



White Paper – SAP Online Mobile Solutions

Prospecta has proven enterprise mobile capability with the delivery of numerous mobile solutions over the past 6 years and works closely with SAP Australia to develop and market online and offline mobile applications for SAP customers.

Prospecta's vision to help our customers obtain value from the Enterprise Resource Planning system by making information technology easier to use and to support an end to end business process.

Our focus on usability with our background and experience in enterprise mobility offers your organization the best solution to meet your needs.

What value can Prospecta deliver?

Our delivery model offers a combination of competitive pricing and skilled technical resources across a range of technologies which allows us to provide greater coverage across mobile solution implementations and transfers cost savings to our customers. Our consultants are cross skilled in SAP technologies such as ABAP, Web Dynpro, BSP, ITS and NetWeaver Mobile Infrastructure.

MOBILITY

To facilitate mobility for key business processes some factors to help select the most appropriate mobile approach include network access, architecture and infrastructure.

There are two types of mobile solution approaches online and offline.

An offline solution requires synchronization between the mobile device to the backend SAP R/3 system, in contrast to an online solution which is connected directly to the R/3 backend.

Prospecta has experience with online and offline mobile solutions into SAP R/3, in this paper we outline the various options for an online solution.

Online mobile solutions require a wireless network and use http/https protocol to communicate with SAP. This mobile approach can function on a number of hand held devices and offers real time updates and information from SAP R/3, without the need for synchronization or redundancy in data.

We recommend two SAP technology approaches for online mobile applications; Web Dynpro and BSP.

Web Dynpro is available from ECC 5.0 while BSP is available from SAP 4.7 release.


Both technologies are strong in their respective areas and have their own advantages based on the application to be designed.

Web Dynpro

The Web Dynpro model is based on the Model View Controller paradigm, and has the following features that build on the classic Dynpro model:

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A sample of a mobile screen below using Web Dyn Pro for a notification and inspection process.

Notif	Type	Status	Inspection
<u>10000075</u>	M1	✘	
Engine broken down			
<u>10002367</u>	M1		
<u>10002368</u>	M1		
<u>10002371</u>	M1		
Test order MAM25			
<u>10002374</u>	M1		
Safety			

The advantages of Web Dyn Pro are:

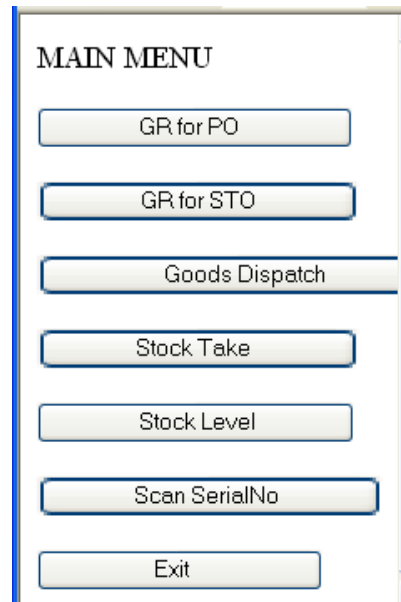
- Clear separation of business logic and display logic
- Uniform metamodel for all types of user interfaces
- Execution on a number of client platforms.
- Extensive platform independence of interfaces

Business Server Pages

SAP ITS or SAP Web Application Server in SAP R/3 4.7 provides a page-based programming model with server-side scripting as well as server page technology for developing, designing and implementing Web applications.

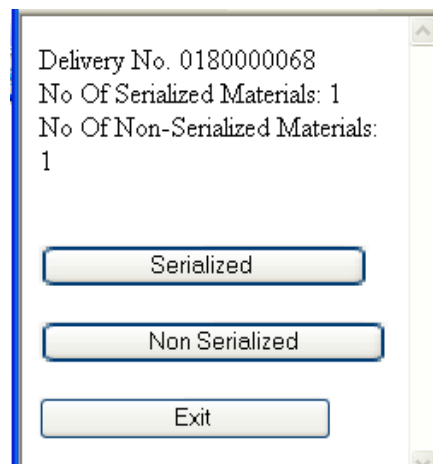
We can create HTML pages or Business Server Pages (BSPs) with server-side scripting in ABAP or JavaScript.

A sample of a mobile screen for Goods Receipt process:



The advantage of ITS/BSP are:

- Take advantage of the Model View Controller design patterns
- The HTMLB and XHTMLB HTML Business libraries are available as BSP Extensions for a uniform layout and its associated usability advantages.



