Enterprise Technology Services

New Life for a Legacy System

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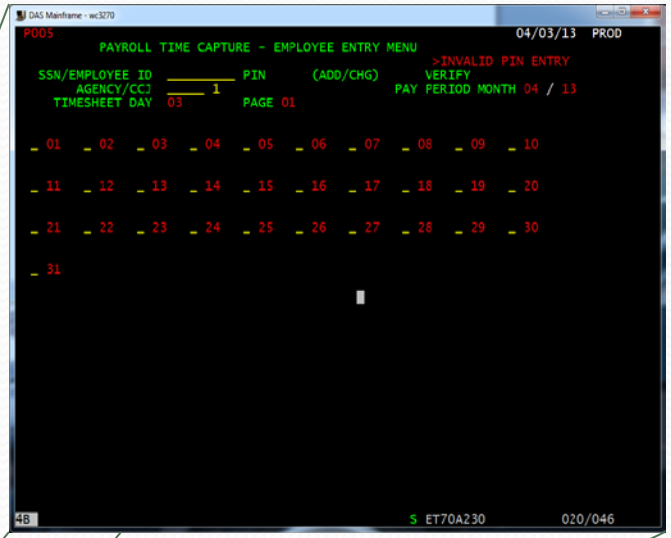
Enterprise Technology Services

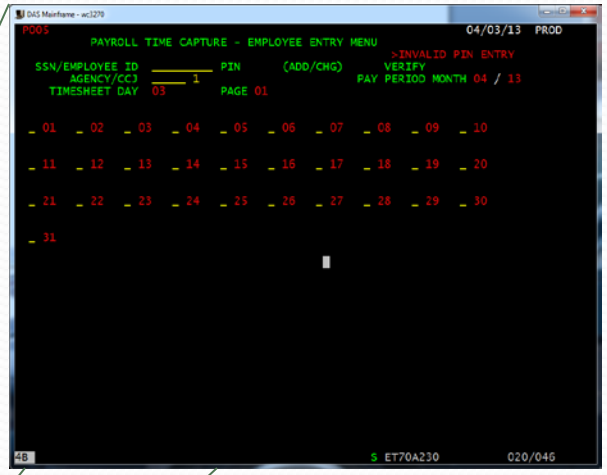
Overview

- Example of a Legacy System
- Current Status of Legacy System
- Customers Requirements
- Challenges Replacing Legacy Systems
- Modernizing your Legacy Systems
- Current Architectures
- Questions

