JUDCon

JBoss Users & Developers Conference

2012:India

Migrating SAP Portal Application to JBoss Portal

Sushil Ajgaonkar

L&T Infotech

L&T Infotech

Challenges with existing Portal

- **USD 12B Engineering conglomerate**
- **Existing Self Service Portal for Vendors**
  - Release of PO and amendments
  - Issue of Material / Receipt of finished goods
  - Quality Inspection Reports
  - Approval of Invoices
- **Challenges**
  - Mounting costs as vendor base expanded
  - High maintenance and support cost
  - Erratic response time
  - Non-intuitive user interface

L&T Infotech

Solution Requirements

Our solution had to address four areas

- Cost should not linearly increase with number of vendors added

TCO

User Experience

- Address existing user interface concerns and should offer better user experience

- Scale well to support existing & additional users

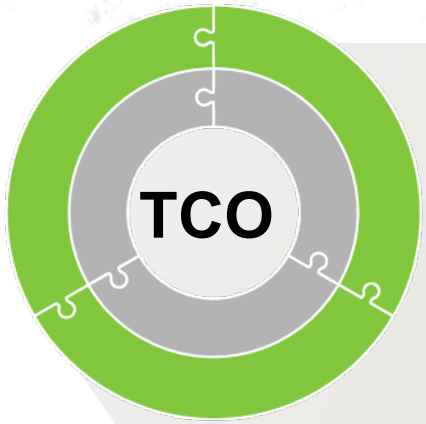
Performance

Integration

- Integrate and render data from SAP ERP

L&T Infotech

Managing TCO



- Proposed migrating the SAP Enterprise Portal to Redhat supported JBoss Portal.
- Took advantage of core based pricing model of JBoss Portal
- For an annual outgo of USD 14000,
  - About 400 users supported on the SAP EP platform
  - 16-core JBoss Portal subscription supporting unlimited users
- Exploited the flexibility in deploying the 16 cores

