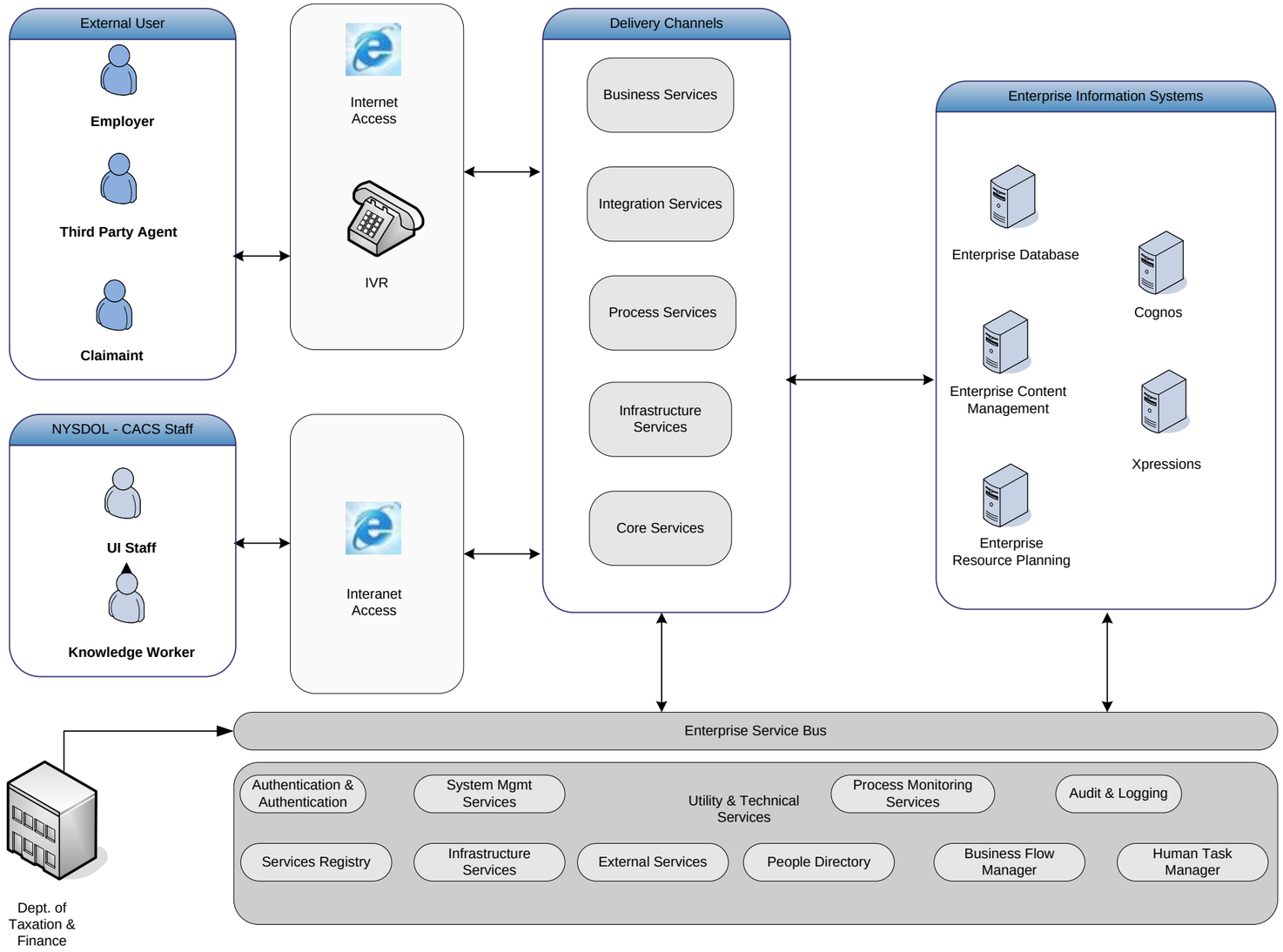
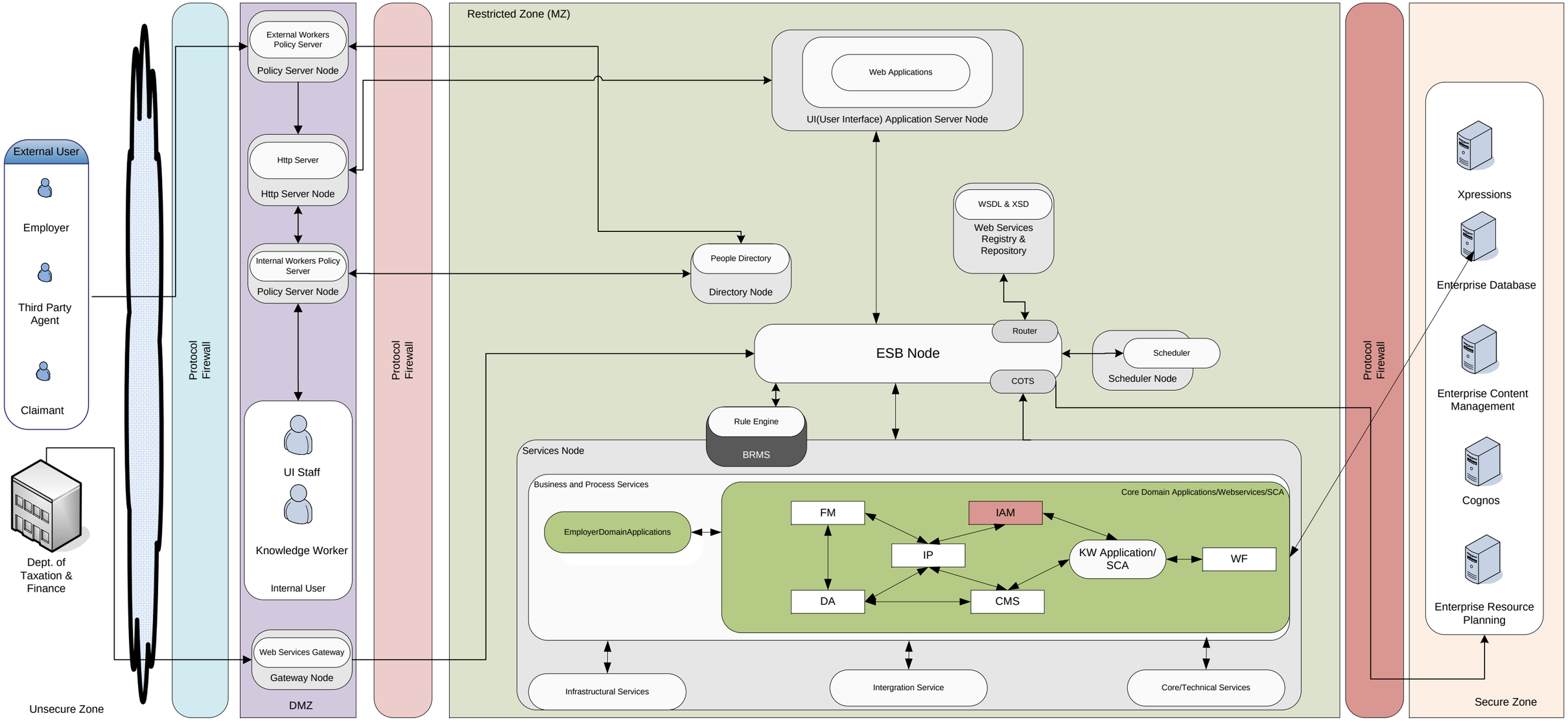
Architecture Overview Diagram – Enterprise View

