How AF 2.0 Helps You Organize Your Information

Felicia Tan
Service Engineer

Agenda

- What's AF 2.0?
- The value of AF
- Demonstrations
- Backwards compatibility
- Requirements

Foundation by any other name

Code Name
- Foundation

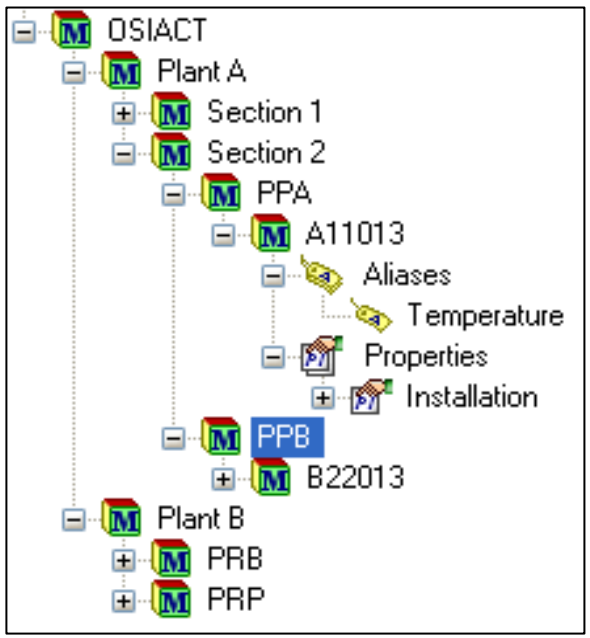
Product
- PI AF 2.0

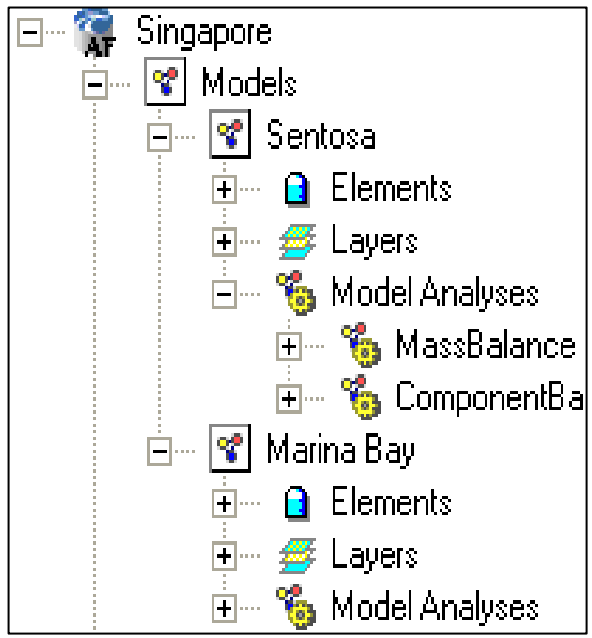
Goal
- Data Directory

What is AF 2.0?

The best of PI MDB and PI AF 1.x combined

… and a lot more!





The value of AF: structure

- PI is extremely good at:
  - Collect data from almost anywhere
  - Massive scalability, Highly available
- Flat points database
  - Organize your data
- Meta-data: a **structure** for the data
  - PI supplies data
  - AF supplies structure and access to more data

Why add structure?

- Structure is ***your*** knowledge applied to ***your*** points
- Structure helps you:
  - Store your expertise about your process
  - Build applications
  - Build displays
  - Look for your answers