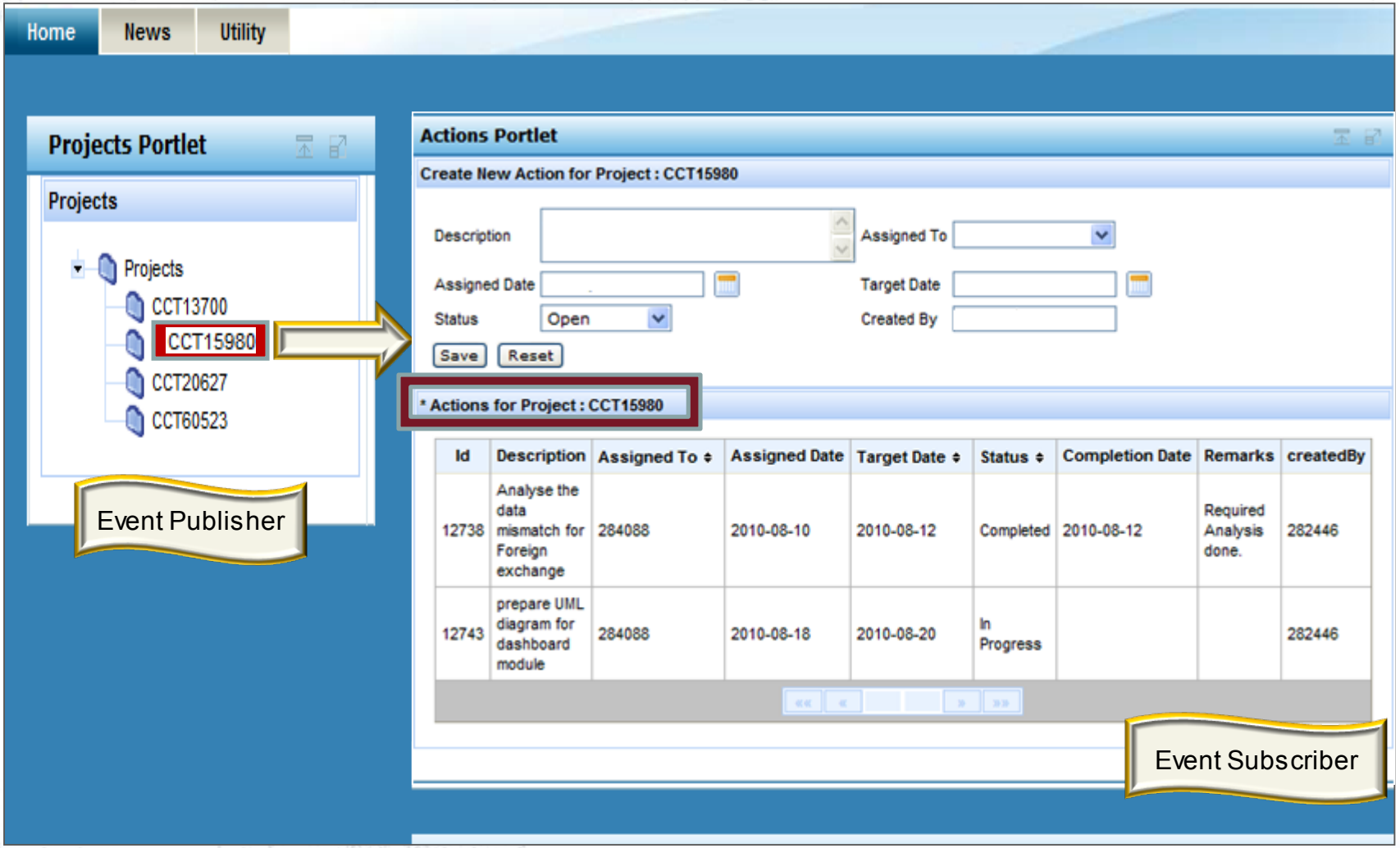
L&T Infotech

Rich User Experience

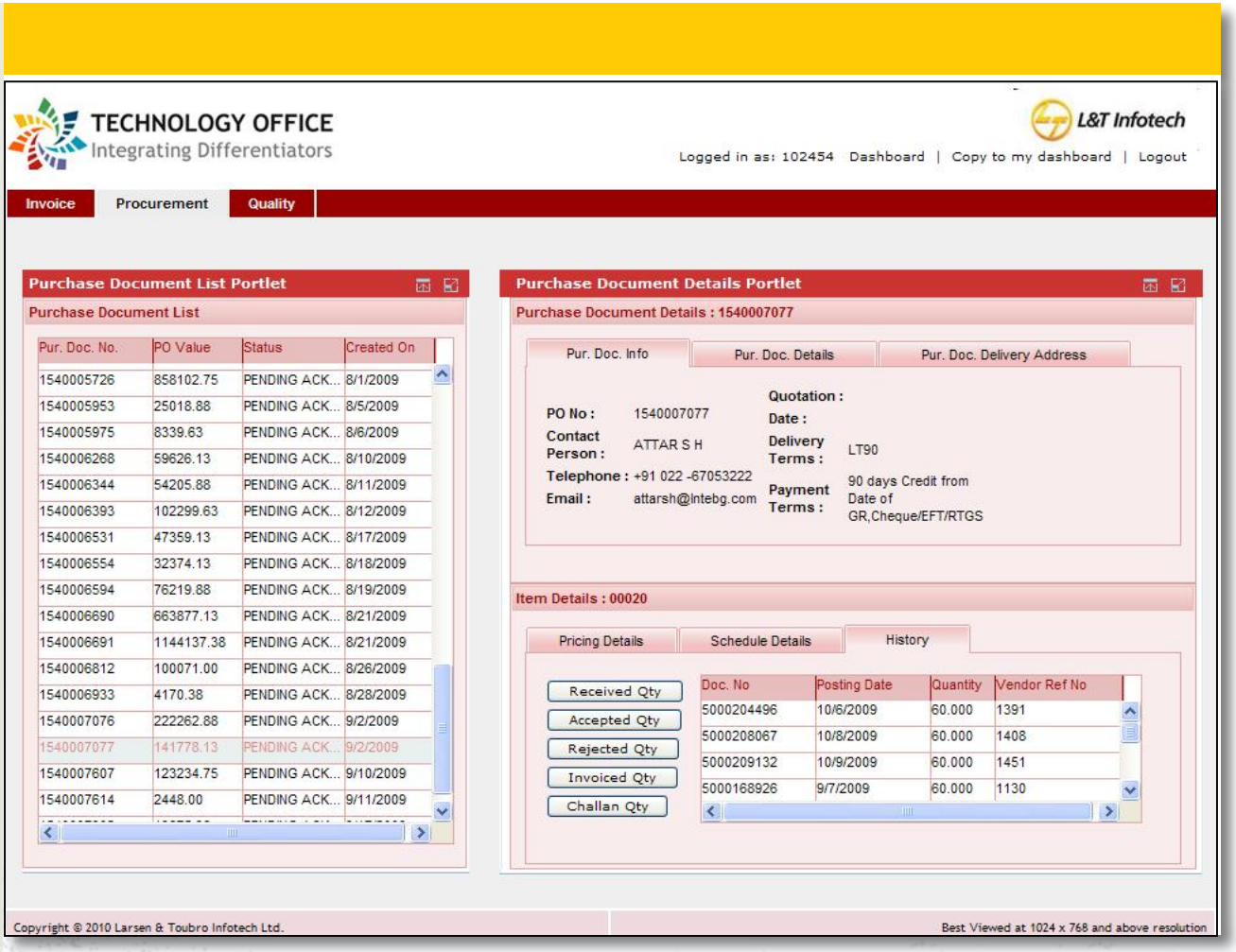
- Developed Rich Portlets which would render similar views if not richer than Flex based iViews on existing portal
- Seam portlets combined with RichFaces
- Implemented an inter-portlet communication (IPC) framework to provide intuitive and minimal navigation
- Leveraged AJAX for seamless screen refresh
- Used custom-renderers and themes to improve look-and-feel of the portal.
- Cross browser support