Thursday, December 05, 2013



Information contained in this attachment was accurate at date of original analysis.
Information contained will be clarified and updated post bid award during vendor on-board process.



Core Architecture Overview Diagram System View

IP – Interested Party

CMS – Case Management System

IAM – Identity Access Management

FM – Financial Management

DA – Designated Allocation

KW – Knowledge Worker

WF - WorkFlow

Interested Party Management: The Interested Party Management framework provides a collection of services that enables its consumers to create, update, and retrieve different Interested Parties. Interested Parties may be workers, employers, owner-officers, third party representatives, or others who have a business relationship with the Dept of Labor. This module focuses on providing services to manage these "Interested Parties", including the ability to maintain the relationships between parties, provide searching functionality, and the ability to update or modify an interested party's information such as name, address, email, etc.

Case Management: The Case Management framework provides a collection of services that enables its consumers to support the creation, modification and retrieval of different types of cases. Core Case Management only handles common attributes of all Cases, such as create date, case status, and case type. Any attributes that are specific to particular business case type is handled within that specific business implementation. The following broad categories of cases are planned to be supported by the CMS module: Liable Employer cases, Audit cases (employer and claimant), Appeals cases and Claimant cases (including multi-claimant, federal, EB, DUA and TAA).

Workflow Management: The Workflow Management framework provides a collection of services that enables its consumers to support the administration and management of workload through the creation, assignment and modification of tasks/queues. This module focuses on providing automated and manual options to create, assign, route, review and modify tasks based on business events and processes, and options to administer, manage, and report on user assignments and overall workload. It is designed to provide integration with the Case Management, Interested Party Management and Correspondence Management services

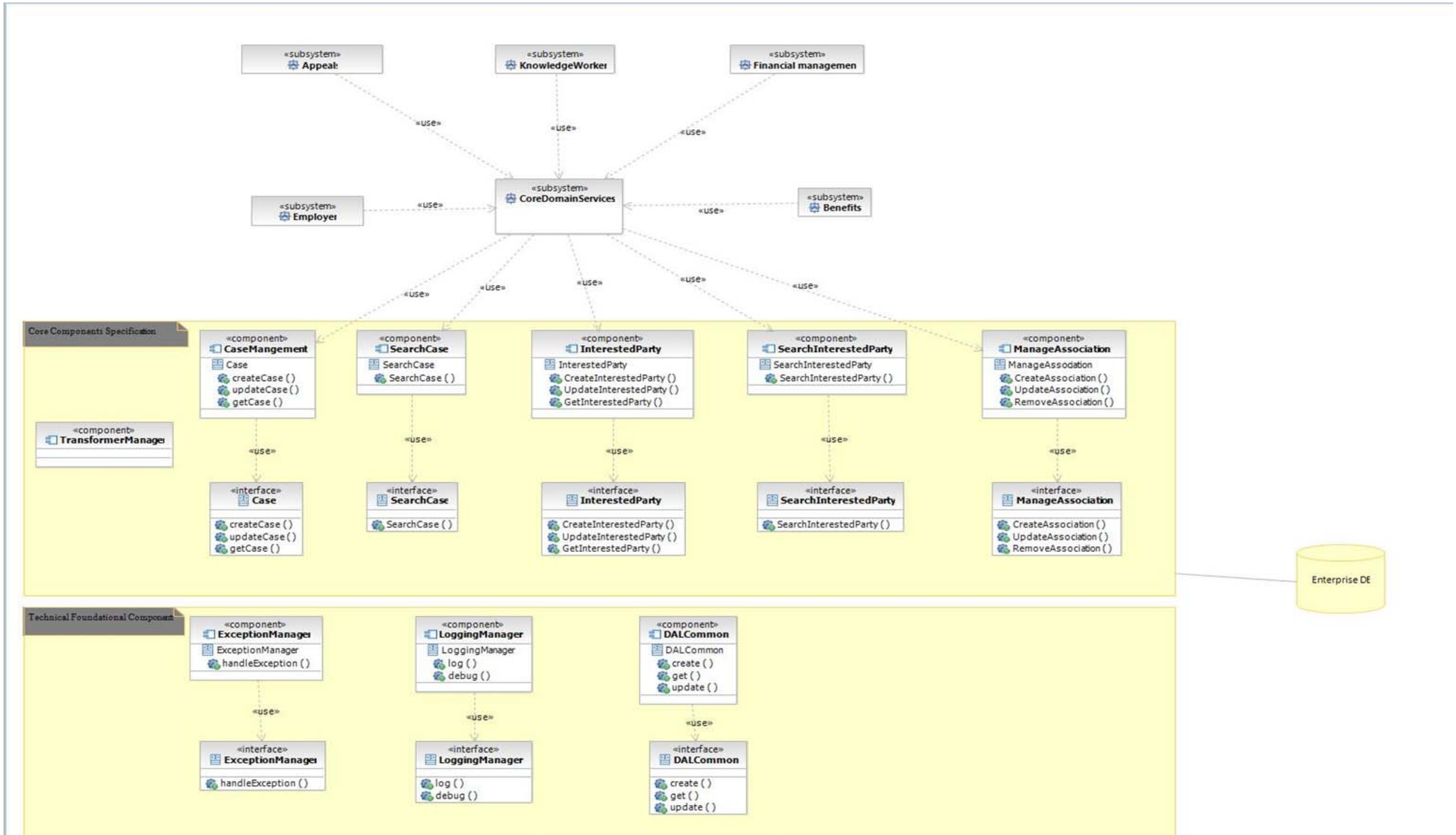
Financial Management: The Financial Management module provides a centralized bookkeeping framework that will consistently record all financial transactions that affect the Unemployment Insurance System's monetary resources. The system will provide all necessary options to the business processes to properly record and retrieve financial transactions. This includes recording receivables due, remittances paid, disbursements made to claimants, and employer charges.