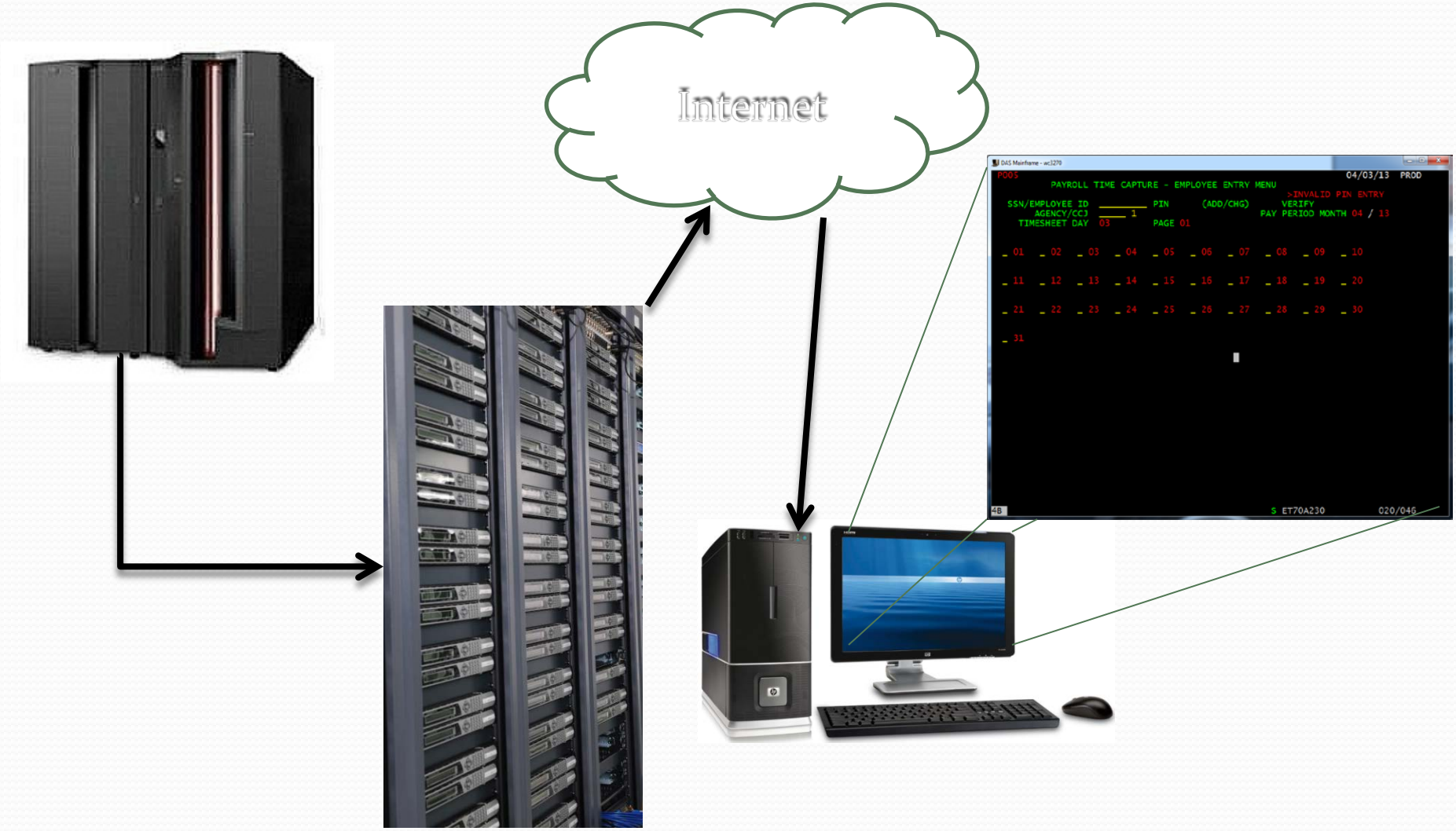
History of a Legacy System



Current State



Current State with enhancements



What Do The Customers Want?

In an ever increasing digital environment, the driving need for on-demand data spanning enterprise applications and multiple agencies will continue to grow.

What are the Gaps?

- Agency needs to couple time reporting with other data to satisfy requirements for state, local and federal budget dollars
- The increasing demand to share information between Agencies, their applications and databases
- The ability to compile on demand data from multiple sources using Application Standard Interfaces and present them in a single modern application

How Are Agencies Filling Gaps?

To fill the gaps left by legacy systems, agencies over the years have implemented their own time recording and other shadow systems to meet their business needs.

These shadow systems meet agency requirements however they have created some other issues.

- Additional FTE to support double entry for monthly time
- Additional technical staff to develop batch processes to send data between systems
- Non standardized ways of collecting and entering time
- The ability to use electronic workflow to streamline timekeeping processes (time off requests, sick time, etc.).

Challenges to Replace Legacy Systems

Budget and staff constraints

- Budgets continue to shrink with the need to do more with less while better faster cheaper will continue to become the new norm
- Business and technical expertise constraints grow tighter as the demand for more data and increased flexibility continue to grow
- Challenges to find ways to maximize service offerings while minimizing the support requirements
- COBOL programmers are becoming retirement eligible and new staff skilled in this programming language are very hard to find
- Additional time needed to reconcile data between systems

Modernizing Legacy Systems

There are many things to consider when modernizing your legacy systems. Below are just a few.

- Costs (System replacement costs can be tens of millions dollars)
- Policy, Statute, Rule Review
- Risk Tolerance
- Data and System Security
- Cultural Change - “We’ve always done it this way!”
- Human Resource, Training, Productivity Impacts
- Mobility
- Integration with Other Systems
- Data Conversion

Opportunity Knocks!

The Improving Government Committee recognized the need and chartered the Online Time Project to address the time entry problems faced by many agencies today.

Project Success Metrics

Web Time Capture

- Develop a Web based time capture application for use by state employees to replace the existing DAS “green screen” systems and paper time sheets.