L&T Infotech

Client Side IPC

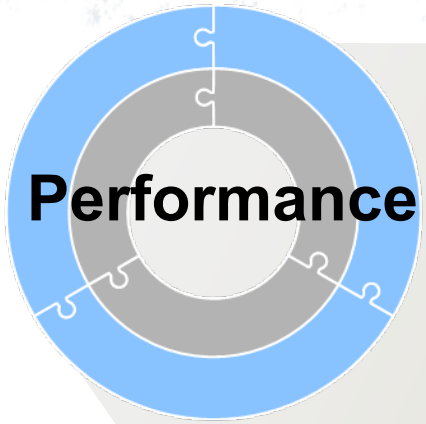


Rich User Experience - Example



L&T Infotech

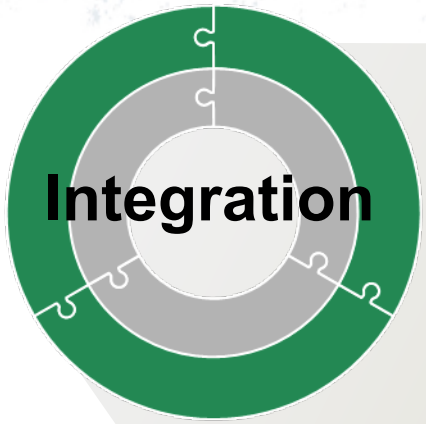
Manage Performance



- JBoss Portal supports horizontal and vertical scaling
- Exploited the flexibility in deploying the 16 cores
- Tuning – JVM, Pool of connections to SAP ERP, Seam framework, UI layer