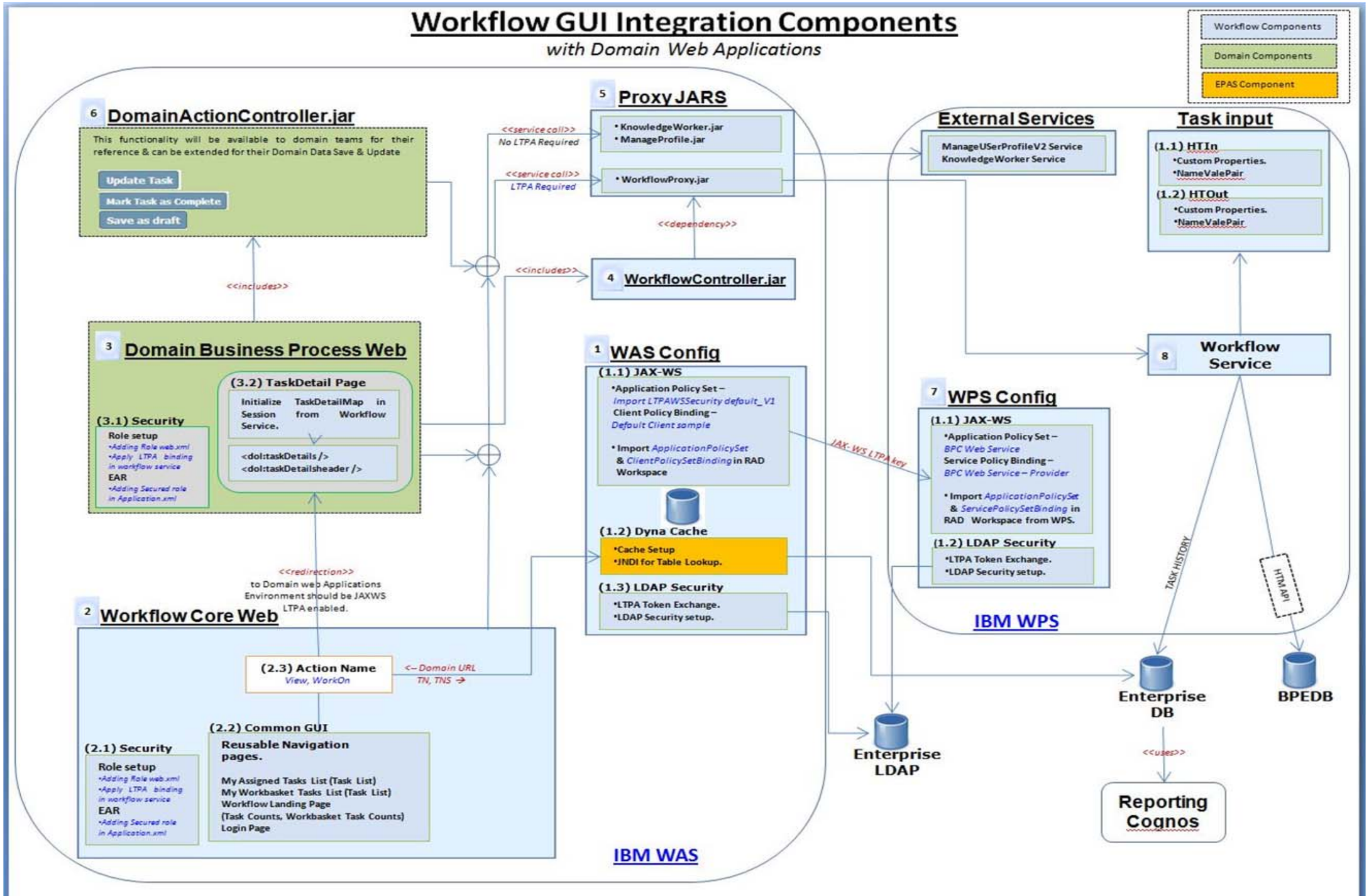
Identity and Access Management: Identity and Access Management encapsulates people, processes and products to identify and manage the data used in our systems to authenticate users and grant or deny access rights to data and system resources. The Identity (and Access) Management (IDM/IAM) module provides the services to register and maintain the online accounts for the users of DOL systems using statewide ny.gov services. This includes the user's ability to self register (create and ID and password) as well as collecting/maintaining customer identity information such as email address, optionally DMV ID, SSN etc. This is done independent of the customer requesting any specific service from DOL such as "find me a job" or apply for UI Benefits". It also provides a single account that could be used across multiple agencies and single sign on to access all the services (business functions) offered by Labor that require login.