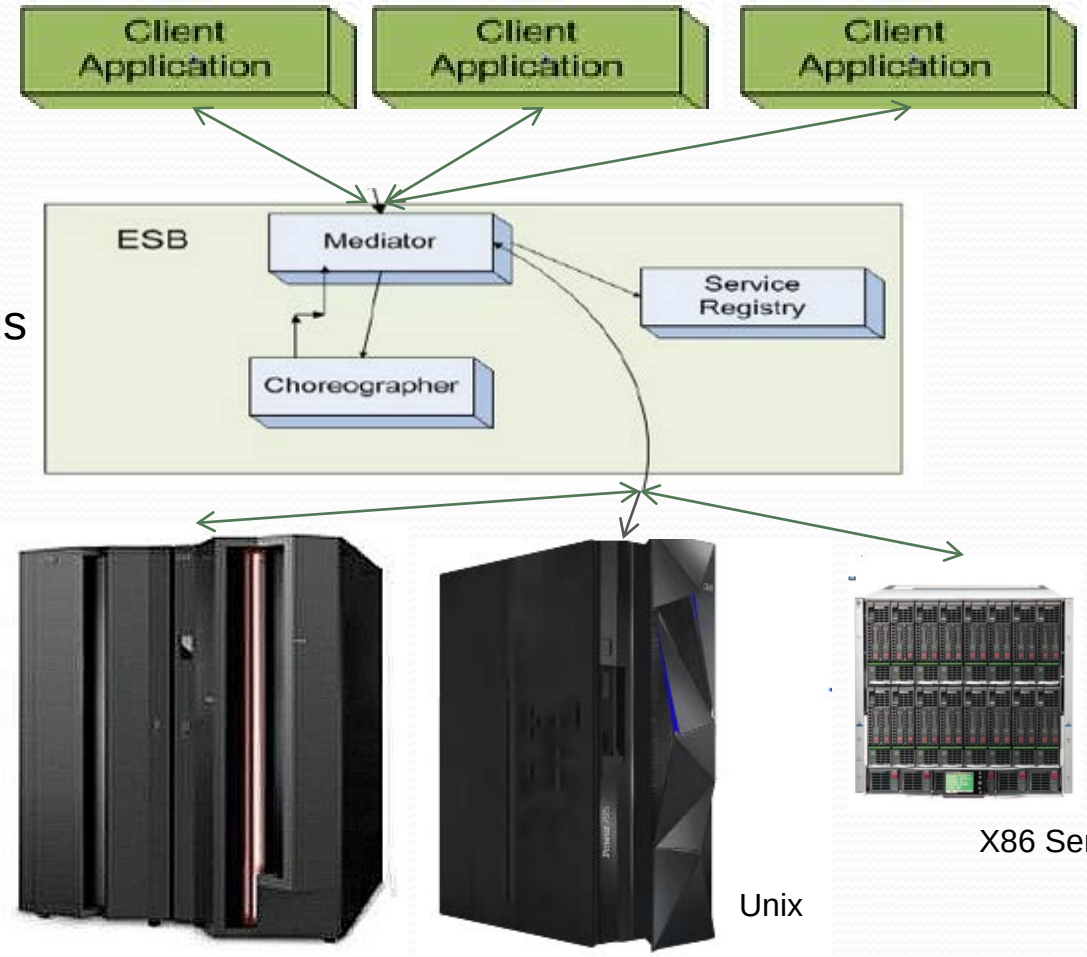
Project Success Metrics cont.

Service Oriented Architecture Middleware

- Provide the ability for agencies to utilize their current time capture applications, develop new, or purchase a time keeping application tailored to their business needs that integrates with the Oregon State Payroll Application through a Service Oriented Architecture (SOA) Enterprise Service Bus (ESB).
- Implement the Service Oriented Architecture (SOA) Enterprise Service Bus (ESB) to allow for future expansion opportunities.