L&T Infotech

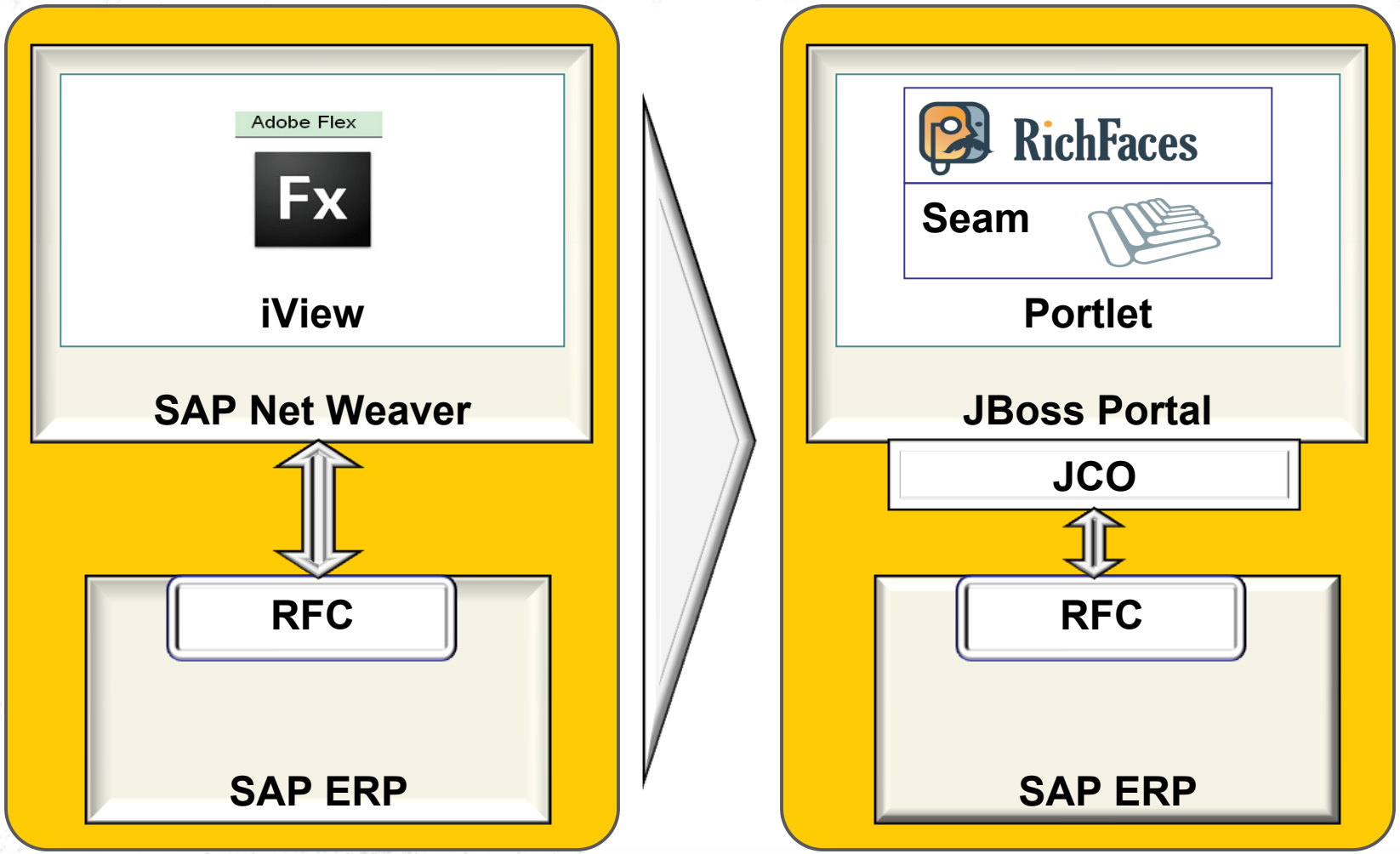
Integrate with SAP



- Custom developed using SAPJCO library
- Invoke appropriate RFC exposed by SAP ERP

