schedule Simulation Visa
- New Services
 - ProjectWise LifeCycleServer BestStart Services
 - Bentley ConstructSim BestStart Services

Plant Design Technology Trends

- Globally Distributed Work
 - Manage project execution around the globe
- Work Sharing and Joint Ventures
 - Data security, control of content
- Data exchange
 - Between different systems without data loss
- Ease of use / Minimal training
 - Minimize project and personal ramp-up time and adding new partners
- Efficiency in design
 - Next opportunity in efficiency is to build-in engineering rules to address both lack of expertise and project execution time

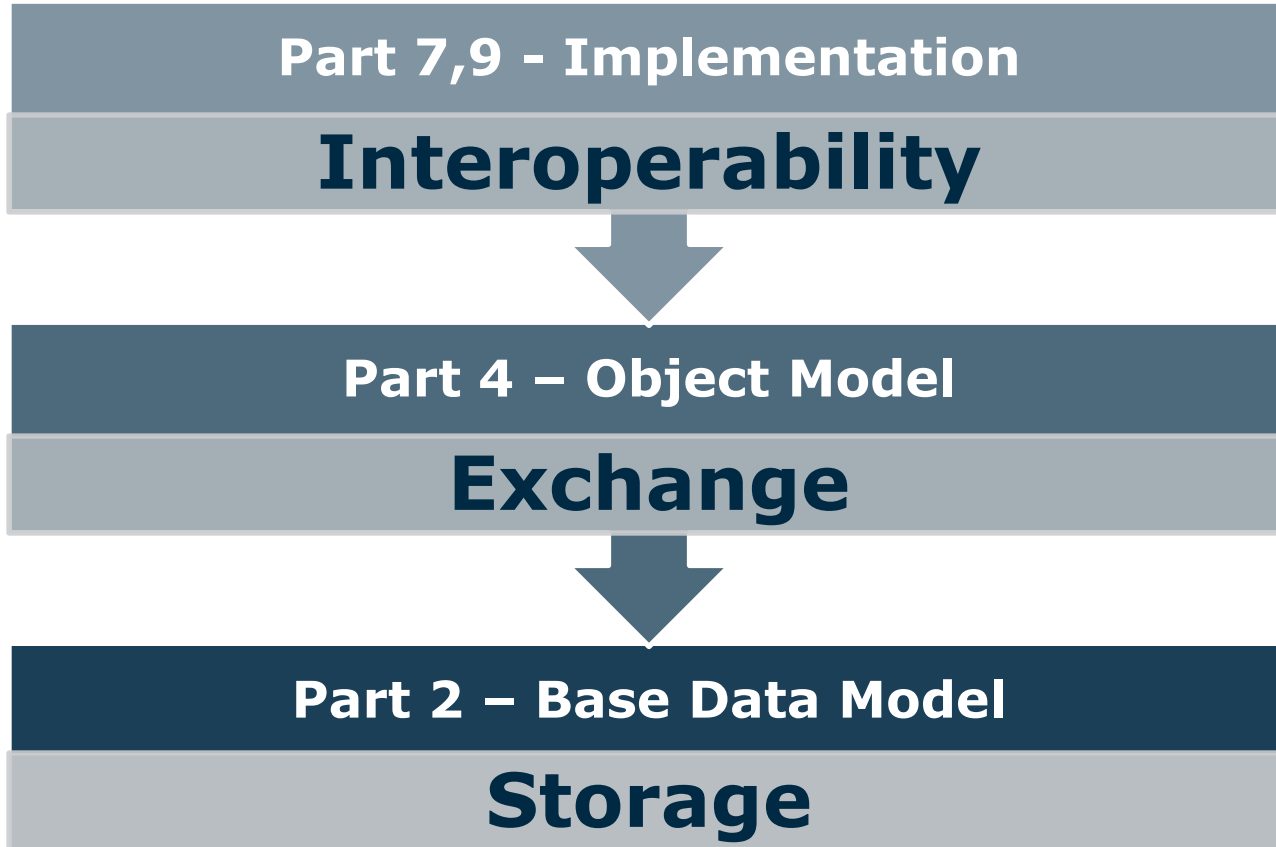
What is ISO 15926?

- Industrial automation systems and integration—
Integration of life-cycle data for process plants including oil and gas production facilities
- Part 1 - Introduction
- **Part 2 - Data Model. a generic 4D model that can support all disciplines**
 - Implemented in ProjectWise Lifecycle Server
- Part 3 - Geometry and Topology, the geometrical constructs of ISO 10303-42

What is ISO 15926?

- **Part 4 - Reference Data, the terms used within facilities for the process industry**
 - Implemented in OpenPlant applications as the basis for the data mode
- Part 5 – ISO 15926 Maintenance of the standard (being replaced)
- Part 6 – Validation of Reference Data
- **Part 7 - Implementation methods for integration & distribution based on the W3C Recommendations for the Semantic Web**
 - Software architecture and implementation
- *Part 9 Defines agreed protocol to interoperate*

ISO 15926 Part Review



ISO 15926 "Parts" Analogy

iRING

Part 2
Data Model

Natural Language
Grammar

Part 4
Reference Data

Dictionary &
Thesaurus

Part 7
Templates

Phrase, Sentence,
Paragraph, Verse,
Rhyme, Lyric

Part 8
RDF/OWL

Paper, Book,
Website

Part 9
Façades

"Reading"

What are the Benefits of adopting ISO 15926?

- Select software that best-fits your organization
 - No need to change based on the project needs
 - Integrate with your other systems
 - Maximize your personnel, minimize re-training
 - It's the "green" thing to do
- Access to all data across lifecycle
 - Data always available for re-use
 - Legacy storage in a non-proprietary format
- Large and small organizations benefit equally
 - Benefits irrespective of organization size or geographic distribution

What are the Benefits of adopting ISO 15926?