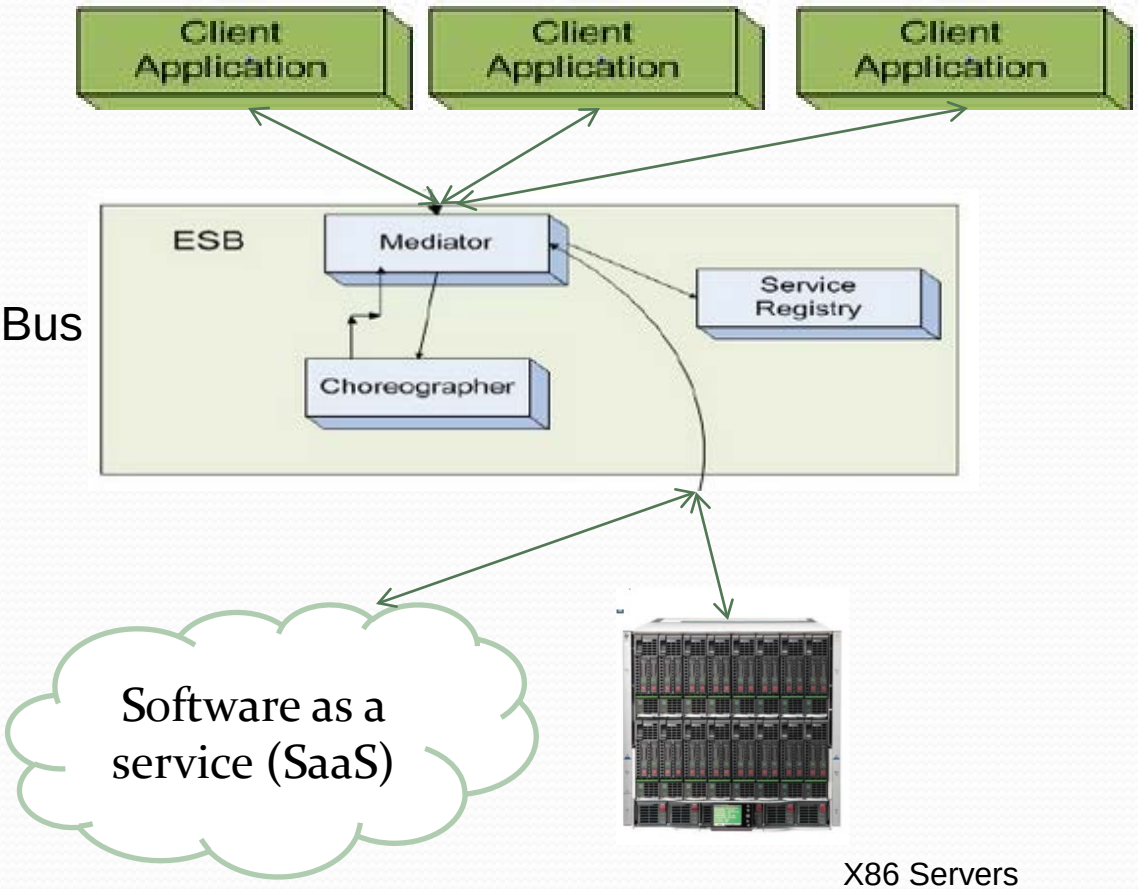
Architecture for your Legacy Systems

Enterprise Service Bus

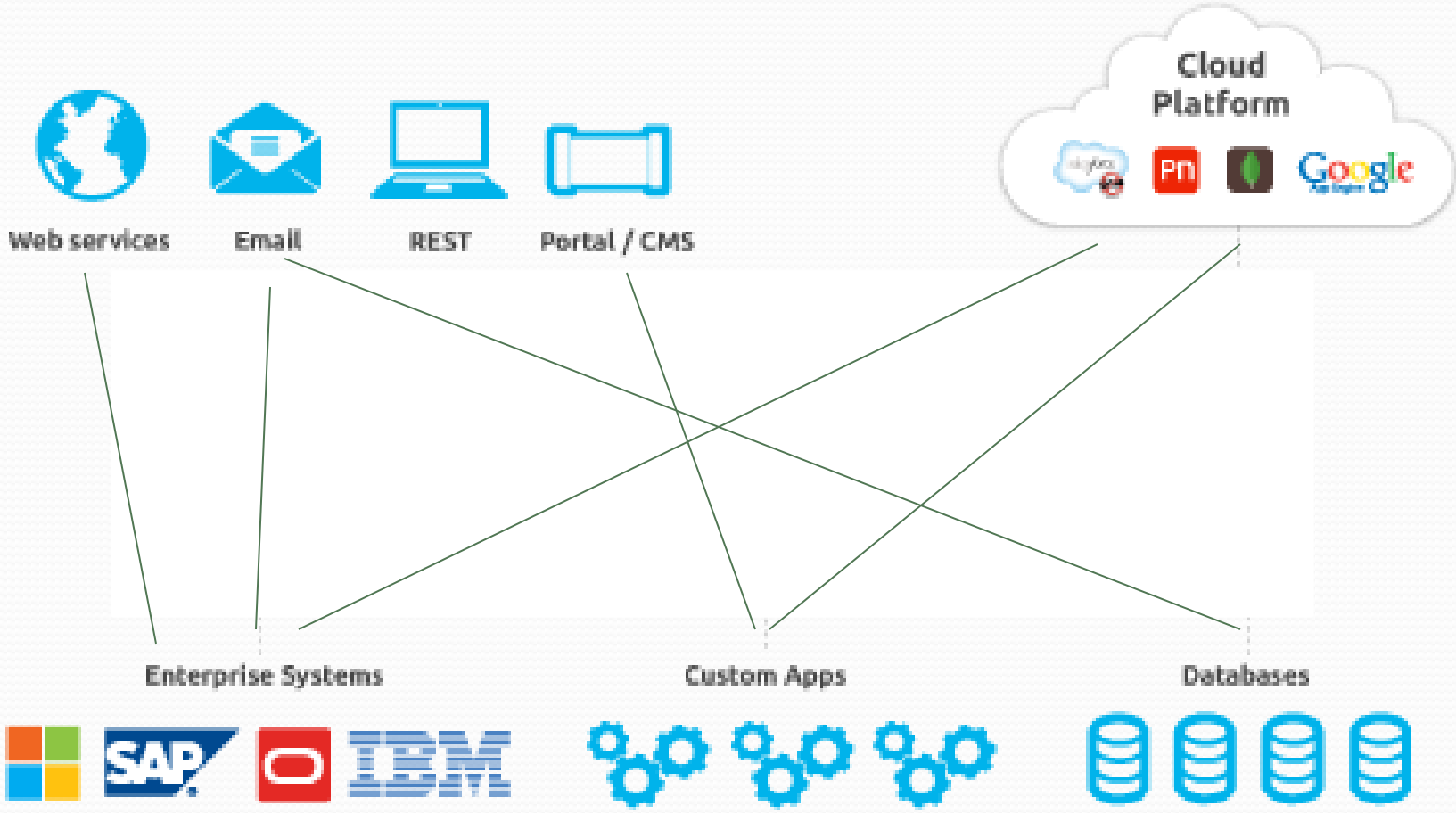


Modernizing Your Legacy Systems