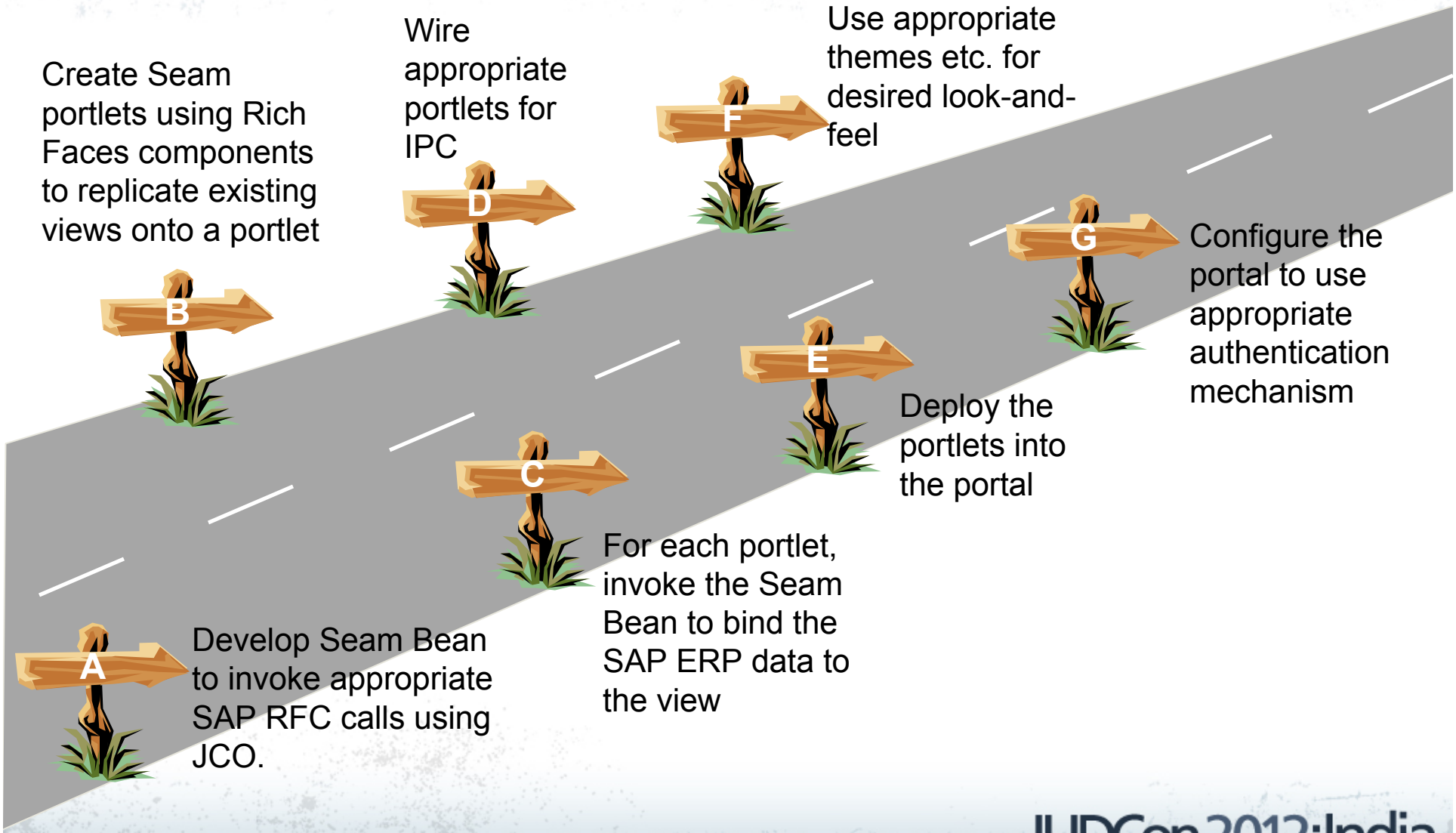
L&T Infotech

Solution Summary



L&T Infotech

Migration Approach



L&T Infotech

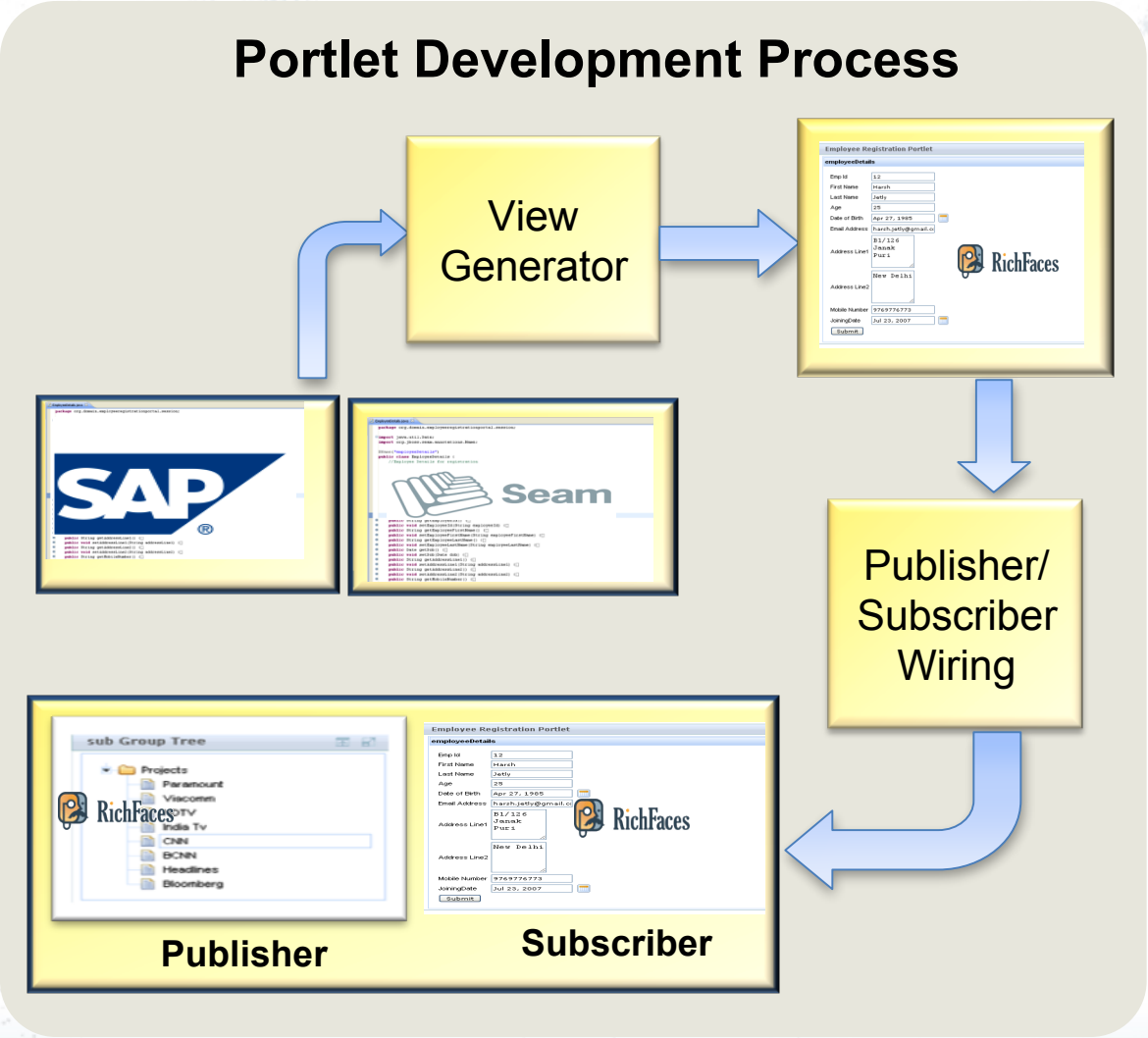
QuikPortal Framework

- **Ready framework to accelerate the time-to-market for portal applications**

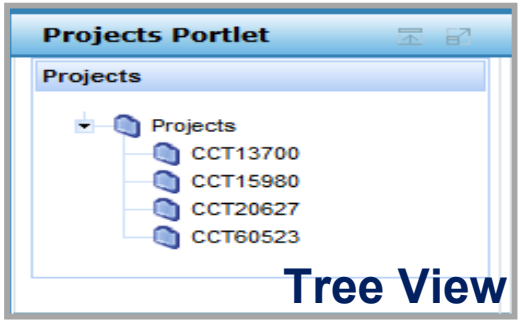
– Automates the creation of views using Rich Faces components

