SAP Mobile Workflow using Sybase Unwired Platform in Materials Management domain

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Abstract— In today's real-time business environment, the execution across the continuous supply chain can be maximized by stretching the limits of the organization from within the confines of the desktop or data center to mobiles. Mobile applications are playing a role in supply chain (manufacturing processes), demand chain (customer interactions), and in plentiful of other scenarios. By approaching mobility as a strategic initiative and building multiple applications targeting multiple enterprise business process, organizations can reap the benefits of mobility in a better way. Enterprises are using mobile applications in growing numbers to enhance business agility and deliver superior customer service. In the past, mobile interactions for an enterprise were disjointed. To successfully deliver on the vision of mobility and extend the reach of information, organizations require an architecture and strategy that enables a global view and incorporates mobility as an intrinsic part of the enterprise infrastructure. The paper explains a solution which serves the purpose of providing mobility workflow in SAP systems for the employees in an enterprise using Sybase Unwired platform.

Index Terms— SAP Systems, Sybase unwired platform, MEAP, BAPI, Mobility, Mobile Business Objects.

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1 Introduction

THE The aim of the paper is to provide a step by step application guide to Mobilize SAP business workflow based on SAP material management and provide a brief overview of SAP Mobile Platform (also known as Sybase Unwired platform -SUP). Specifically we have used the SAP Mobile Platform to emphasize on the ever growing trend of enterprise mobility and to explore all the easy to use and uncomplicated implementation features offered by it.

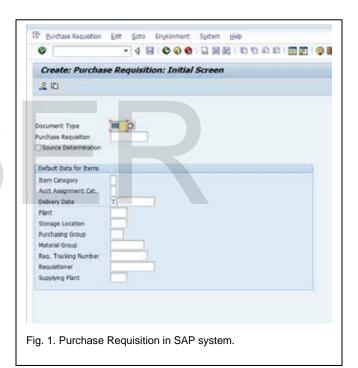
We have used the existing Business Application Programming Interface (BAPI) from the SAP system to implement a purchase requisition approval process in the form of a Mobile application. A purchase requisition would be created in the SAP system whose request for approval will be send to the concerned manager and the managers would view and approve the Purchase Requisition from their mobile device.

2 PROJECT OVERVIEW

Enterprise Mobility is the new pattern which indicates a drastic change in work habits, with more employees working out of the office and using mobiles and cloud services to execute business functions.

The markets for business-focused mobile applications will more than double in the coming five years. The study claims that the employees now expect the software they utilize for work to be available on their smart phones and tablets. The spending of funds on enterprise business applications for mobiles will more than double from \$26 billion in 2012 to \$53 billion in 2017. More than 250k apps from Apple App Store.10 Billion IP connected devices by 2015[3].

Thus, to cope up with these problems, we plan to build a solution to push notifications from SAP NetWeaver that is SAP Business Workflow to Sybase unwired platform workflows in BlackBerry or Android.



3 Project Implementation

3.1 Device Configuration

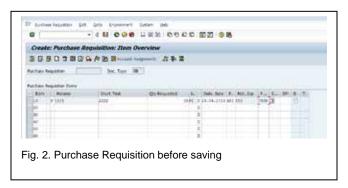
After configuring the Sybase Unwired Platform Server, we configured the device. After starting the MDS-CS server, wait for the simulator to start. The simulator will automatically connect to the MDS-CS server. The MDS-CS Server is the link between the device and the Sybase Unwired Platform Server. Following the above steps, we loaded the generic SUP Workflow libraries. It allows the user to run any SUP workflow.

3.2 As-Is Process in SAP systems

Create a Purchase Requisition in SAP system using Transition

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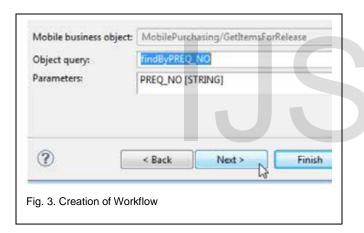
cote (Tcode) ME51



The user can check the Purchase Requisition Status with Tcode ME57. To Release Purchase Requisition we go to Tcode ME54. Click the enter key to release the Purchase Requisition Request Check the release status in ME5.

3.3 Workflow Creation

We created a new workflow and then sent a notification to the physical device. Following this step, we selected the Query "findByPREQ_NO" to load all the items to the device.



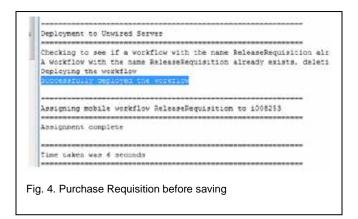
In simple words, the server will send the notification to the physical device.

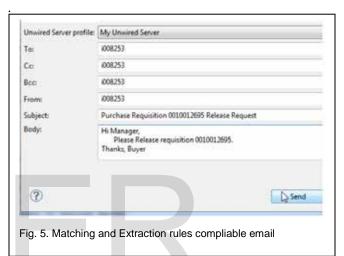
Search for the MBO recently created. Type "*" and execute "Search". Create a sample notification as shown. This is supposed to be the email generated by SAP NetWeaver BPM or SAP Business Workflow, etc. Move to the next screen.

Finally, after pursuing the above steps, the workflow is generated and deployed.

4 RESULTS

In order to test our application, we started with sending "Send a Notification" to test the workflow without actually polling the email server. Moreover, we created an email that complies with the Matching and Extraction rules previously created





In a matter of seconds, the user receives a notification on his mobile device.



Fig. 6. Notification received in Messages



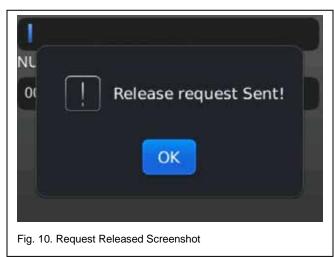
Furthermore, once the user gets the list of Items on the screen, he/she should select the menu option "Proceed to Release".



After "Proceed to Release", the user should execute "Release".



The user will subsequently receive the message for successful asynchronous execution.





5 ADVANTAGES OF THE PROJECT

The project brings enormous benefits to the current era of technology using SAP systems. The key advantages are as follows:

- 1) Architecture is consistent across key mobile platforms, including Android, iOS, Blackberry, etc.
- 2) Architecture allows native device capabilities to be integrated (GPS, camera, sensors)
- 3) Leverage web developers to build mobile applications.

6 CONCLUSION

Thus, by using the Sybase Unwired Platform in collaboration with SAP systems, the user experiences high flexibility to work remotely. The application offers a lower administrative, maintenance, and support costs solution. The user is independent to choose from a large choice of mobile devices, including the latest technology as integrated mobile applications permit higher flexibility in information sharing and workflow. Hence, the idea of a single console for managing all devices, applications, and security which provides greater flexibility in extending mobility throughout the enterprise is feasible. Thus, this innovation will further allow managers to approve pending requests and thus, the workflow will remain continuous without any delay owing to this software

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