Enterprise Service Bus



Application Integration



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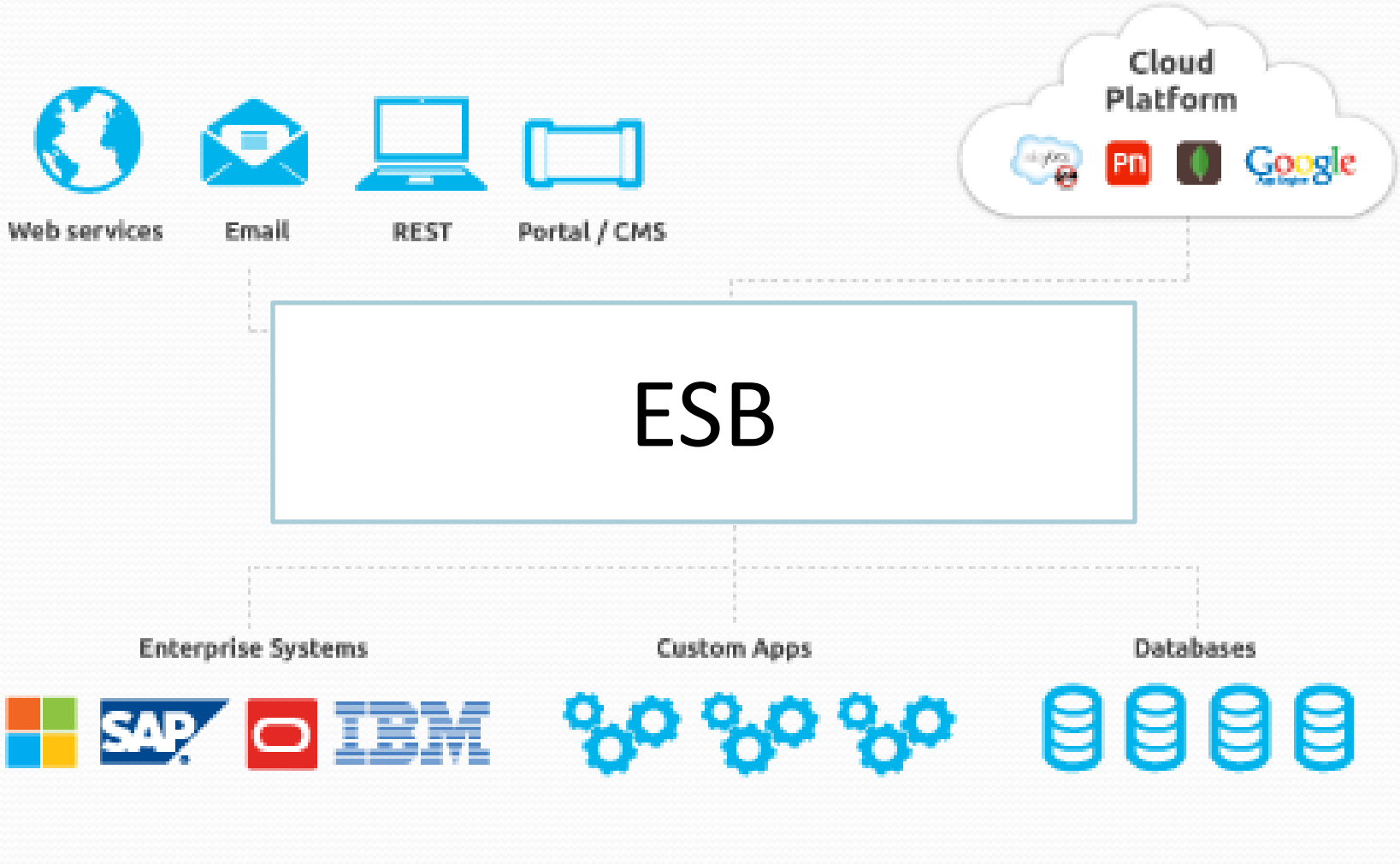
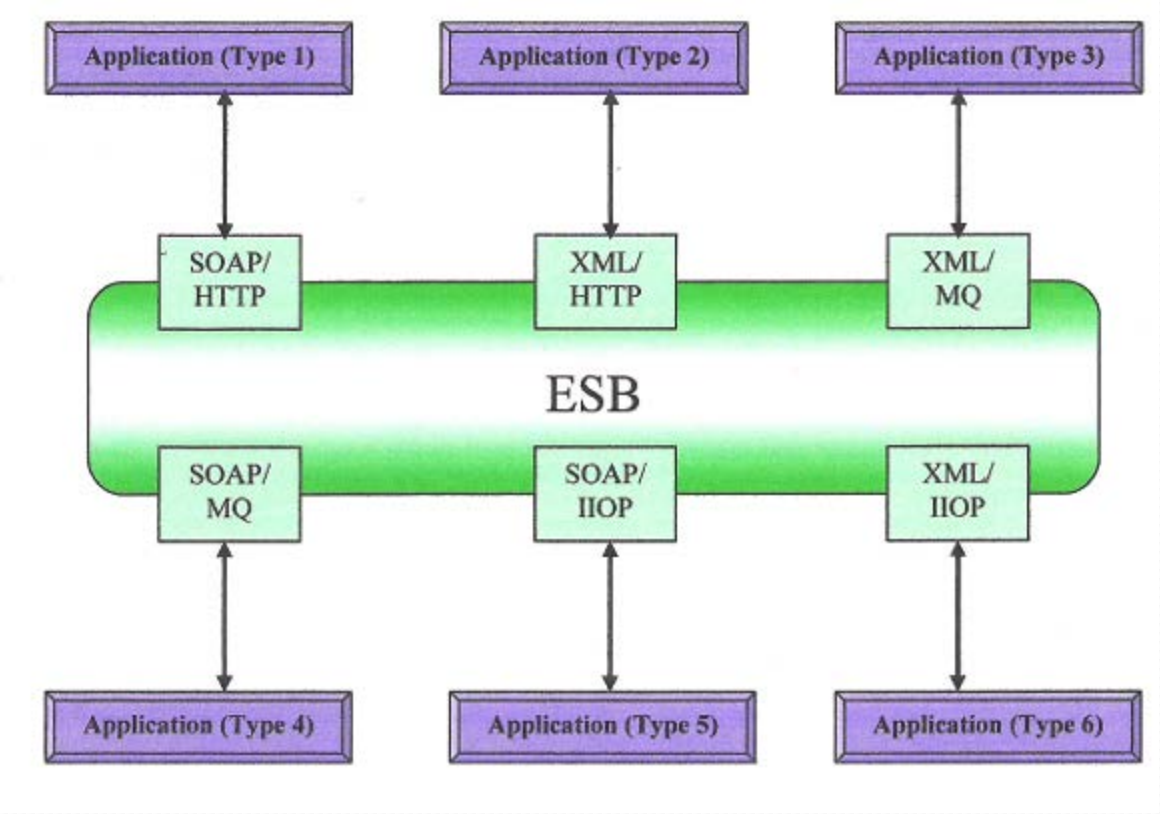