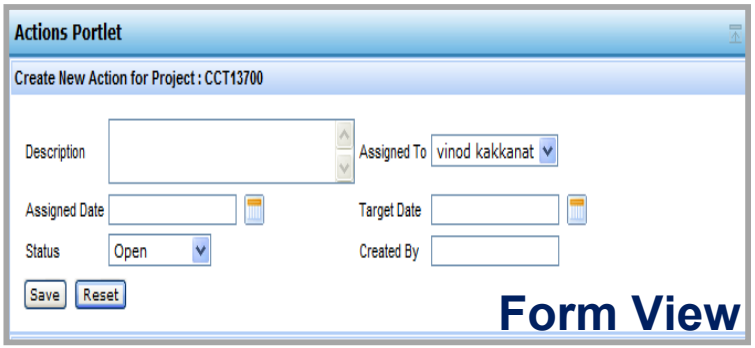
– Allows wiring of the portlets for IPC

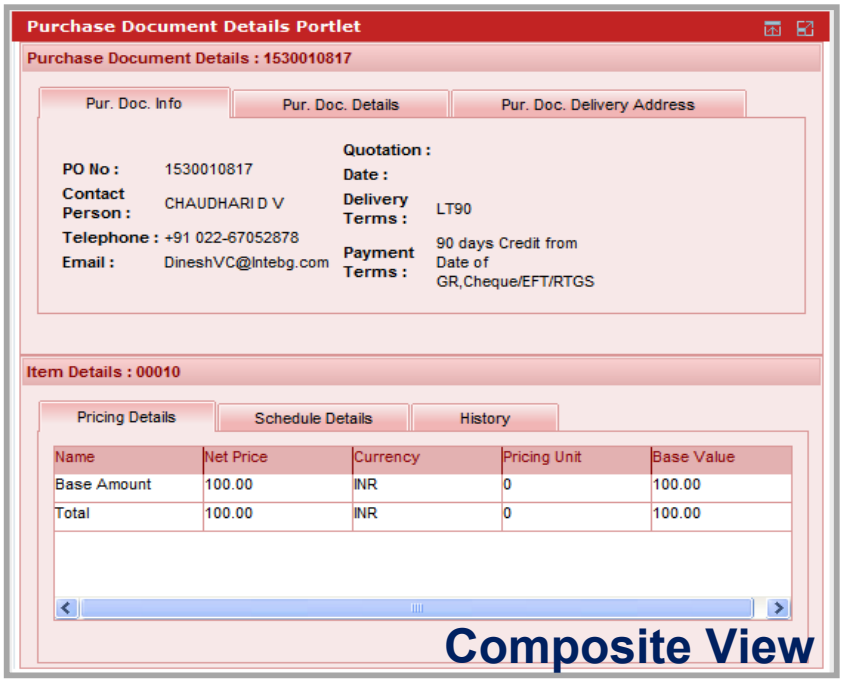
– Generates Java proxies and Seam Bean to invoke SAP RFC