- Flexibility in project team
 - Different project members can use different tools – can still share together without loss of fidelity
- Choice of tools on revamp
 - On Brownfield sites, don't need to use same tools that were originally used for project
- Greater competition
 - For owners greater choice of engineering contractors
 - For engineering contractors greater choice of software tools

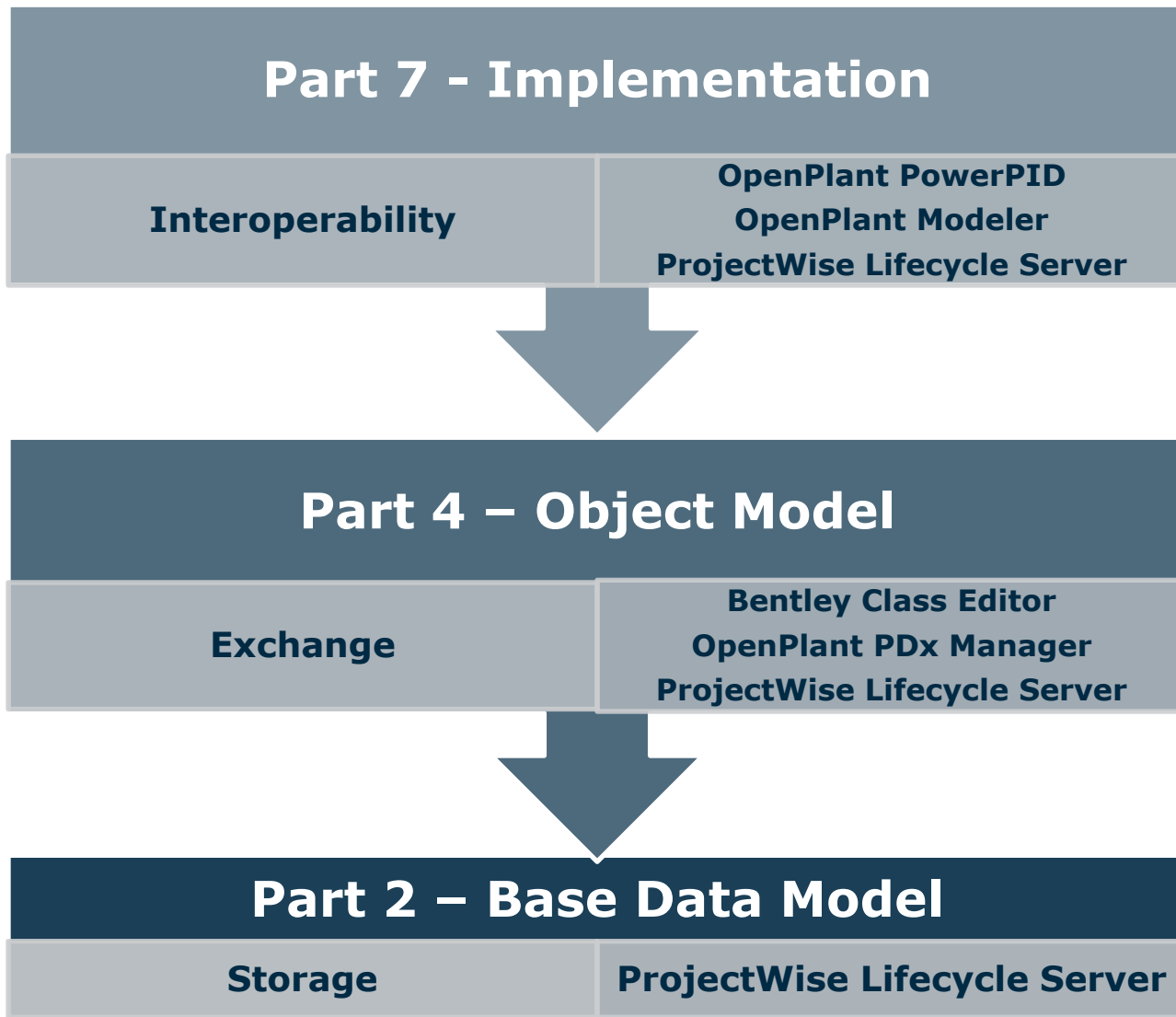
What are the Benefits of adopting ISO 15926?

- Foster innovation
 - Lowers cost of entry for new solution providers into the plant market
 - New specialized tools can be leveraged for their benefits without having to recreate the complete infrastructure
 - Easy to pass existing information for new analysis, designs, etc.

What are Bentley doing to facilitate ISO 15926?

- Common Class Editor
 - Common way to define, manage and maintain the ISO 15926 data model
- Data transfer mechanisms
 - Exchange information between applications using common “language”
- Common tools and utilities
 - Common catalog definitions
 - Common Isometric management tools
 - Common interfaces to analysis
- Collaboration, collate and viewing technology
 - Bring all the drawings, models and data together for review, comment, mark-up etc

ISO 15926 – Bentley Applications



Summary

- Adoption and participation in ISO 15926 is a benefit to the entire industry
- Benefits of work already done can be leveraged today
- Start to think about new ways of working for tomorrow



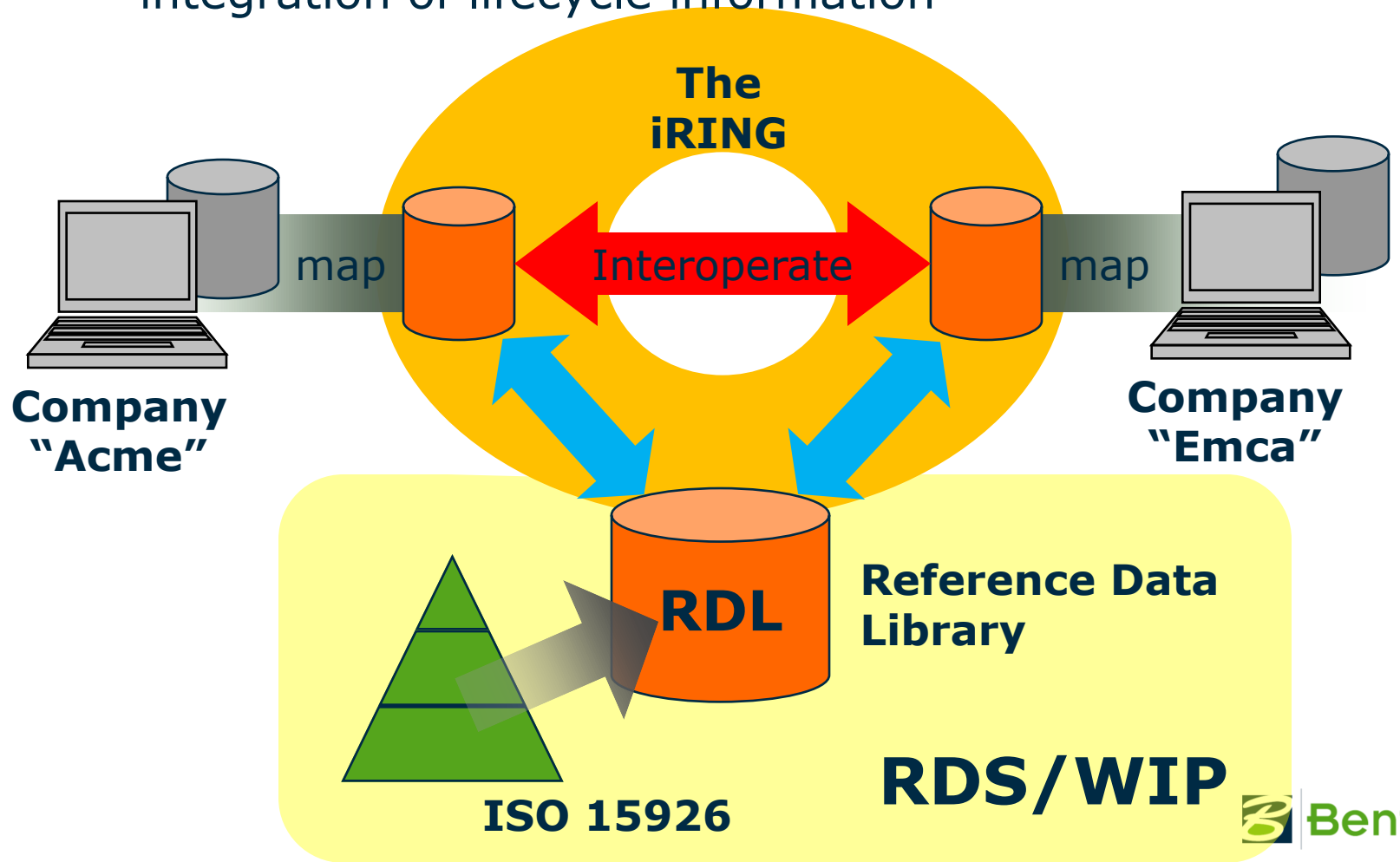
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iRING