ESB Core Features

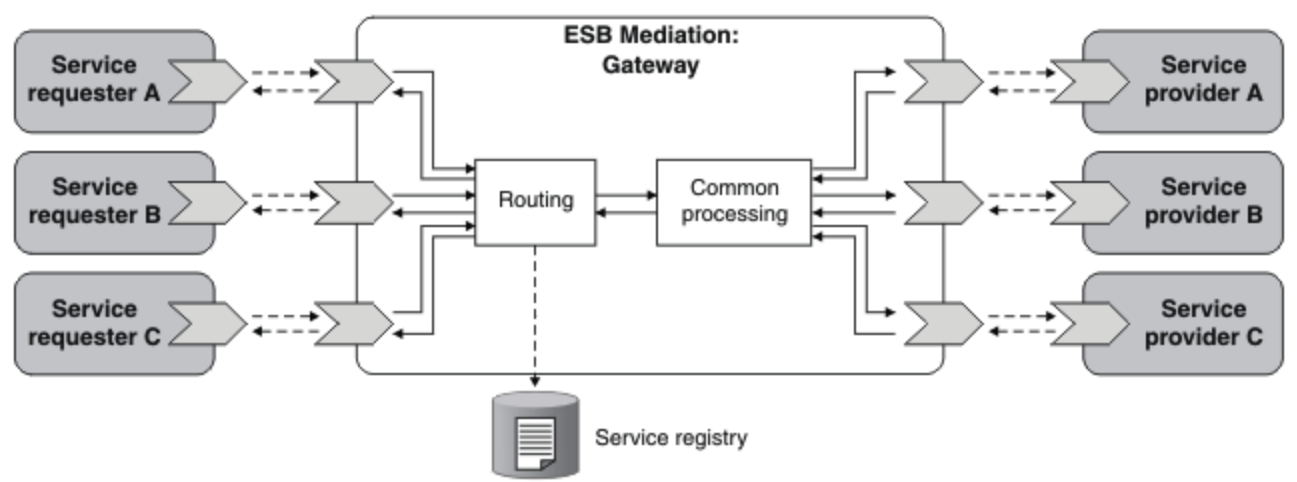
- Protocol Transformation
- Message Processing & Transformation
- Security AAA (Authentication, Authorization, Administration)
- Service Orchestration
- Choreography