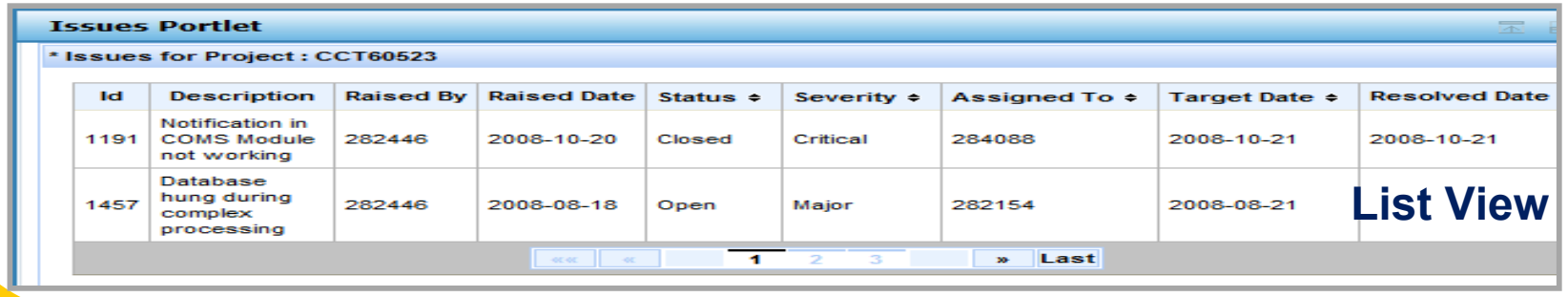


QuikPortal – Generated Views





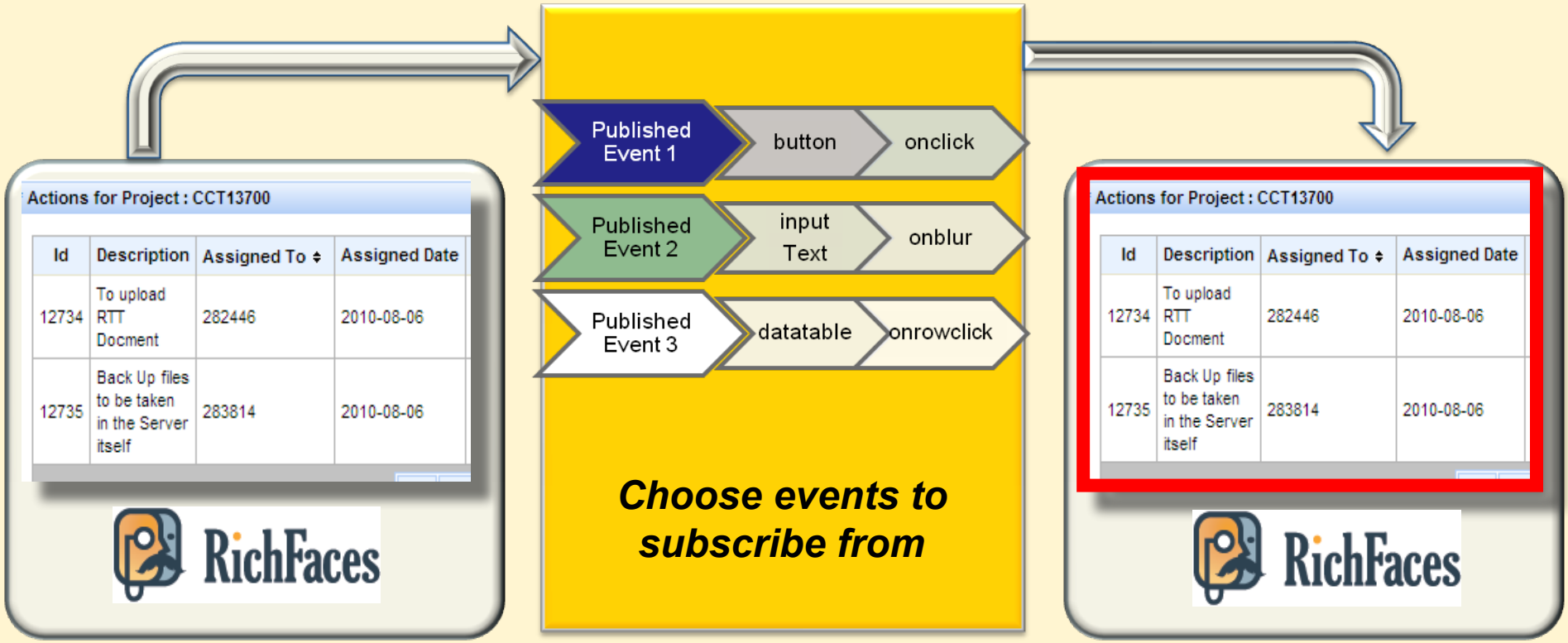




L&T Infotech

QuikPortal - Portlet Wiring

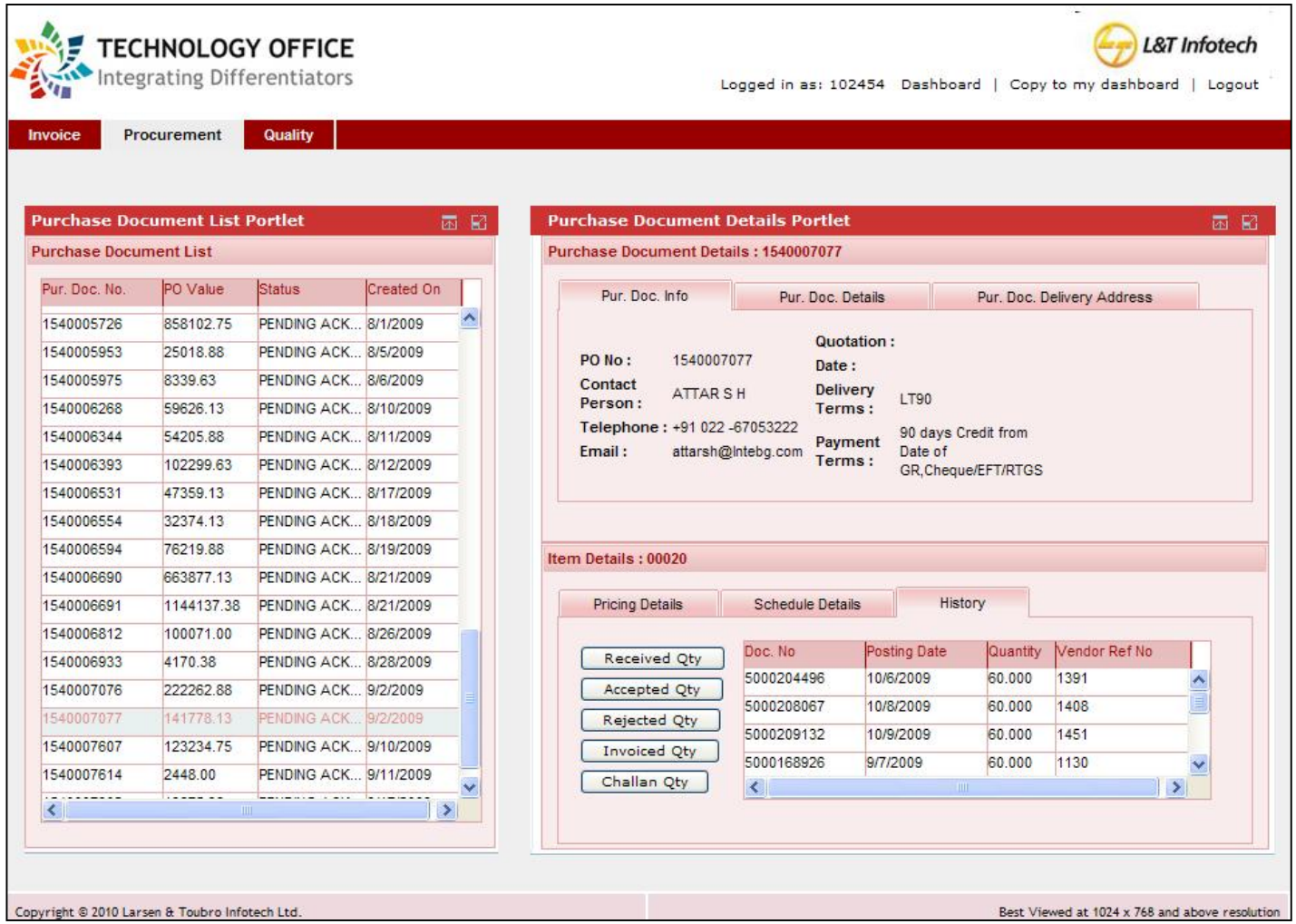
- **Wizards to configure the Portlets as Publishers or Subscribers or both.**
- **Allows wiring such configured portlets together to perform IPC.**



