Patent Public Advisory Committee Meeting
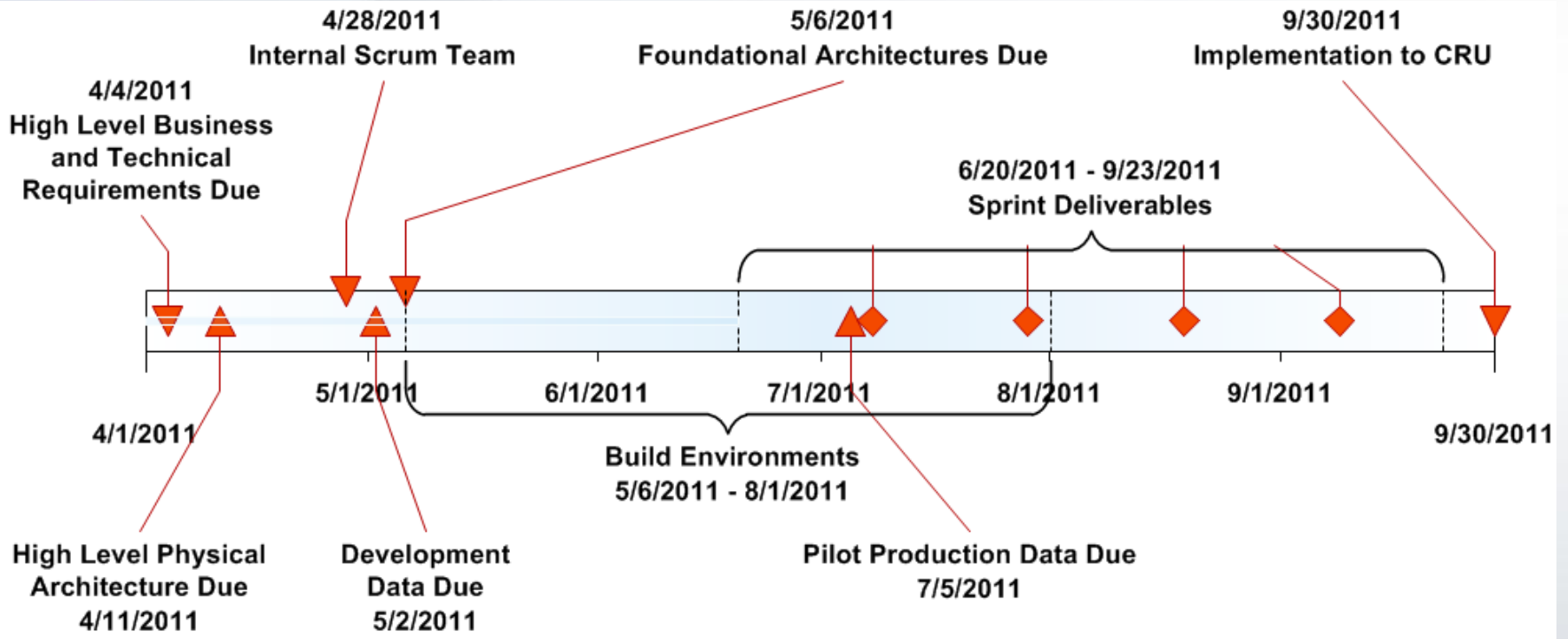# PE2E Status

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Patents Portfolio Manager

July 14, 2011

PE2E Timeline

4/28/2011
Internal Scrum Team

5/6/2011
Foundational Architectures Due

9/30/2011
Implementation to CRU

4/4/2011
High Level Business and Technical Requirements Due

6/20/2011 - 9/23/2011
Sprint Deliverables

4/1/2011

5/1/2011   **6/1/2011**   **7/1/2011**   **8/1/2011**   **9/1/2011**   **9/30/2011**