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Device used for online Time Recording on Shop Floor. This was integrated to SAP CATS and Project System

WEB DYNPRO VS SAP BSP

Criteria	Web Dynpro	BSP
Mode	Online	Online
Min Release	ECC 5.0	SAP 4.7
Skills	ABAP & JAVA	ABAP Only
Security	Preferred for Intranet and Internet	Preferred only for Intranet.
Hardware	Recommend additional hardware for Netweaver Platform	Not Required
Performance	Less in comparison to BSP as it needs to make RFC Connections	Runs as any normal SAP application and the pages are cached.
Maintenance	Skills are rare and changes have to be made both in ABAP and JAVA	ABAP developer can maintain BSP. Easier maintenance
Mobile Devices	All Devices with Pocket PC and also devices such as Nokia and Blackberry	Recommended only devices that have Pocket PC. For Example TDS, Symbol or Intermec
Cost	More Expensive	Economical Development

ONLINE MOBILE EXPERIENCE

Solution	Client	Technology Device
Stock Take (Cycle Count), Goods Issue, Goods Receipt and Stock Overview, Barcoding	Services Company	SAP ITS- Intermec
Stock Take, Goods Issue, Goods Receipt and Stock Overview, Outbound Delivery, Inbound Delivery, Bar coding	Air condition Manufacturer	SAP BSP – Symbol Devices
Automation Of SAP Warehouse Management, Truck Monitoring	Steel Company	SAP Web Console
Inspection Rounds and Breakdowns	Oil and Gas	SAP Netweaver /MI/Web Dynpro
Real Estate / , Mobile Sales and Service / Production Tracker	SAP	Web Dynpro-Blackberry Nokia
Recording Time and Job Information in the shop floor and integrating back to the Cross Application Timesheet System (CATS) application in SAP	Mining Equipment	SAP-ITS- Intermec

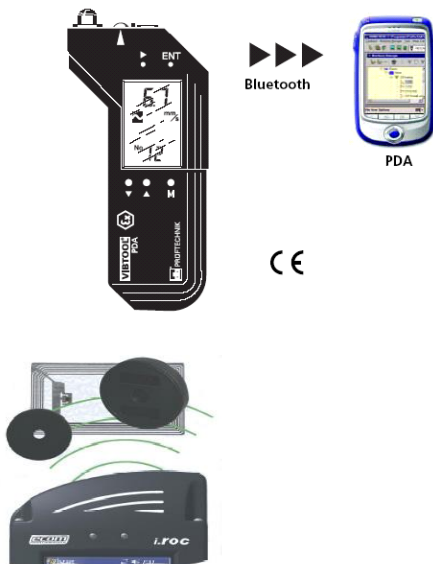
RFID, BARCODING AND PERIPHERAL DEVICES

Prospecta has all the expertise to print Barcodes from SAP and also integrate with Peripheral Devices if required.

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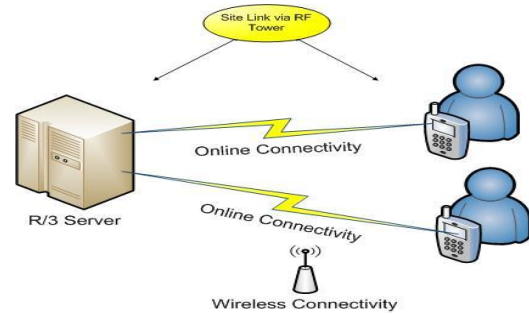


RFID has been also a major driver to adopt mobility. Prospecta has been involved to develop drivers for RFID and Peripheral devices for a specific mobile device.



ARCHITECTURE

The Architecture is based on a WIFI for controlled environment (intranet) and GPRS/3G for a internet based environment where the application can be accessed anywhere.



PROSPECTA KEY FACTS

Track Record of proven success for implementation of SAP Mobile Solutions.

Turn Key Solutions – For global clients ranging from hardware selection, building mobile applications and post production support.

Prospecta has been in the field of mobility since 2002 and have a very strong understanding of software, business process and devices that would make a mobile implementation successful.

Partnership with SAP - We work closely with SAP to develop and market mobile business applications business solutions in both offline and online mode.

Delivery Model – An established SAP Mobile Factory for application development to stream line business processes in SAP.

Recognition as the partner of choice for the Global SAP Mobile Implementation and Roll out partner for BHP Billiton (World's Largest Diverse Resource Company) to roll out SAP Mobile for its all operational processes in the mining industry.



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SUMMARY

Today's market place requires technical delivery to be of high quality, efficient, timely and cost effective. Prospecta continually improves our technical capability and has a proven development approach to provide you with the most effective solution.

For further information please see us at <http://www.prospectasoftware.com>