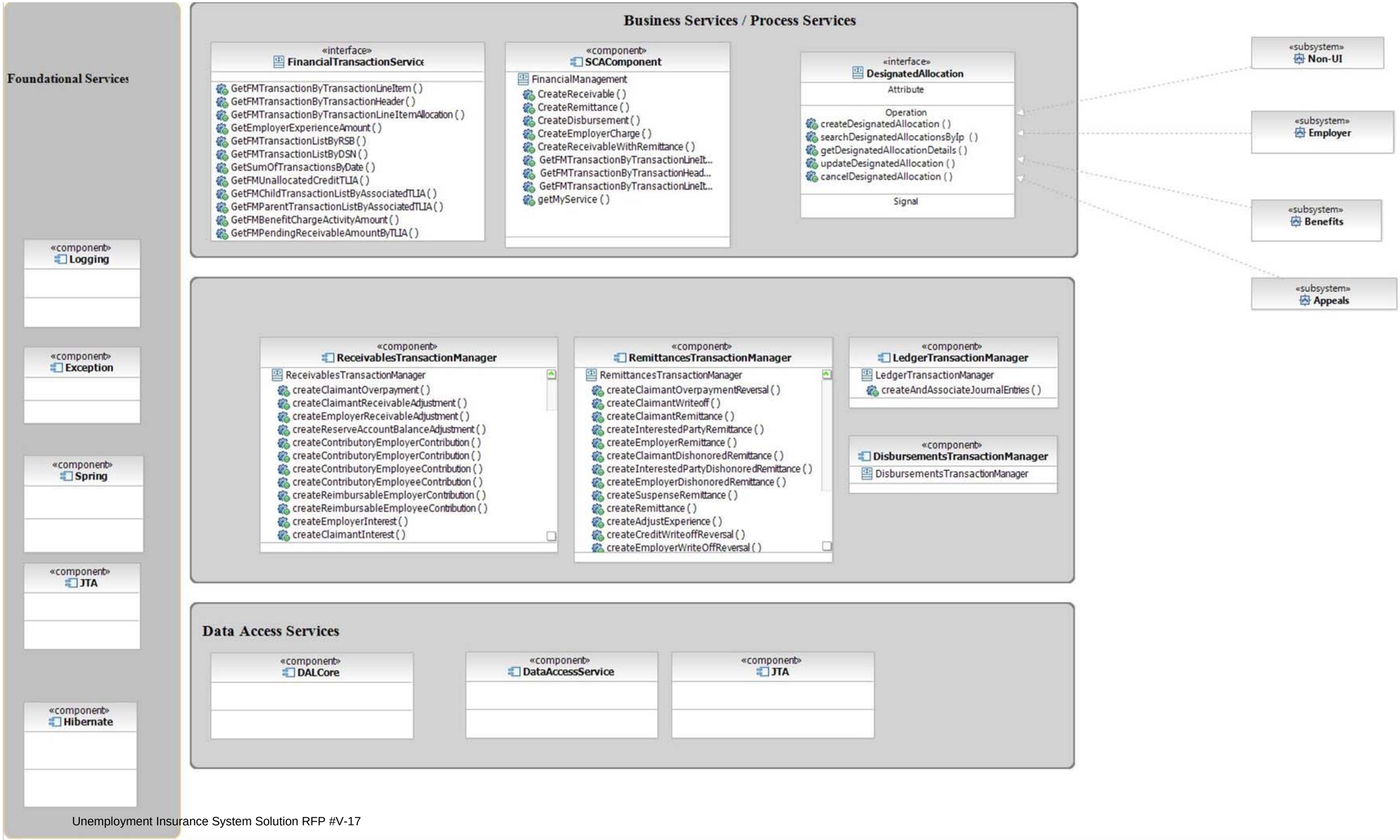
Knowledge Worker Management : The Knowledge Worker Management framework allows for the storing of application user profiles, including work location, contact information, availability, supervisor information, skills, etc. It does not store information related to roles and permissions, as LDAP is used for that purpose. The Knowledge Worker Home Page provides an entry point to the system and allows access to commonly used functions by UI users working on behalf of the Department of Labor. Some of these commonly used functions are as follows: Case search, Workflow accessibility, Interested Party search (See description above for examples of interested parties), and User Profile maintenance.

