

Data Connectivity / EDI

Concepts, Considerations, Current State

Robert Entin

Vornado Realty Trust
CIO

Integrated Business Systems
Chairman /CTO

Why am I here?

- Because I was asked?
- Systems interfaces / data connectivity, rich topic
 - Topic elicits emotion, expectations vs. experiences?
 - EDI been around a long time, increasing geometrically
 - Lots of jargon, BI, XML schemas, DTDs, SaaS, SOAP
 - Industry Standards, emerged ok?
- Where are we? Is it a good place?
- Perspective as a software developer and end user
- Is there a right answer? How many?

Agenda

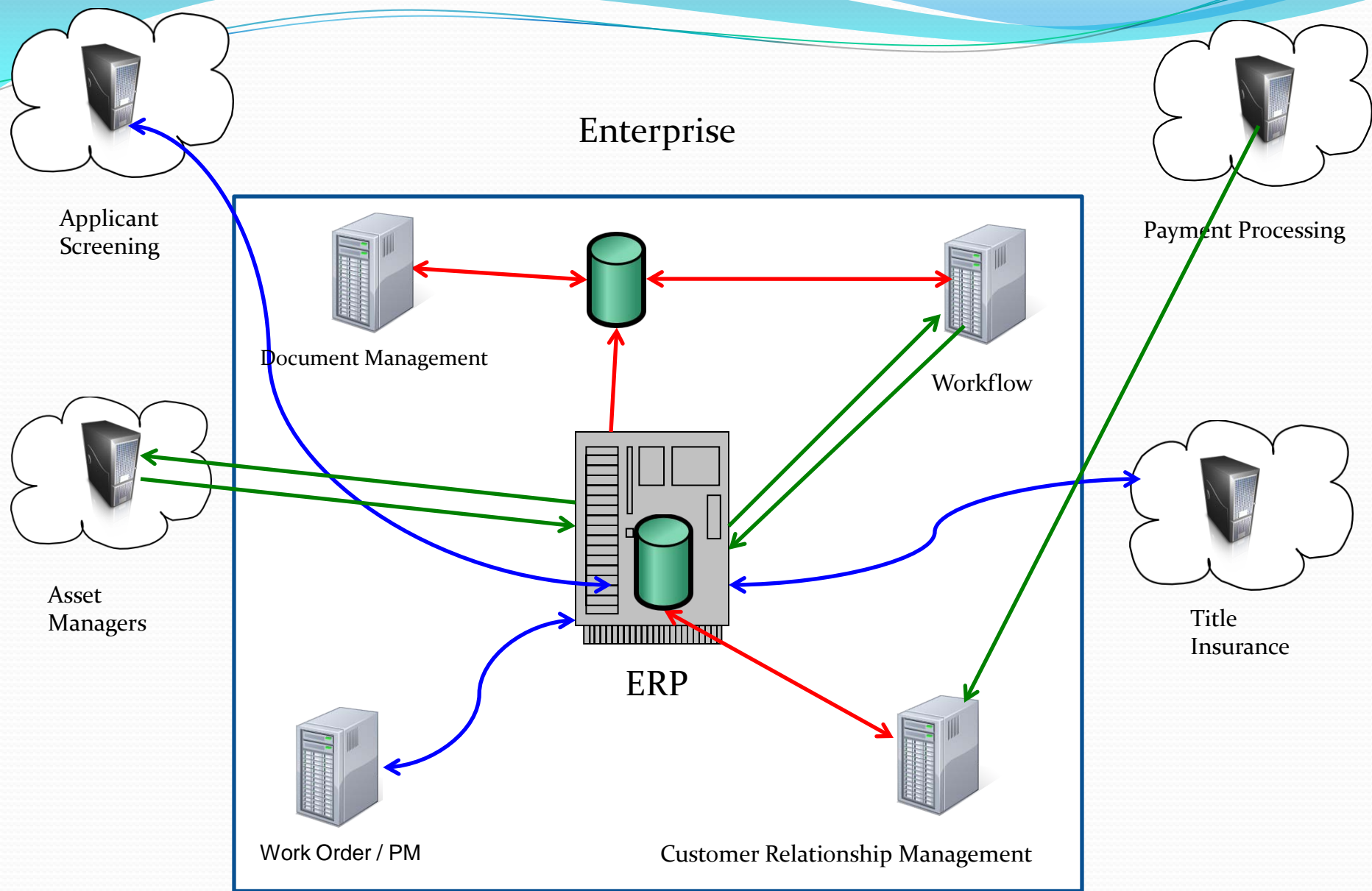
- What are the problems, issues and needs?
- What are the alternatives for?
 - Transport
 - Connection
- Where are some more or less appropriate?
- Status:
 - How are we doing?
 - Are we where we should be?
 - Is there an “answer”?
- Questions and Answers