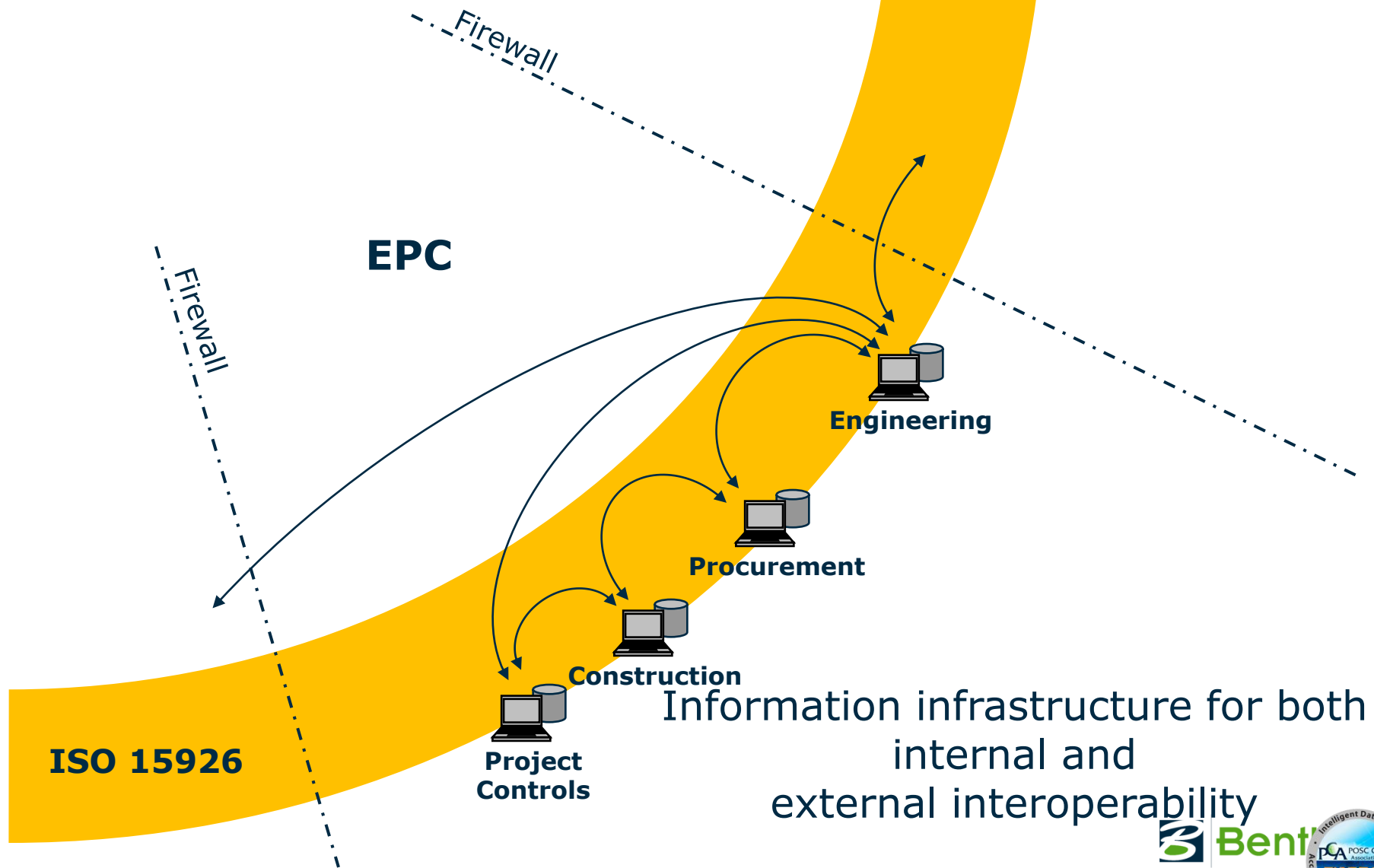
Improve Your Interoperability

Start with ISO 15926!