Interested Party/Case Component Architecture

Thursday, December 05, 2013

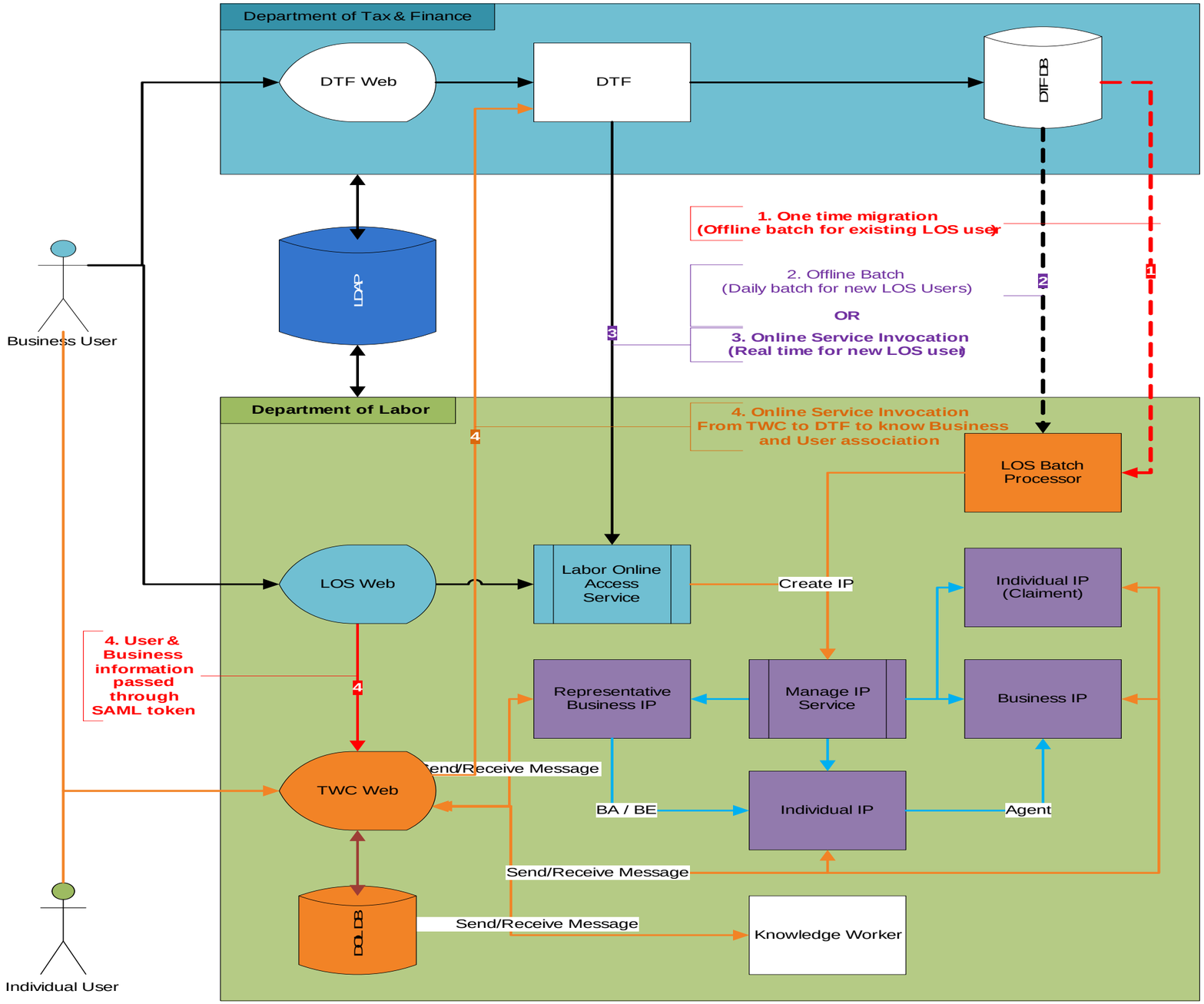



Workflow GUI Integration Components
with Domain Web Applications
Workflow Components
Domain Components
EPAS Component
6 DomainActionController.jar
This functionality will be available to domain teams for their reference & can be extended for their Domain Data Save & Update
Update Task
Mark Task as Complete
Save as draft
<<includes>>
5 Proxy JARS
• KnowledgeWorker.jar
• ManageProfile.jar
• WorkflowProxy.jar
<<service call>>
No LTPA Required
<<service call>>
LTPA Required
<<dependency>>
<<includes>>
4 WorkflowController.jar
External Services
ManageUSerProfileV2 Service
KnowledgeWorker Service
Task input
(1.1) HTIn
•Custom Properties.
•NameValePair
(1.2) HTOut
•Custom Properties.
•NameValePair
3 Domain Business Process Web
(3.1) Security
Role setup
•Adding Role web.xml
•Apply LTPA binding in workflow service
EAR
•Adding Secured role in Application.xml
(3.2) TaskDetail Page
Initialize TaskDetailMap in Session from Workflow Service.
<dol:taskDetails />
<dol:taskDetailsheader />
1 WAS Config
(1.1) JAX-WS
•Application Policy Set –
Import LTPAWSSecurity default_V1
Client Policy Binding –
Default Client sample
• Import ApplicationPolicySet & ClientPolicySetBinding in RAD Workspace
(1.2) Dyna Cache
•Cache Setup
•JNDI for Table Lookup.
(1.3) LDAP Security
•LTPA Token Exchange.
•LDAP Security setup.
JAX-WS LTPA key
7 WPS Config
(1.1) JAX-WS
•Application Policy Set –
BPC Web Service
Service Policy Binding –
BPC Web Service – Provider
• Import ApplicationPolicySet & ServicePolicySetBinding in RAD Workspace from WPS.
(1.2) LDAP Security
•LTPA Token Exchange.
•LDAP Security setup.
8 Workflow Service
TASK HISTORY
HTM API
IBM WPS
<<redirection>>
to Domain web Applications
Environment should be JAXWS
LTPA enabled.
2 Workflow Core Web
(2.3) Action Name
View, WorkOn
<– Domain URL
TN, TNS →
(2.2) Common GUI
Reusable Navigation pages.
My Assigned Tasks List (Task List)
My Workbasket Tasks List (Task List)
Workflow Landing Page
(Task Counts, Workbasket Task Counts)
Login Page
(2.1) Security
Role setup
•Adding Role web.xml
•Apply LTPA binding in workflow service
EAR
•Adding Secured role in Application.xml
IBM WAS
Enterprise LDAP
Enterprise DB
BPEDB
<<uses>>
Reporting Cognos