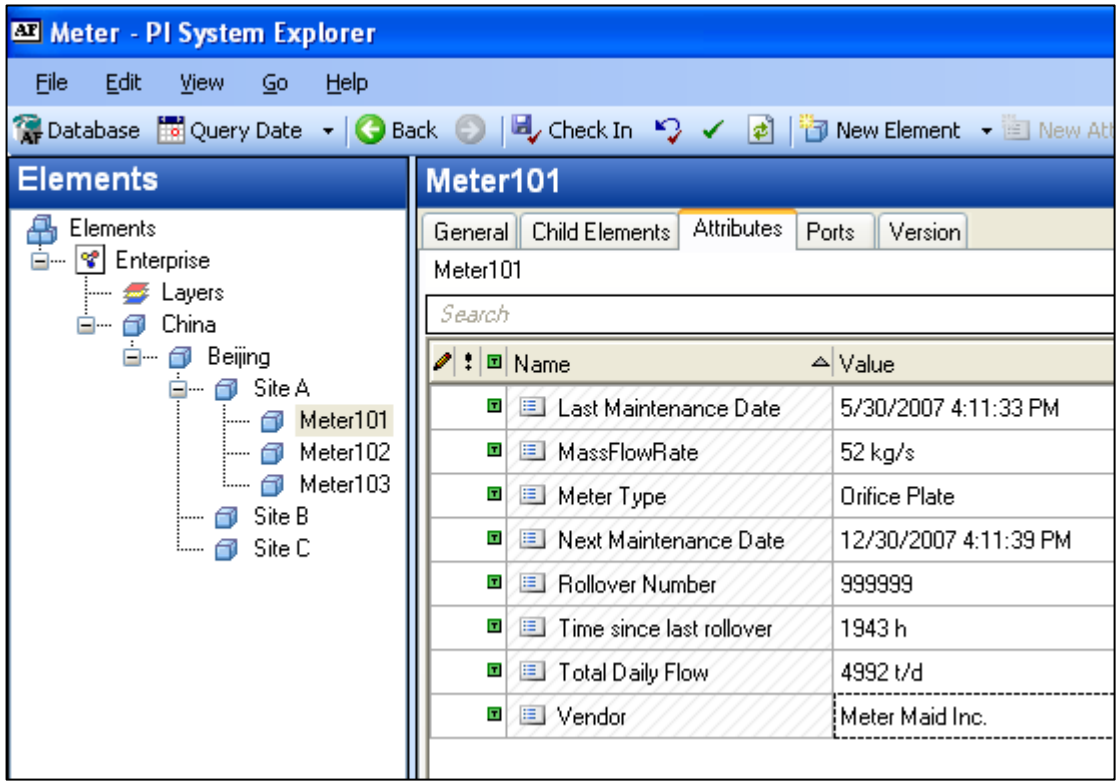
AF shapes your data

AF is designed to store structure:

- Defining types of assets → Templates
- Associating points with assets → Elements
- Extra information about points → Attributes
- Physical/logical asset structure → Hierarchy
- Assets connectivity → Models
- Transactions → Transfers