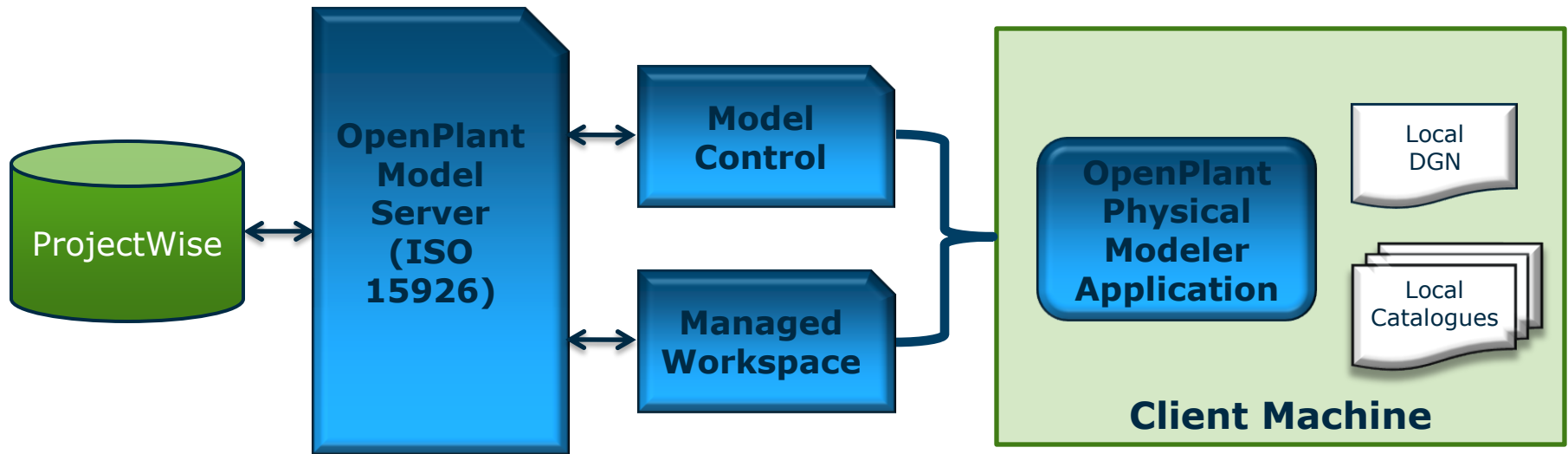
ISO 15926 is a standard for interoperability and the integration of lifecycle information



The iRING in your Company

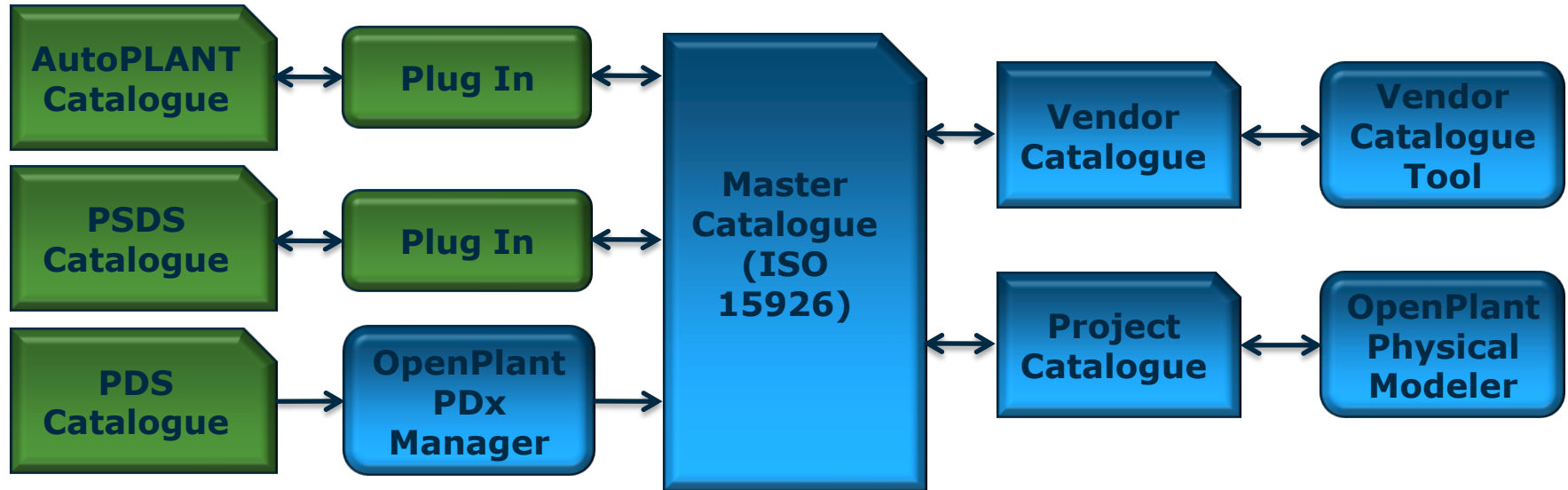


OpenPlant Physical Modeler



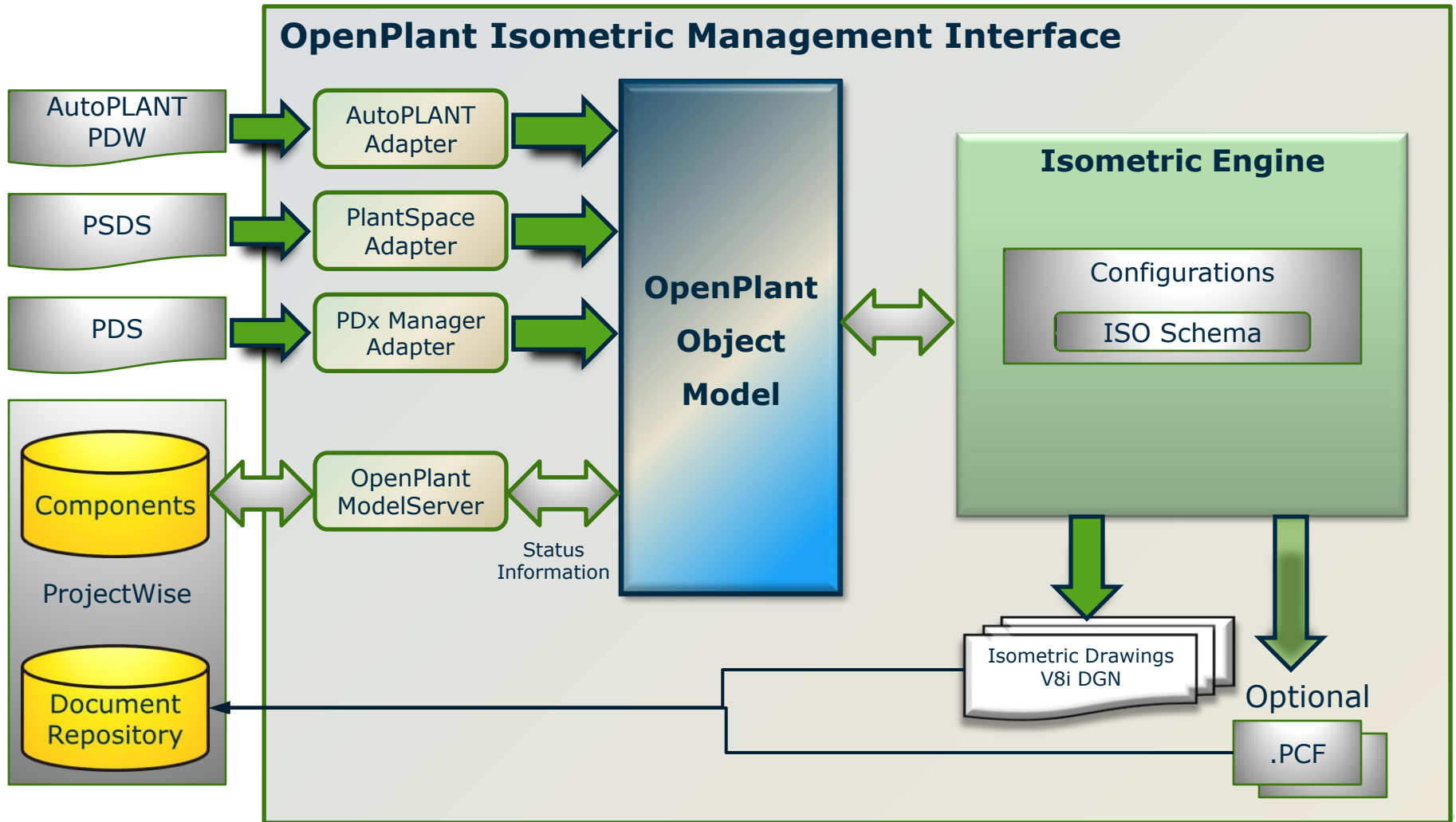
- ProjectWise is the Component and Document Store
- OpenPlant ModelServer manages each application client request, providing check-in/out, security, etc
- OpenPlant Physical model works on the client machine, stores local reference data (catalogues) as well as ability to save local files