Foundational Services
«component» Logging
«component» Exception
«component» Spring
«component» JTA
«component» Hibernate
Business Services / Process Services
«interface» FinancialTransactionService
GetFMTransactionByTransactionLineItem ( )
GetFMTransactionByTransactionHeader ( )
GetFMTransactionByTransactionLineItemAllocation ( )
GetEmployerExperienceAmount ( )
GetFMTransactionListByRSB ( )
GetFMTransactionListByDSN ( )
GetSumOfTransactionsByDate ( )
GetFMUnallocatedCreditTLIA ( )
GetFMChildTransactionListByAssociatedTLIA ( )
GetFMParentTransactionListByAssociatedTLIA ( )
GetFMBenefitChargeActivityAmount ( )
GetFMPendingReceivableAmountByTLIA ( )
«component» SCAComponent
FinancialManagement
CreateReceivable ( )
CreateRemittance ( )
CreateDisbursement ( )
CreateEmployerCharge ( )
CreateReceivableWithRemittance ( )
GetFMTransactionByTransactionLineIt...
GetFMTransactionByTransactionHead...
GetFMTransactionByTransactionLineIt...
getMyService ( )
«interface» DesignatedAllocation
Attribute
Operation
createDesignatedAllocation ( )
searchDesignatedAllocationsByIp ( )
getDesignatedAllocationDetails ( )
updateDesignatedAllocation ( )
cancelDesignatedAllocation ( )
Signal
«subsystem» Non-UI
«subsystem» Employer
«subsystem» Benefits
«subsystem» Appeals
«component» ReceivablesTransactionManager
ReceivablesTransactionManager
createClaimantOverpayment ( )
createClaimantReceivableAdjustment ( )
createEmployerReceivableAdjustment ( )
createReserveAccountBalanceAdjustment ( )
createContributoryEmployerContribution ( )
createContributoryEmployerContribution ( )
createContributoryEmployeeContribution ( )
createContributoryEmployeeContribution ( )
createReimbursableEmployerContribution ( )
createReimbursableEmployeeContribution ( )
createEmployerInterest ( )
createClaimantInterest ( )
«component» RemittancesTransactionManager
RemittancesTransactionManager
createClaimantOverpaymentReversal ( )
createClaimantWriteoff ( )
createClaimantRemittance ( )
createInterestedPartyRemittance ( )
createEmployerRemittance ( )
createClaimantDishonoredRemittance ( )
createInterestedPartyDishonoredRemittance ( )
createEmployerDishonoredRemittance ( )
createSuspenseRemittance ( )
createRemittance ( )
createAdjustExperience ( )
createCreditWriteoffReversal ( )
createEmployerWriteOffReversal ( )
«component» LedgerTransactionManager
LedgerTransactionManager
createAndAssociateJournalEntries ( )
«component» DisbursementsTransactionManager
DisbursementsTransactionManager
Data Access Services
«component» DALCore
«component» DataAccessService
«component» JTA

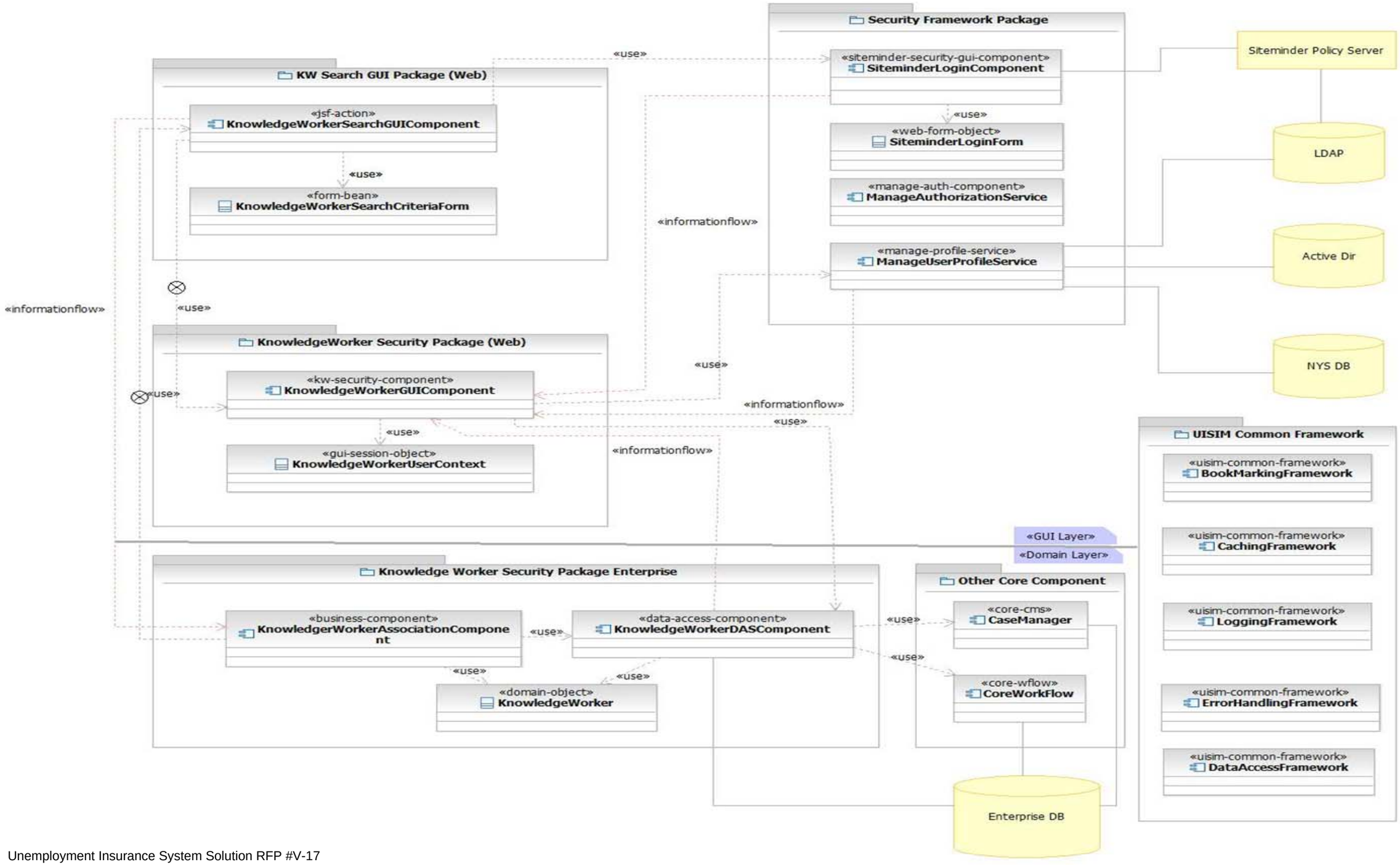
Identity Access Management Component Architecture