Protocol Transformation

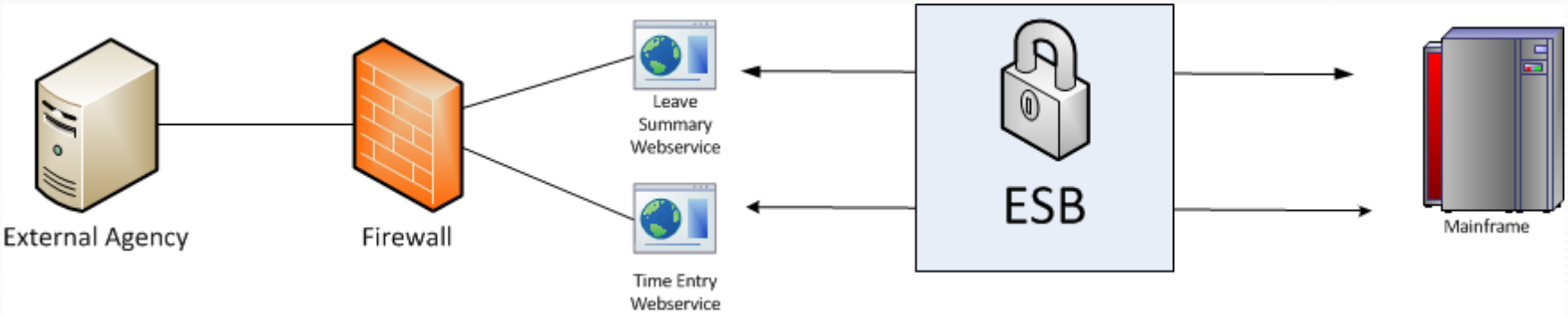


Message Processing

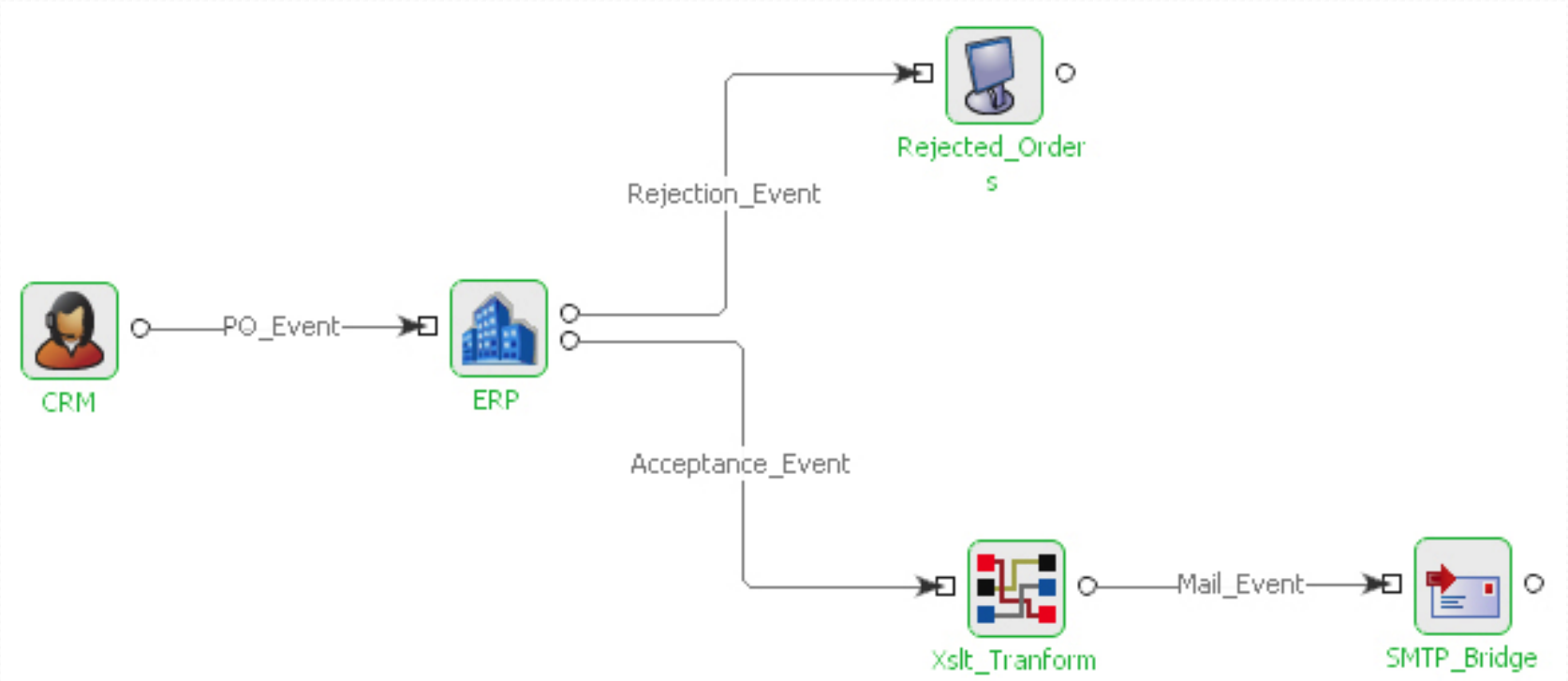
AAA Security



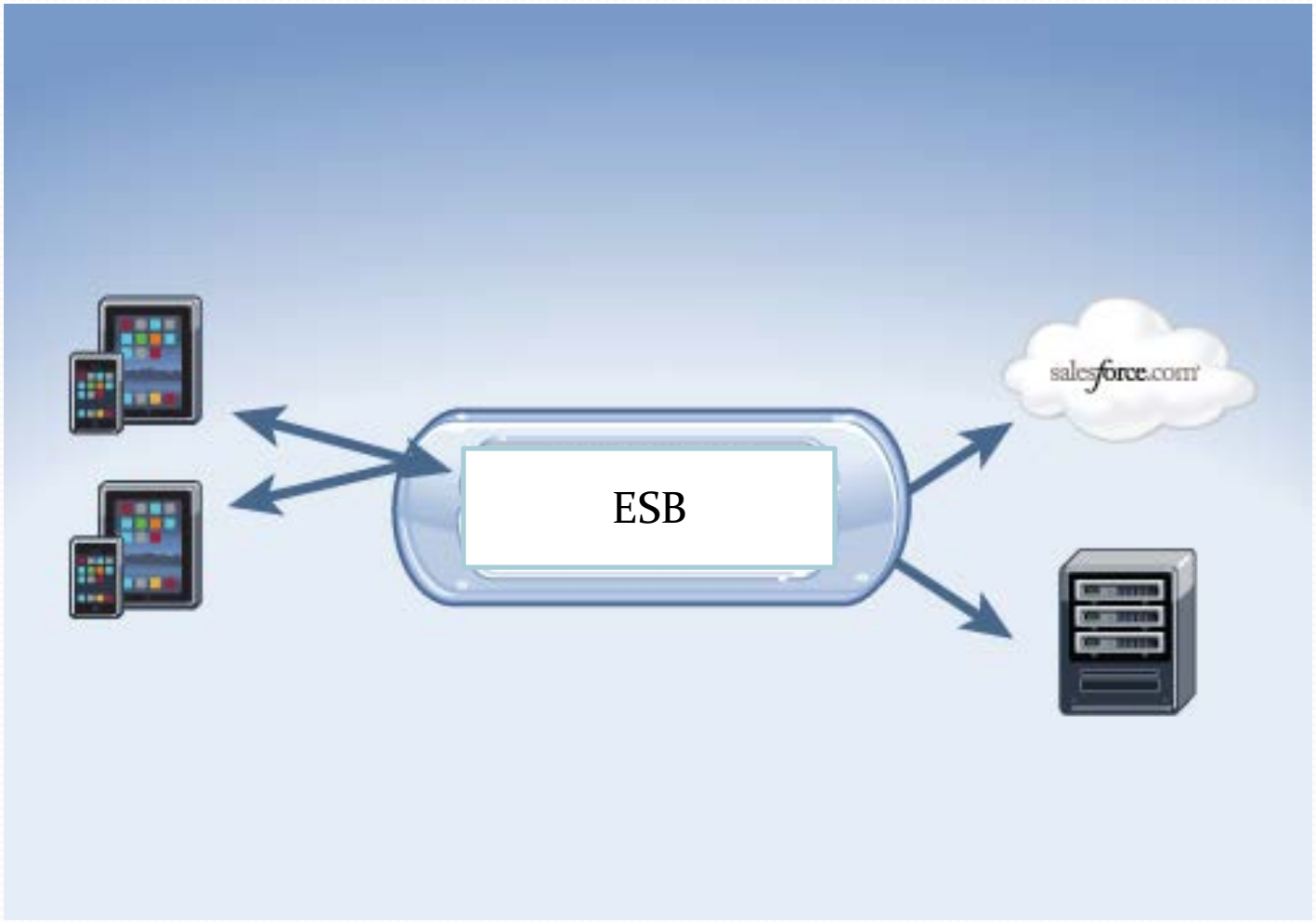
Time Capture Message Flow



Process Choreography



Mobile API's



ESB Key Features

- Centralized Integration points
- Configuration vs. Code
- Reusable Code
- Central Service Registry
- Secure

ESB Vendors

Commercial

- IBM
- Oracle
- Microsoft
- Sonic
- Azure
- Amazon

Open Source

- Jboss (Redhat)
- Mule
- Talend
- WSO2
- Apache ServiceMix
- Many more….

Questions?

THANK YOU FOR ATTENDING !

Be sure to stop by and see us at our booth!