Common Catalog Strategy



- Build a ISO 15926 based master catalog
- Provide plug-ins to exchange content from existing applications
- OpenPlant will natively use the master catalog to build a project instance in the same format
- Look at providing tool to vendors to deliver new catalog content in a neutral format

OpenPlant Isometric Manager



Bentley OpenPlant Design Technology

OpenPlant Services

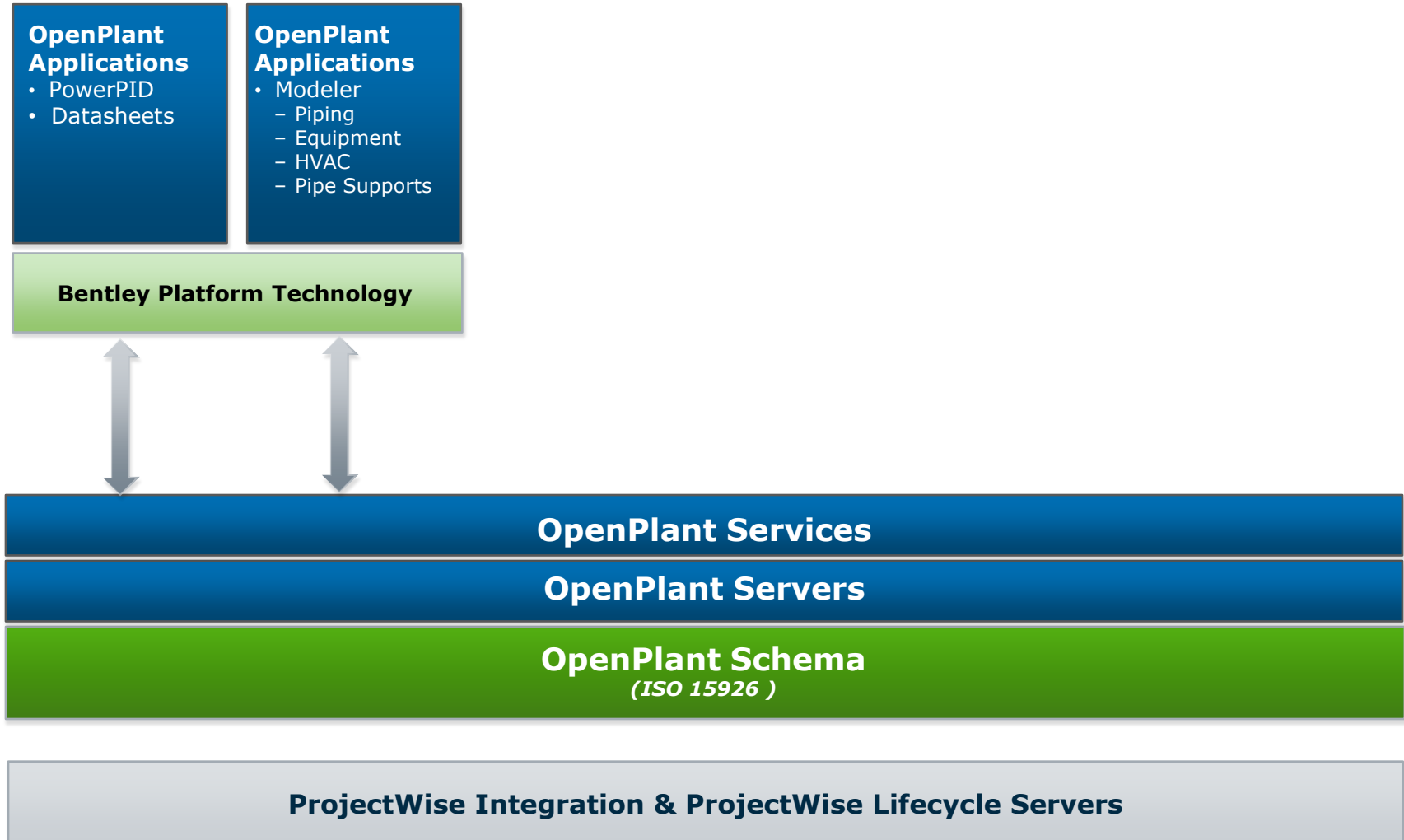
OpenPlant Servers

OpenPlant Schema
(ISO 15926)