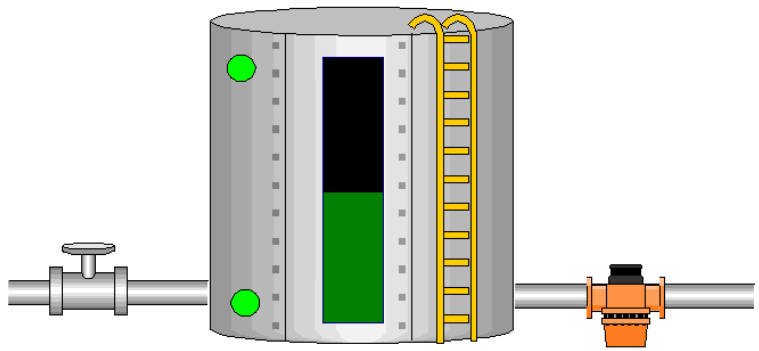
Area of Expertise

- Different type of equipment
- Calculations
- Limits

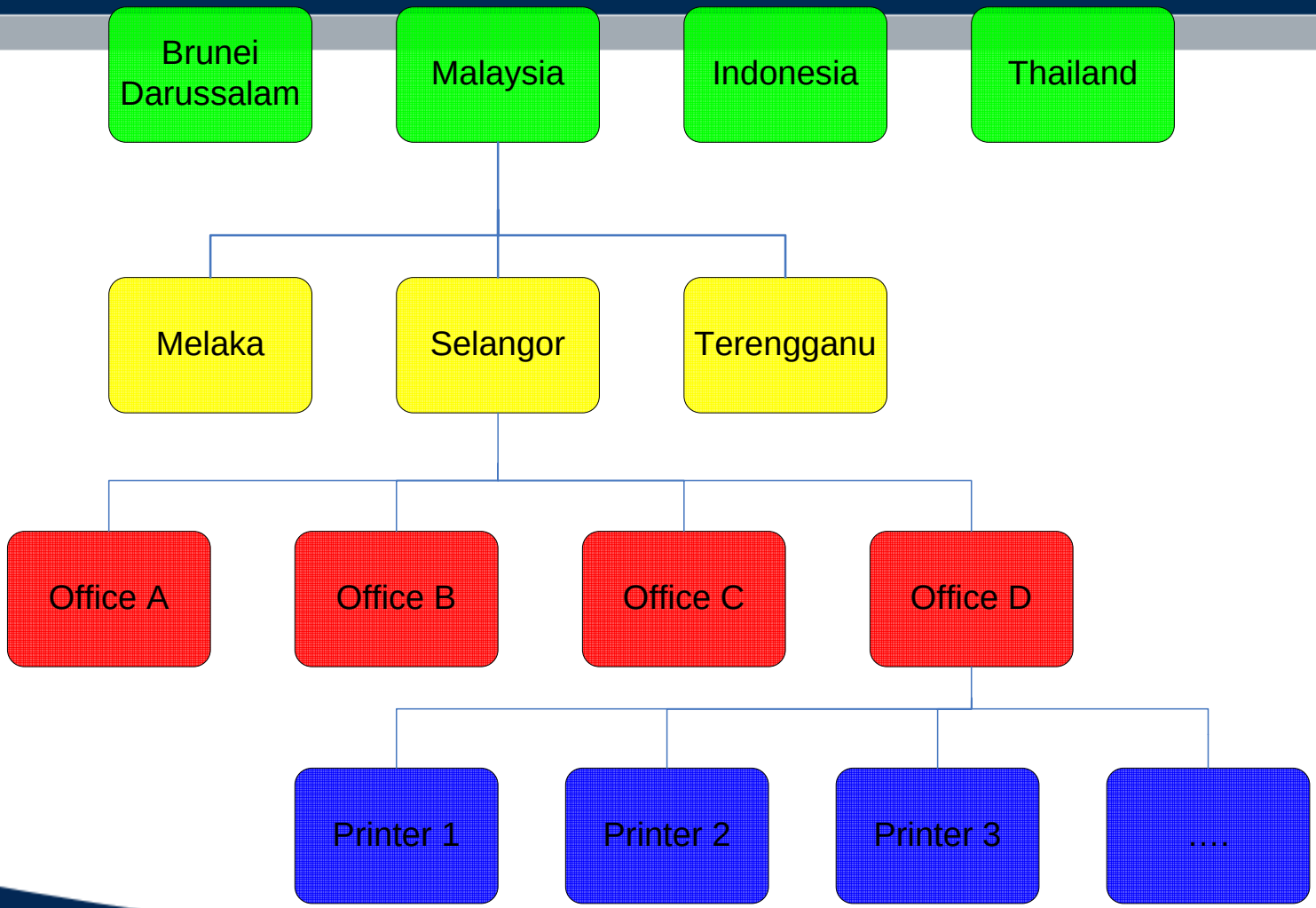


Storing your Expertise

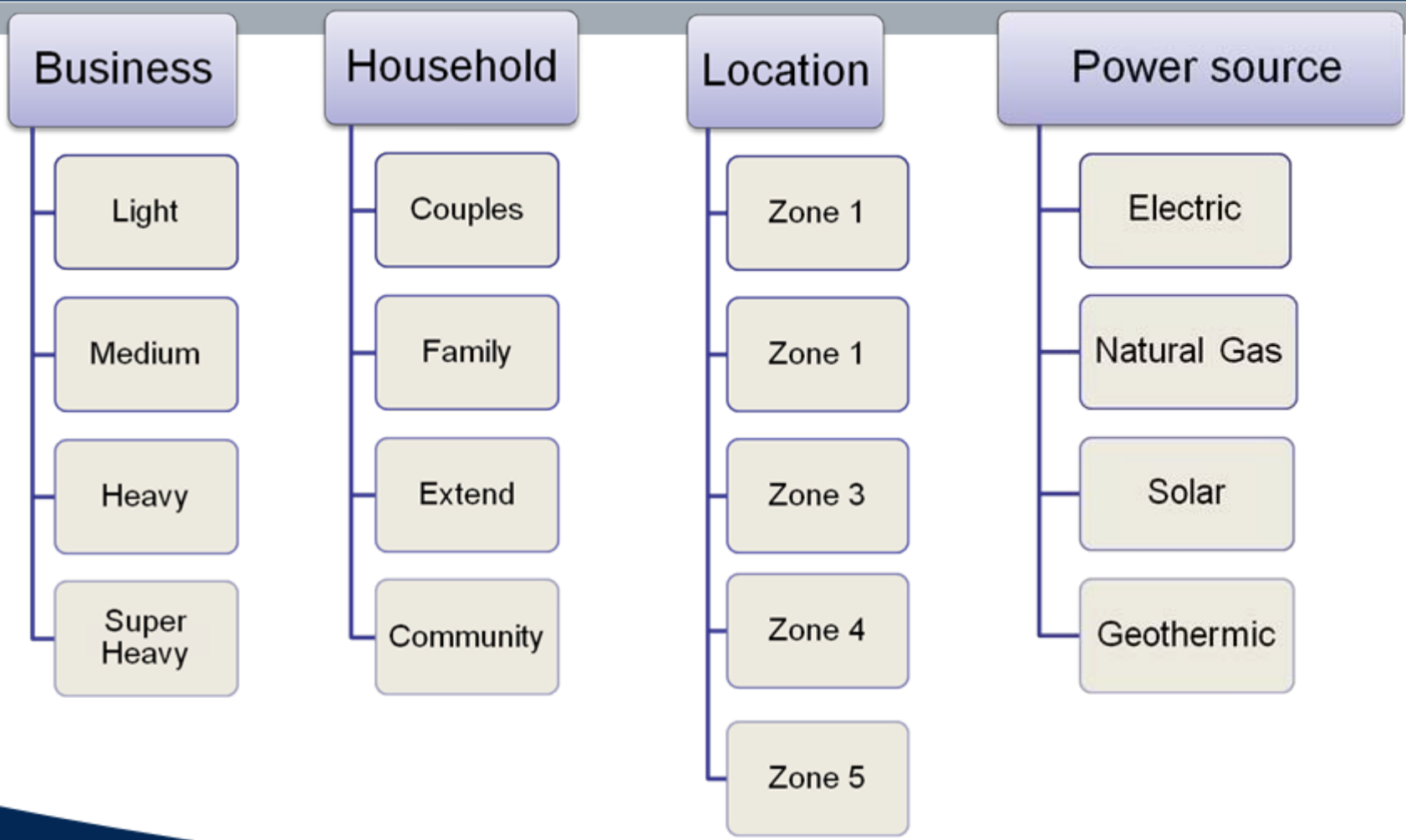
- How to totalize flow rates in/out of Tank
- Limits for notification on Tank
- Alarm states on Tank
- Strapping table
- Capacity of Tank
- Production line for Tank
- Downstream units of Tank
- Responsible person for production line



Hierarchical view



Categories


Business
Light
Medium
Heavy
Super Heavy
Household
Couples
Family
Extend
Community
Location
Zone 1
Zone 1
Zone 3
Zone 4
Zone 5
Power source
Electric
Natural Gas
Solar
Geothermic