High Level Physical Architecture Due
4/11/2011

Development Data Due
5/2/2011

Build Environments
5/6/2011 - 8/1/2011

Pilot Production Data Due
7/5/2011

10/1/2011 - 9/30/2012
FY 2012

Examination tools

Applicant tools

Workflow

Structured text-content

10/1/2012 - 9/30/2015
FY 2013-15

FY 13 - Rollout of functionality to broader audiences

FY 14 -15 Define & pursue decommissioning strategy

Front-End Summary

- Integrated front-end design & implementation

  – Initial front-end implementations complete

  – Development continues on additional front-end deliverables

  – Deliverables are fully-functioning web-applications, with stubbed-out services

- Service-level architecture

  – Completed and integrated into project documentation

- Data models

  – Foundational logical model complete

  – Physical model for 1st sprint complete and deployed

Front-End Implementation

User Involvement

- Design / Development sprints every two weeks

- Weekly meetings with examiners

    - Both CRU and "regular" examiners

    - To design the functionality for the next sprint

    - To assess the functionality of the previous sprint

- A major (holistic) user evaluation every 6 weeks

    - Most recent was May 25th

    - Next is July 7th

- Usability advisory council regularly updated

- POPA union fully informed

- Reactions are uniformly positive

Back-End Summary

- Procured development kicked-off June 20; delayed 2 weeks
  - SDI NG protest delayed procurement; alternate procurement plan pursued
  - Financial adjustments due to emergent budgetary constraints

- High-level physical architecture
  - Completed for development environment
  - Ongoing for QA, Staging, & Release

- Environments
  - Development & QA environments built
  - Requirements being gathered for staging & production environments

- Database
  - Logical & physical model complete foundation and scope of 1st sprint
  - Expansion of database models for subsequent sprints continues

Back-End Summary

- XML Schemas under development
  - 7 key content types identified for high-granularity schemas
  - Lightweight schema for additional content types
- Technology stack for scope of FY11 release vetted and finalized
- Internal development began June 6
  - Continuous-build environment configured and working
  - XSLT (Extensible Stylesheet Language Transformations) under development for transformation of earlier XML standards (e.g., ST.36)
- Sprints on schedule for FY11 release
  - Deliverables will provide services to connect back-end to front-end, replacing stubbed-out services delivered in front-end
  - Will build initial data-intake routines from vendors and USPTO data sources

Technology Stack

Technology Need	Solution
Operating system	Red Hat Enterprise Linux 6.x
File system	ext4
Virtualization (type 1 hypervisor)	Red Hat Enterprise Linux 6.x: KVM
Server provisioning	RHN Satellite 5.x
Virtualization management	RHEV-M 2.x
Load balancer	IBM Edge Server 7.
Application server	JBoss SOA-P 5.1
Web server	JBoss EWS5.1
Java servlet/JSP container	JBoss EAP 5.1
Object-relational mapping & persistence framework	JBoss EAP 5.1: Hibernate
Logging	JBoss EAP 5.1: JBoss 5.1 logging API
Rules engine	JBoss Enterprise BRMS (Drools 5.x)
Enterprise service bus (ESB)	JBoss ESB as part of JBoss SOA-P 5.1
Database	MySQL Cluster Carrier Grade Edition 7.1
Version control	Apache Subversion 1.6.x feeding ClearCase
Build management	Apache Maven 3.0.x feeding ClearCase
Continuous integration tool	Hudson 1.39x
Build artifact repository	Nexus 1.9.x feeding ClearCase
Development framework	JBoss SEAM, Java EE6
Development IDE	JBoss Developer Studio
Search engine	TBD; currently building business case
Workflow management	JBPM; currently building business case
JavaScript toolkit	Dojo 1.6.x
XML Management	TBD
Physical Servers	Dell R910
Primary Deployment language	Java 1.6

PE2E Portfolio FY12

- Major requirement areas

  - Examiner tools, additional functionality

  - Applicant tools

  - Workflow elements

  - Structured text-content

- Major development areas

  - Lightweight improvements to existing systems

  - PE2E improvements rolled out to pilot audiences

  - AIS integration solutions

  - Increasingly sophisticated text-content acquisition

PE2E Portfolio FY13 - FY15

- FY13: Rollouts to broader audiences

  - Process refinements to ensure operational scalability

  - Incremental deployment to patent corps

- FY14 – FY15: Define & pursue decommissioning strategy

  - Data migration

  - Define and satisfy feature completion criteria

Risks And Issues

- Preserving FY11 scope in light of procurement delay

- Acquisition of production-level, structured XML (ST.96) for FY11