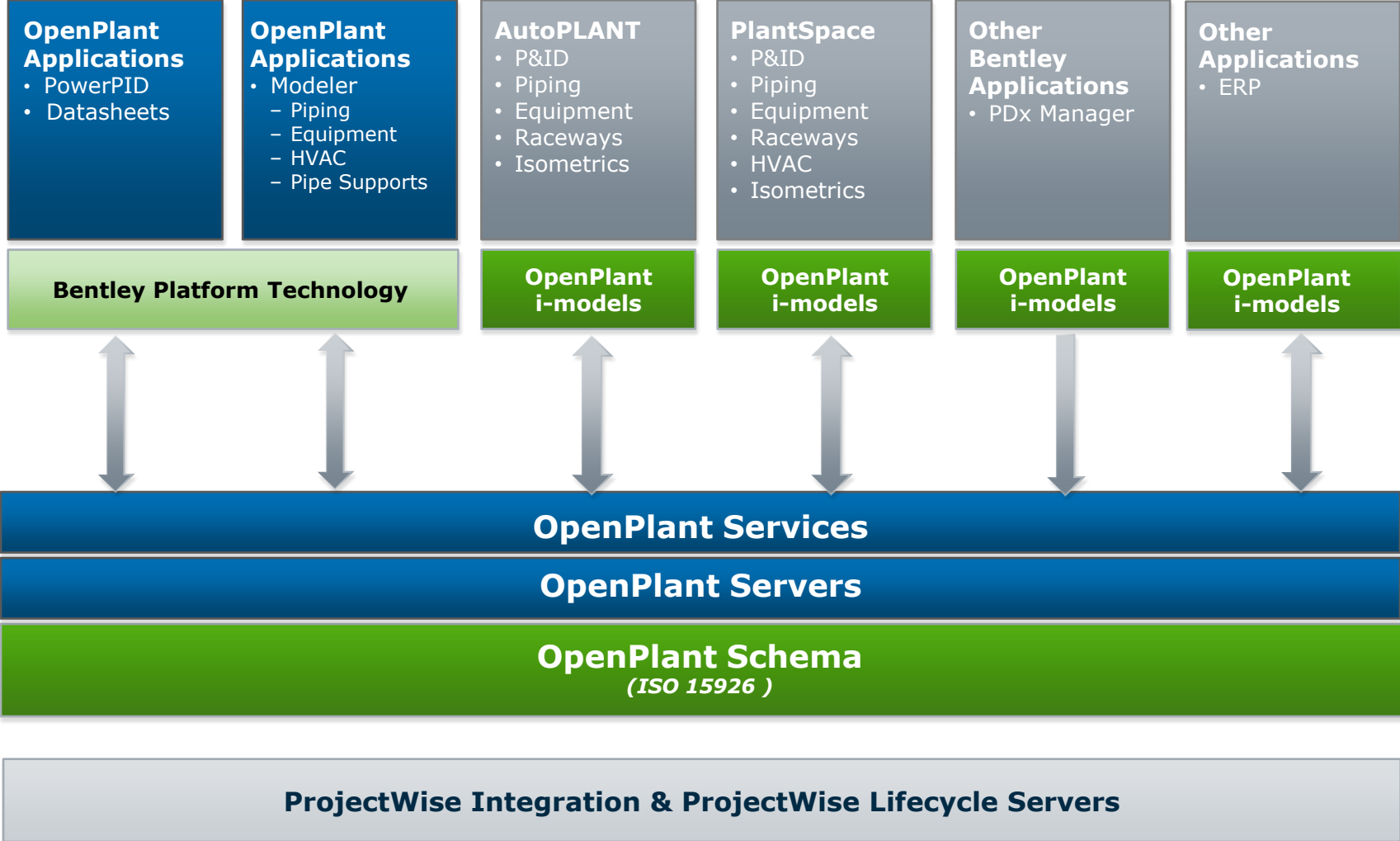
ProjectWise Integration & ProjectWise Lifecycle Servers