DEMO

Knowing Where to Look

- Adding your structure is done once
  - Organize points
  - Consistent naming
  - Static configured data
  - Data from other systems
- This structure benefits all PI users forever
  - Searches across PI systems
  - Search for information related to the business
  - Ability to view and use additional information

Summary of new AF 2.0 features

- Improved element hierarchy
- Improved searching capabilities
- Object history (versioning, query dates)
- Hierarchical attributes
- New attributes types
- Enumeration sets
- Object level security integrated with Windows

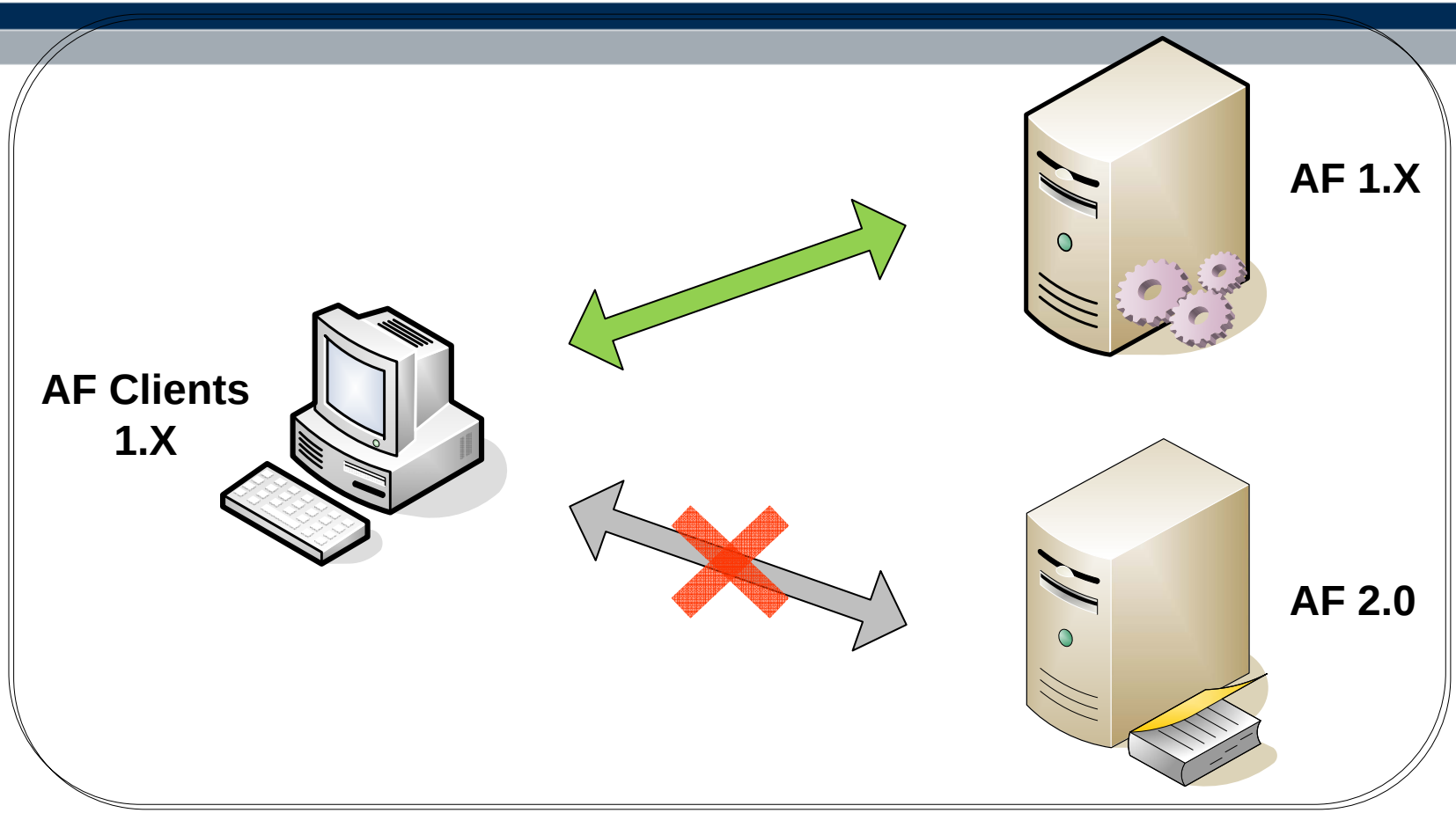
Applications – from OSI

- PI Notifications
  - Store Analysis and Notifications
  - Contacts
  - Use Element Attributes
- Assets connectors
- Event frames
- Configuration database