Thursday, December 05, 2013



Knowledge Worker Component Architecture

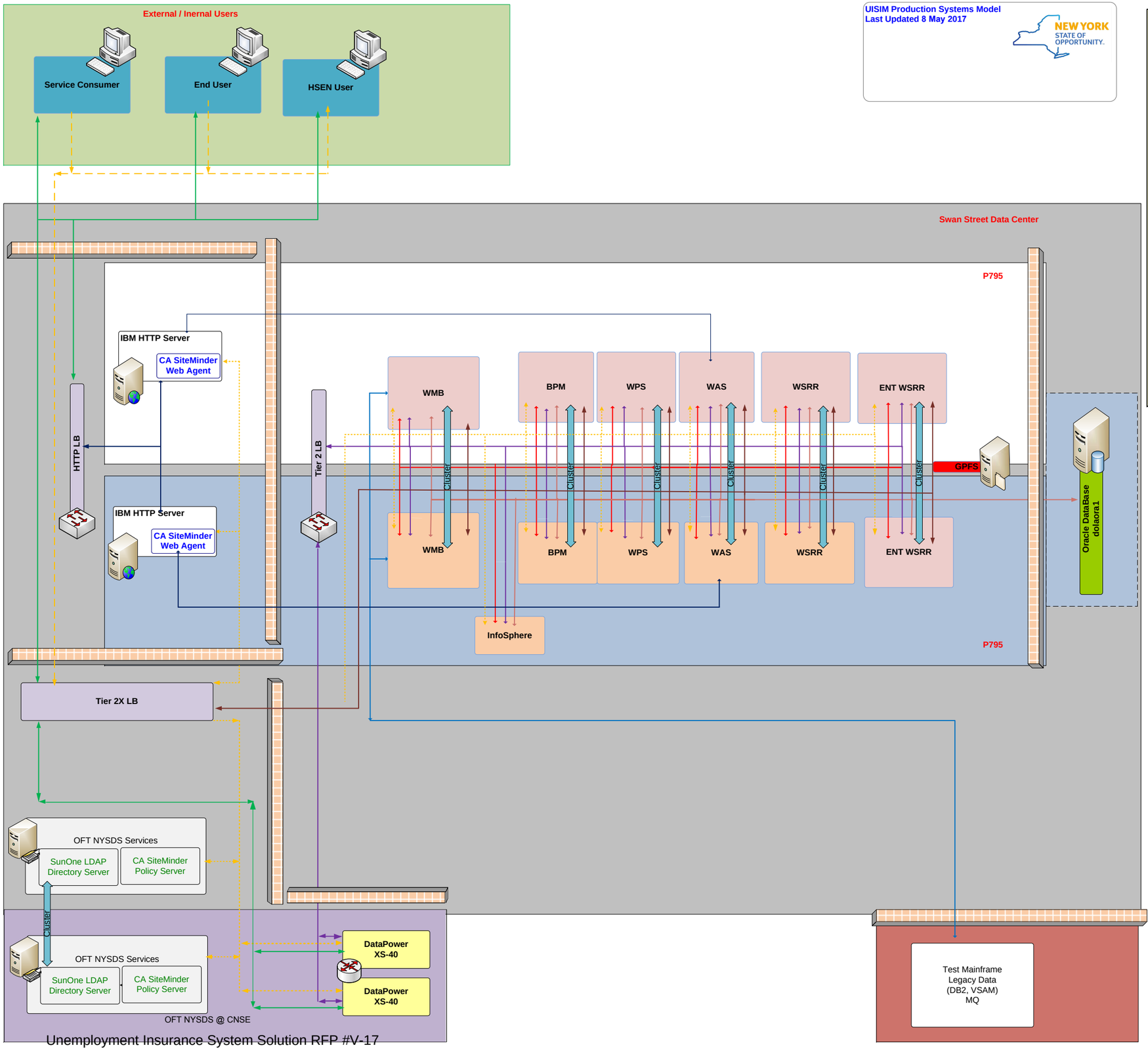
Thursday, December 05, 2013



UISIM Production Systems Model
Last Updated 8 May 2017

NEW YORK STATE OF OPPORTUNITY.