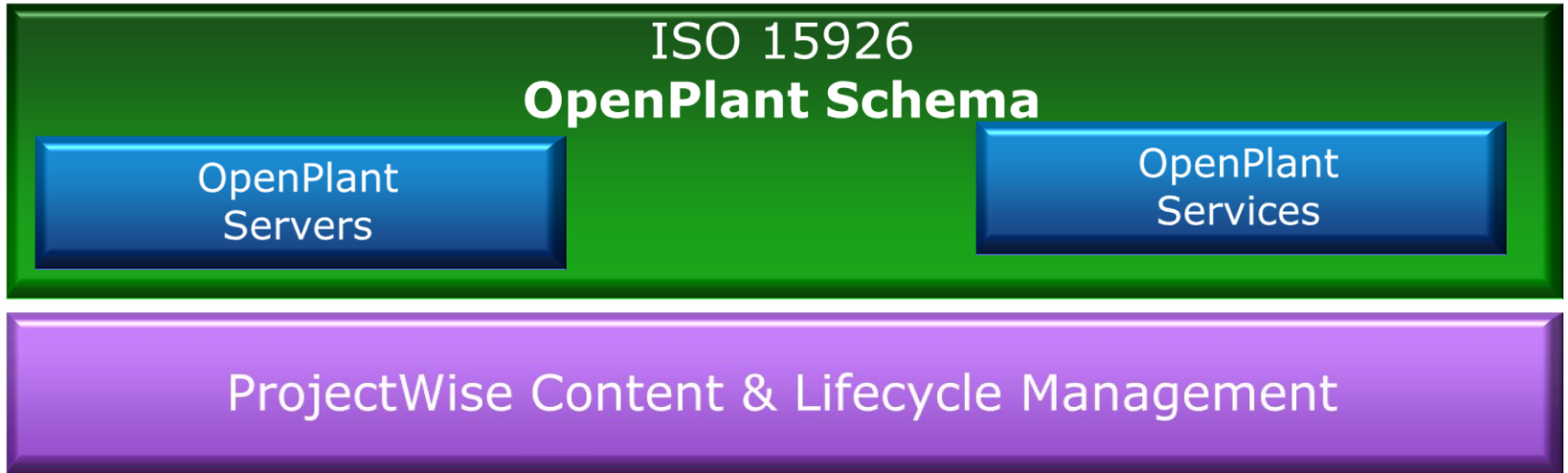
Bentley OpenPlant Design Technology



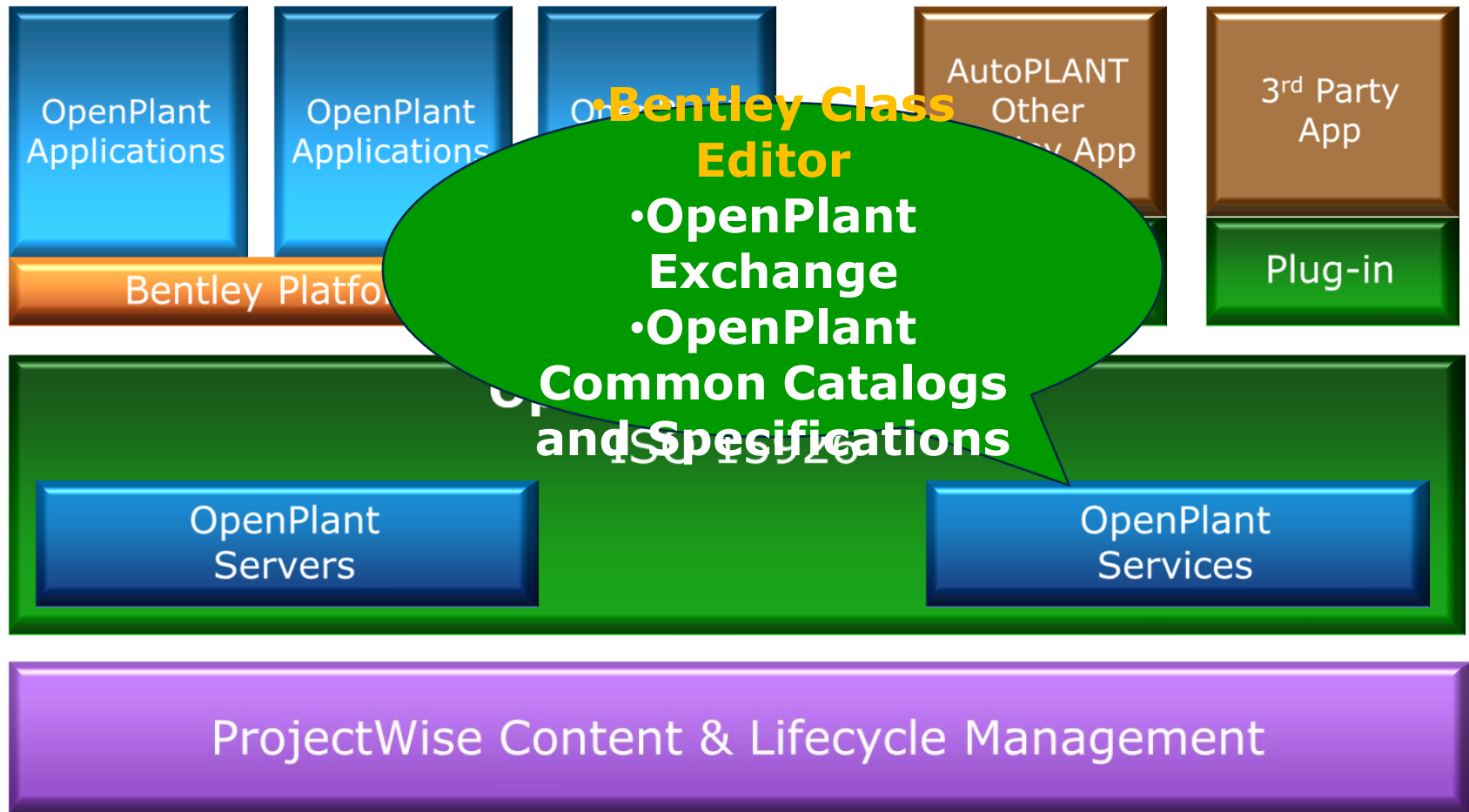
Bentley OpenPlant Design Technology



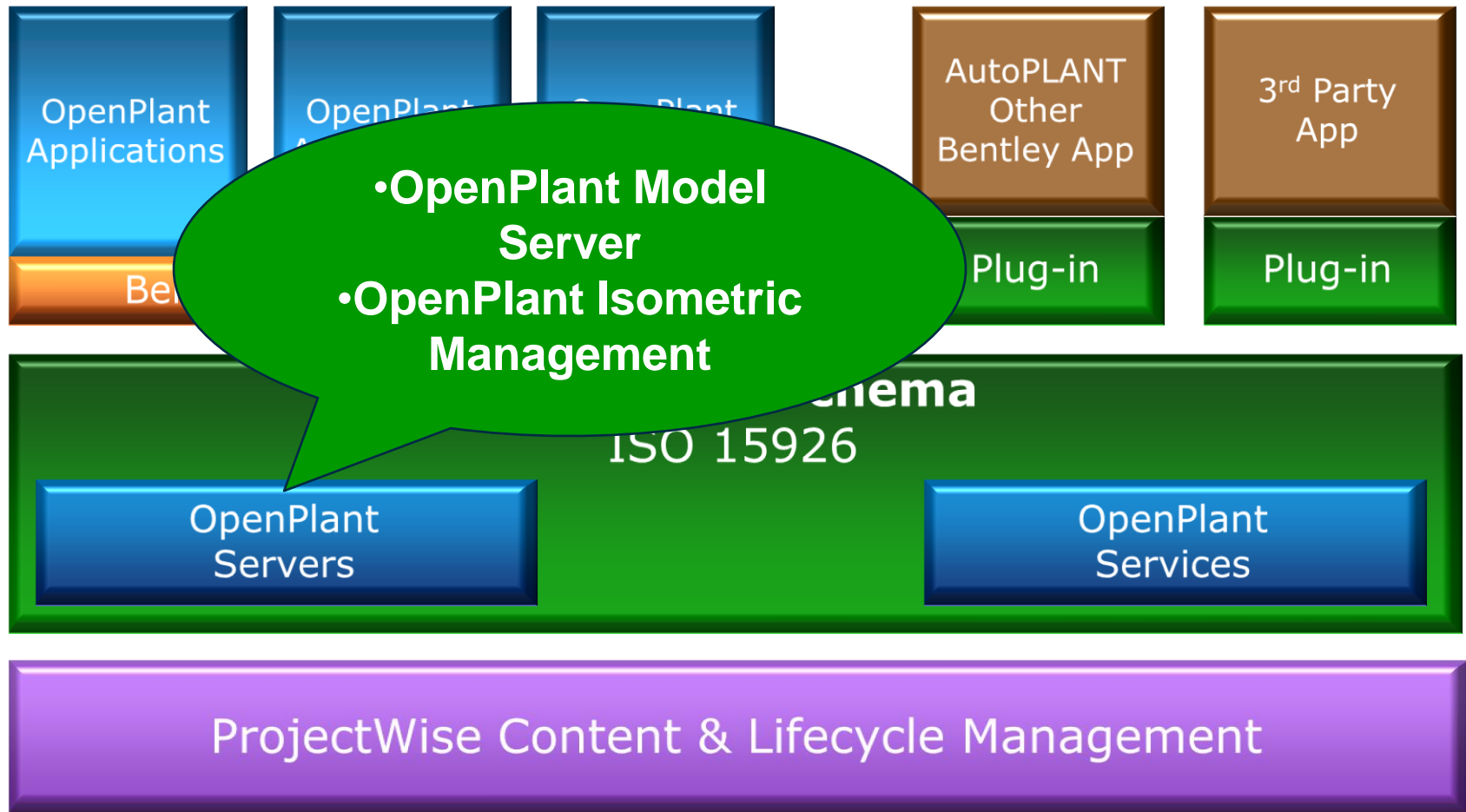
Plant Design Technology



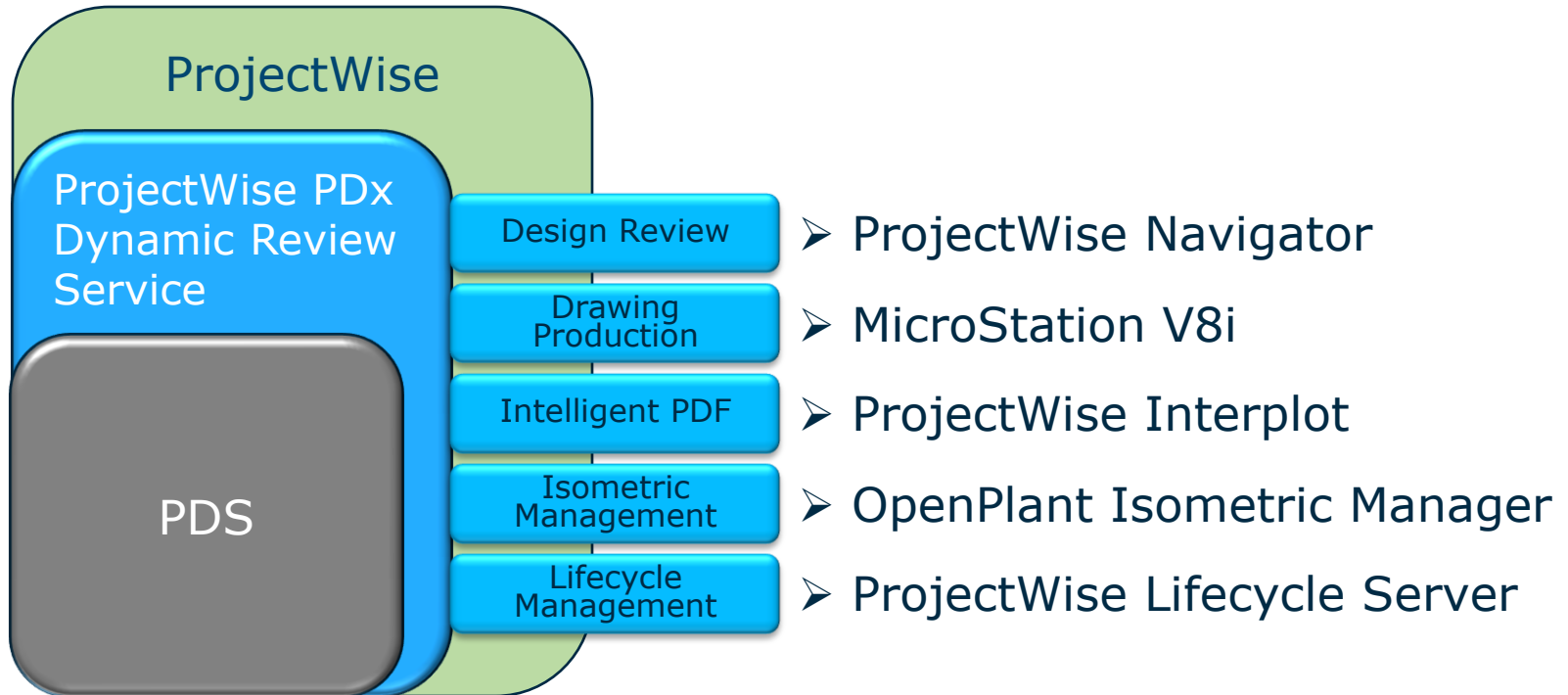
OpenPlant Design Technology



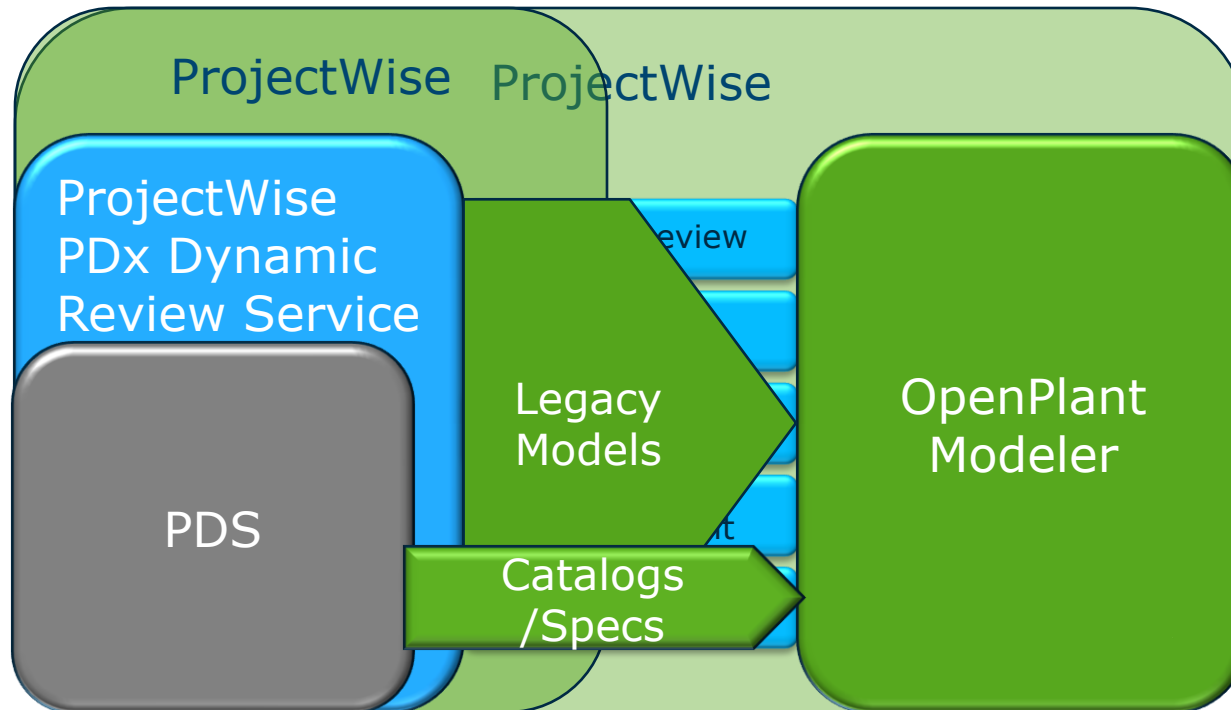
OpenPlant Design Technology



Enhanced PDS Workflows



PDS Mixed Environment



Actual Promotions (valid till 31.12.)

- Special offer for customers of Structural products: Extend your workflow and get 20% off on all AutoPlant modules
- Special offer for ISO15926 adopters: Try OpenPlant PID and get 50% off for the purchase
- Special offer for existing Interference Manager or Schedule Simulation users: Migration to Visas – contact your AM for individual details.



Making IT Strategic to Your Business

Questions?