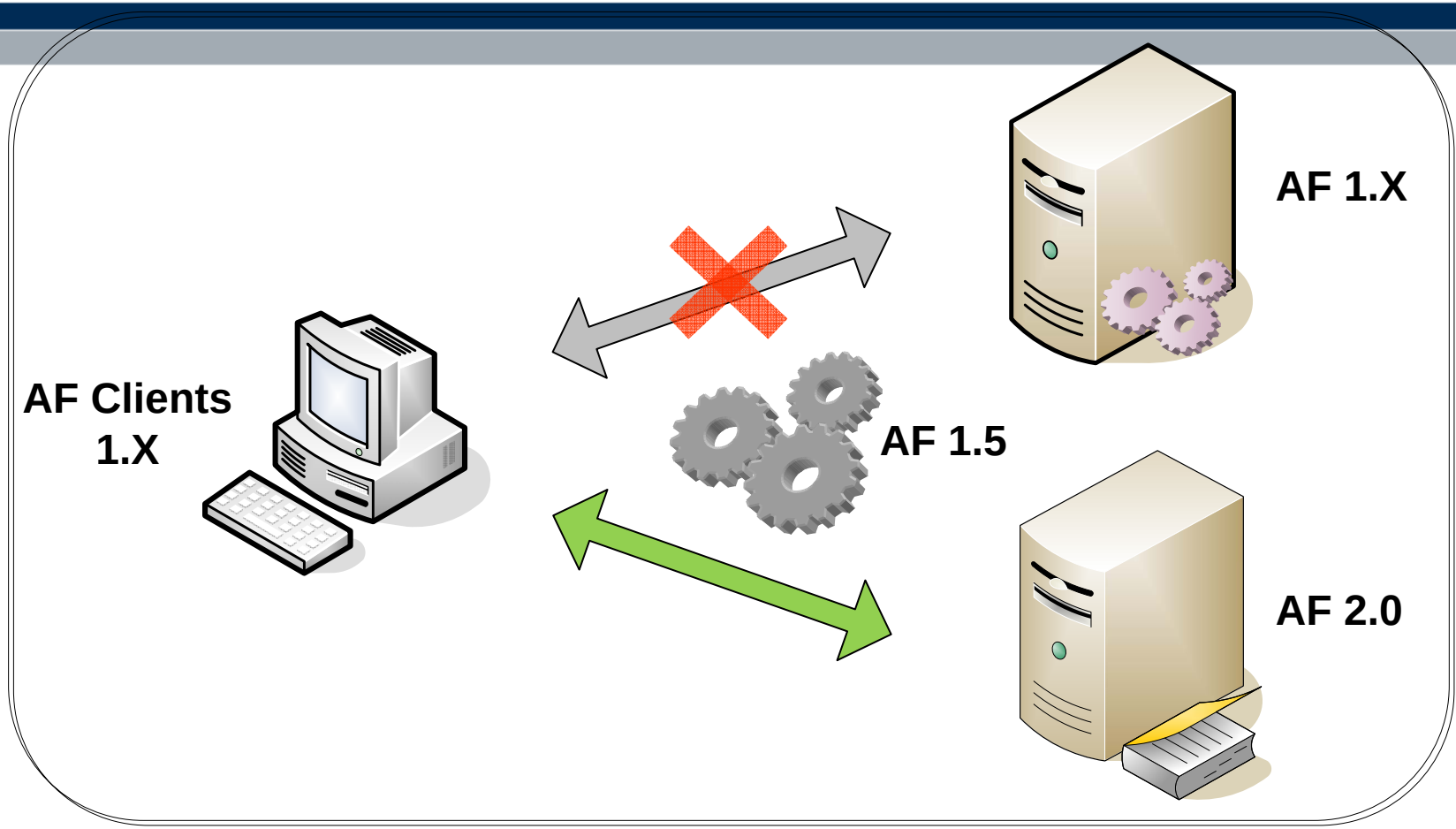
The AF compatibility layer

- Redirect all AF 1.x clients towards AF 2.0
  - AF Explorer
  - AF Modeler for ProcessBook
  - AF Excel Add-ins
  - Custom DR, AR
- New AF 2.0 features not supported by old clients