Transport

- Bisect into two modes
 - Transactional (batch and real-time)
 - BI/Reporting, database connectivity
- Connection type
 - Synchronous vs. Asynchronous
- Connection format
 - Flat file (ACD, CSV, etc)
 - XML, DTD schema
 - Database (ODBC, JDBC)

Connection

- Discrete import / export
 - FTP, NTFS file system connection
- Synchronous service
 - Web service, RPC, RMI, CORBA, etc.
- Database Connection



Enterprise

Applicant Screening

Payment Processing

Document Management

Workflow

Asset Managers

Title Insurance

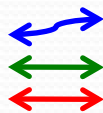
ERP

Work Order / PM

Customer Relationship Management

Extensibility:

- Closely coupled/trusted
- Peer/remote/unknown



Real-time web service, RMI, RPC, etc

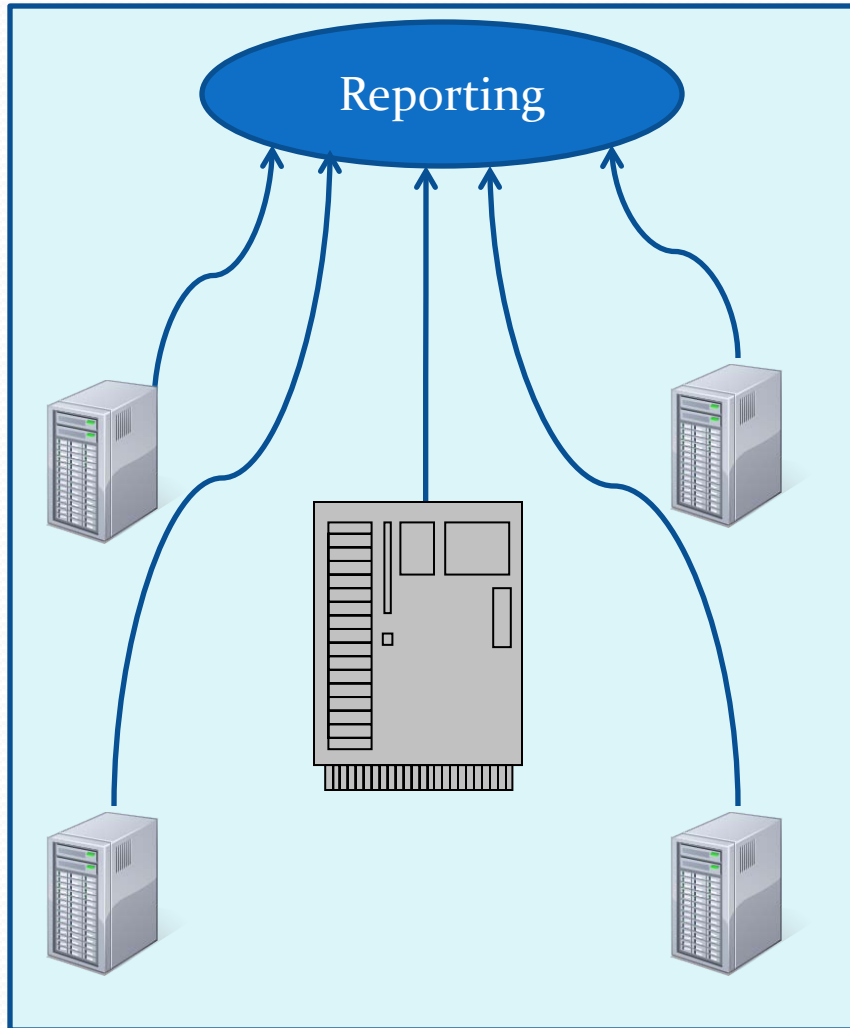
Discrete interface, import / export

DB connection

Type:

- Asynchronous
- Synchronous

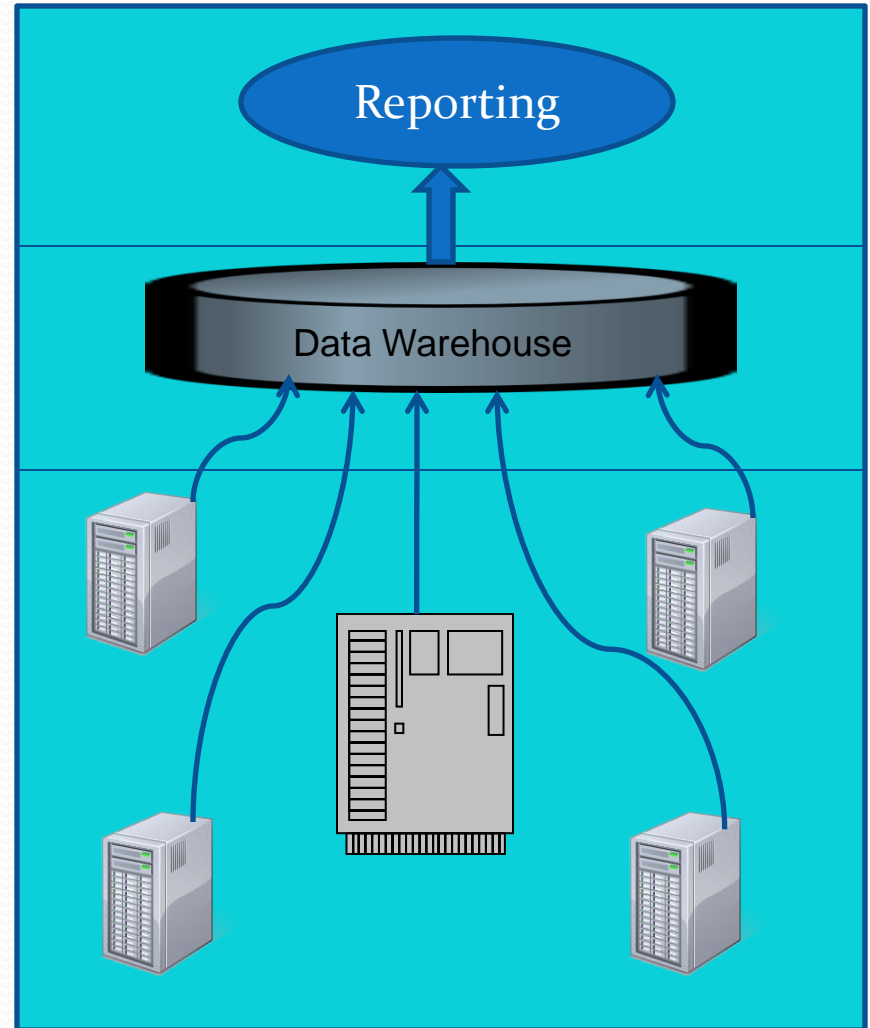
Business Intelligence / Reporting



No replication
Precise representation

Disparate bindings

Reporting needs versus data complexity



Uniform data model

Replication, may be complex
Synchronization issues

State of underlying data structures

XML / DTDs - What's the story

- Extensibility, how and when important
- XML relationship to HTML, keep that in mind
- Pros and cons of XML as a transport
- Industry standard schemas (MISMO), good?
- 2001 prophecy, bots buying and selling everything

Methods of Data Transport

	Transactions		BI/Reporting
	Batch	RT	
Import/Export	Optimal	Data Stale	Acceptable
Service	Bandwidth Issues	Optimal	Typically N/A
DB Connection	High Bandwidth	Optimal	Optimal

Questions and Answers

- Conclusions?
 - Think about needs first, keep an open mind
 - Be patient, devil in details
- Mapping, mapping, mapping