Portlet View **Subscriber Wizard** **Subscriber Enabled View**

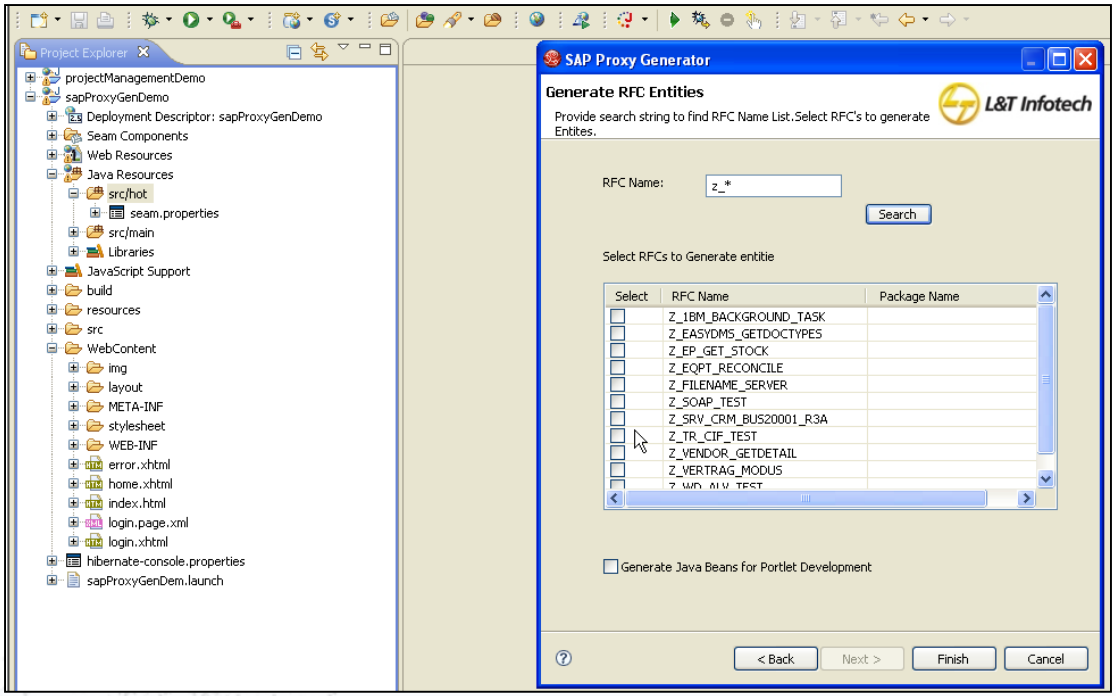
L&T Infotech

Rich User Experience - Example



QuikPortal – Proxy Generation

- **Connects to the SAP RFC repository**
- **Generates ready to use Java proxies and Seam Bean**
- **Seam Bean can be used to generate Portlet Views**



L&T Infotech

Summary

- **Our migration approach**
  - Create Portlets to migrate the view
  - Bind the view to the source of data. For an enterprise app, identify appropriate integration touch point
  - Enhances user experience and performance
- **Leverage the features and capabilities provided in the JBoss Portal**
- **Can be generalized to migrate applications out of commercial portals to improve user experience and performance while reducing TCO**

Thank You