No compatibility layer



With the AF 1.5 compatibility layer

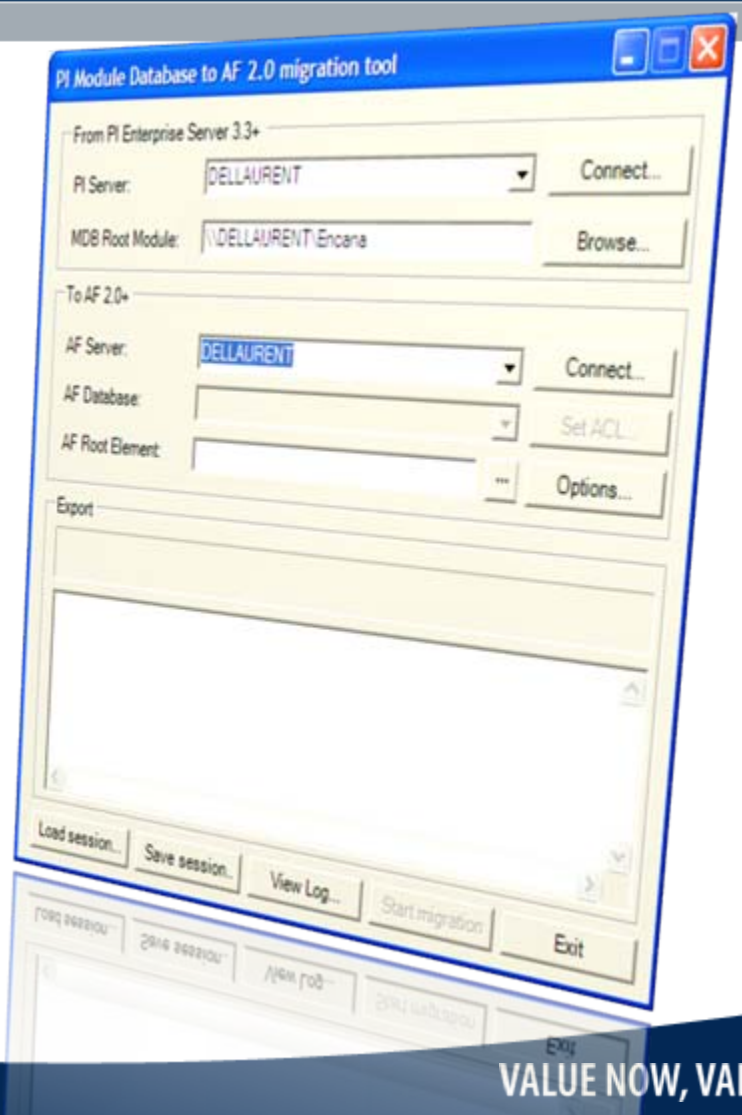


AF upgrade utility

From AF 1.x
To AF 2.0

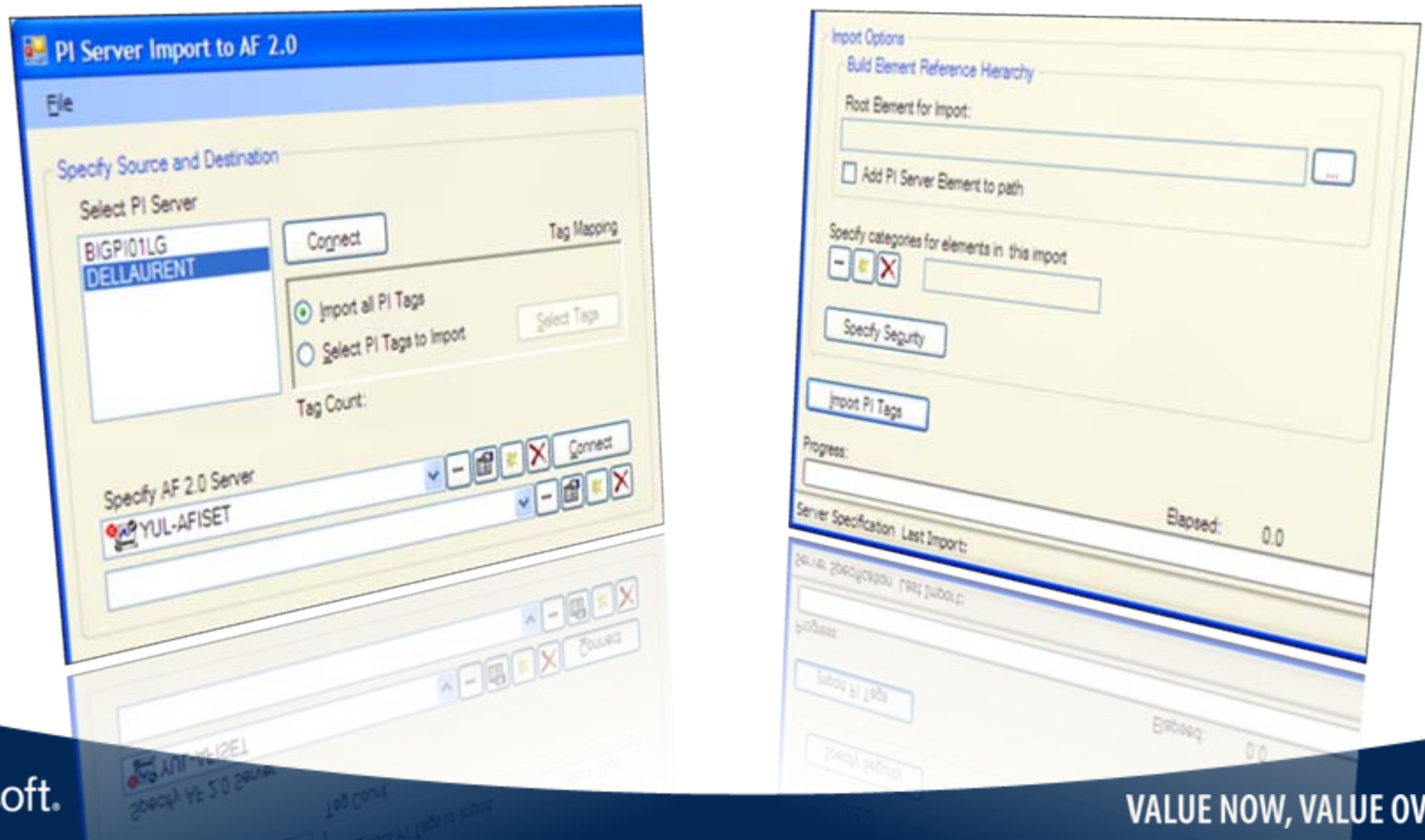
Migration from PI MDB

From PI MDB
To AF 2.0



Getting started with AF 2.0

The PIServerImport utility



Requirements

- SQL Server 2005 or SQL Server Express 2005
- PI Server 3.2.354.0 or more recent
- Microsoft .NET Framework 3.0
- Operating System must be Windows XP or greater