Attachment D - NY Current State Architecture Details



Systems LEGEND

Short Name	Full Name	Version
WPS	WebSphere Process Server	WPS 6.2.0.3
BPM	Business Process Server	BPM 7.5.1.2
WAS	WebSphere Application Server	WAS 7.0.0.39
WSRR	WebSphere Service Registy and Repository	WSRR 6.3.0.1
GPFS	General Parallel File System	AIX 7.1
IBM HIS	IBM HTTP Server	HIS 7.0.0.23
ENT WSRR	WebSphere Service Registy and Repository	WSRR 8.0
Oracle DB	Oracle DataBase	10G, 11G

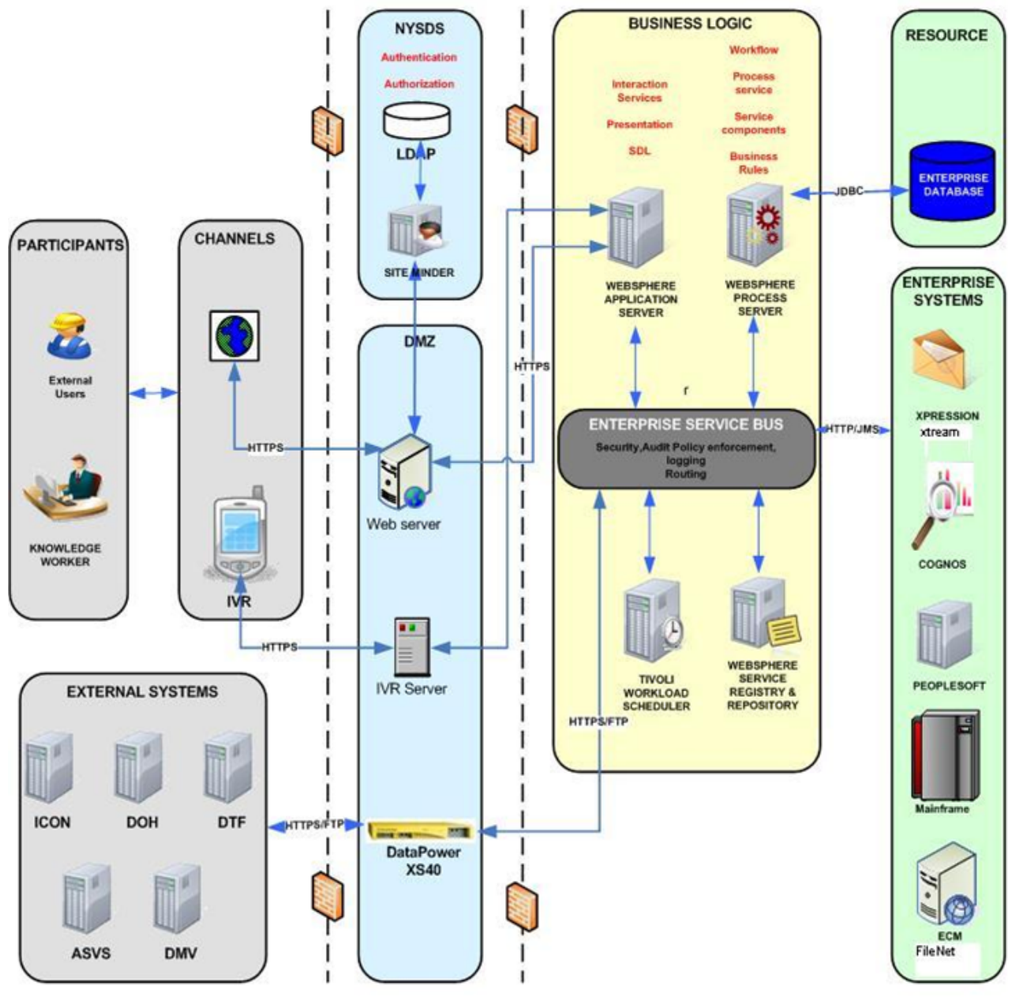
Communications LEGEND

Short Name	Pors
Web	443, 80
CSS / Load Balancer	443, 1043. 1443, 1444, 2414, 2415, 2416, 9043
Database	1521
GPFS	NA
LDAP and SiteMinder	636, 389, 443, 445, 446, 487
HTTP Plugin	80, 443, 21011
JMS	1417
DataPower	443, 445, 446, 487

Web
CSS
DataBase
GPFS
Security
HTTP Plugin
JMS
DataPower

Architecture Overview Diagram – Enterprise View
Thursday, December 05, 2013

Conceptual Operation Model



Current Architectural Guidelines

1. Service Exposure:

Following are the general guidelines for exposing a service:

- All Process services will be exposed as web services.
- Business services are exposed as Service components for Process services to consume. (The process service could be from the same domain or from other domains).
- Business components that need to be consumed by the Consumer layer (of the same domain or another domain) are exposed as web services in the service layer. The exception is the interaction services that are specific to GUI needs and very fine grained services that don't hold any re usable value.
- Business components that need to be shared with other domains are exposed as Service Components (for a Process from other domain) and web services (from consumer layer of other domain).
- Packaged applications built using third party products and partner services are exposed as web services in Services layer using Websphere Enterprise Service Bus.
- All exposed services are registered with Websphere **Service Registry and Repository** and accessed through the router (Enterprise Service Bus).

2. Business Rules:

Business rules cut across all the layers. For example, business process and governance layers intersect in defining the rules and policies for the business process. Consumer layer validation rules, and input and output transformations from and to that layer, must abide by some rules. These lie at the intersection point between the consumer and governance and policy layer. Our process and service layer business rules are stored as rulesets in Ilog JRules.

Development Tools:

The following is a list of the development tools:

Phases	Tools
Requirements Gathering	Rational RequisitePro, Word
Business Modeling	Websphere Business Modeler Websphere Publishing Server
Service oriented Analysis and Design	Rational Software Architect Erwin
Service Development	Rational Application Developer (GUI) Websphere Integration Developer ILog JRules Third party development IDEs for xPression, PeopleSoft, Enterprise Content Manager. COBOL, CICS for legacy
Service Orchestration / Integration	Message Broker Toolkit Websphere DataPower appliances
Service Choreography	Websphere Integration Developer ILog JRules
Service Testing	Rational Functional Tester Rational Test Manager
Service Discovery	Websphere Service Registry and Repository
Service Level Management, Policy enforcement	ITCAM for SOA Websphere DataPower appliances Websphere Service Registry and Repository