



ITSMobile Solution Brief

JANUARY 2010

INTRODUCTION

Since the introduction of the Internet and Web Browser in the mid to late 1990s, a passion has developed for creating “web-based” software, often leading to misguided and unstable applications. Data collection was one such casualty in the rush to incorporate this new technology, once completely dominated by the ubiquitous character-based RF terminal. Experience and technology improvements have led to viable web-based data collection solutions that seem to equally delight and confound the user community. Users love the modern graphical user interface, but are less enthusiastic about performance.

This product brief provides a basic understanding of the “web-based” SAP Data Collection Solution referred to as ITSMobile. The paper focuses on the business perspective and does not delve into the technical details of the solution. For people interested in technical details, please refer to the companion to this document, the PEAK ITSMobile Primer available on the PEAK Internet. <http://www.peaktech.com/sapwp/>

WHAT IS SAP ITSMOBILE?

ITSMobile stands for **I**nternet **T**ransaction **S**erver for **M**obile devices, and is one of several approaches that companies might use to create an SAP Data Collection solution. At a conceptual level, solutions created using ITSMobile are very similar to WebSAPConsole and SAP Console, with some exceptions noted later in this paper. Basically think of ITSMobile as a “better WebSAPConsole” (the first generation web-based RF solution from SAP).

ITSMobile is a relatively new solution that became available to SAP customers in Q3 2007, and was developed primarily to allow the discontinuation of WebSAPConsole, and provide a simple migration path for those companies using that solution. It is very important to understand that ITSMobile is a relatively new solution, but is built from SAP technology that has a long history going back many years.

The Internet Transaction Server (ITS), now referred to as “Integrated ITS”, is the backbone of WebGUI, the web-based equivalent of the ubiquitous SAPGUI client. ITS (and hence ITSMobile) comes in two very different flavors depending on which version of SAP a company is using. Companies running ERP5 or greater have “Integrated ITS”, meaning it is built into the SAP core software. Companies running earlier versions need to obtain and use “stand-alone ITS” (which essentially requires a separate server and development environment). Although ITSMobile solutions using stand-alone ITS are technically possible, PEAK strongly encourages the use SAPConsole in this case (due to the increased complexity involved with this approach). Using Integrated ITS for an ITSMobile solution is the better approach.

The ITSMobile solution is available to SAP customers along with their SAP software licensing agreement (there is no explicit charge for its use like there is for example the SAP Auto-ID Infrastructure). However, both ITSMobile and SAPConsole require every user that accesses the SAP system to have a proper SAP user license.

ITSMOBILE FAST FACTS

<p>Availability</p>	<p>ITSMobile is available for all SAP versions starting with 4.6C – however PEAK recommends only companies on version 5 (ECC 5) or higher uses ITSMobile, as previous versions require using a separate ITS server. Companies also must have specific patch levels to enjoy the full feature set.</p>
<p>Cost</p>	<p>The use of ITSMobile is included with SAP licensing. However every user must have a unique SAP user license (just like SAP Console).</p>
<p>Device Support</p>	<p>Technically, ITSMobile supports any device capable of running a web browser with JavaScript support. However – every device type must be tested, as web-based applications have a tendency to not operate uniformly across different devices.</p> <p>PEAK strongly recommends using an industrial browser (Wavelink, Naurtech, iBrowse, etc.) designed exclusively for data collection solutions in order to ensure a solid user experience.</p>
<p>Primary Attractions (Why use it)</p>	<ul style="list-style-type: none"> • Solution supported by SAP - No Middleware required • Real-time connection • Does not require separate server (for ECC 5 and above) • Web based (graphical) screens • Use of JavaScript allows greater flexibility for creating advanced solutions • Better suited for RFID applications
<p>Estimated Implementation Costs</p>	<p>Generally, implementing an ITSMobile solution requires only slightly more effort than SAP Console. Typical items that can increase the cost are device compatibility issues and special advanced requirements that require development knowledge of web concepts such as CSS, HTML and JavaScript. Do not trivialize these extra required skill sets!</p>

WHY MIGHT COMPANIES NEED ASSISTANCE WITH ITSMOBILE?

There are various reasons companies might need assistance when implementing an ITSMobile solution. Some scenarios are identified below:

1. Company can't decide whether to implement SAP Console or ITSMobile or other SAP solution (Mobile Web Dynpro, etc.)
2. Migrating from WebSAPConsole
3. An ITSMobile solution (actually any web based solution) is clumsy without the use of an industrial browser designed for data collection applications. PEAK understands the nuances of industrial browsers in this environment and can provide a total package of mobile device, browser, and SAP integration expertise.
4. Data Collection solutions are about business processes, not technology. PEAK specializes in these processes and can recommend the correct technology approaches that best fit the overall business objectives, and can provide many mobile business transactions not available in the standard system such as Goods Receipt to purchase order, bin to bin movement, etc.
5. Companies can become overconfident since ITSMobile seems easy to setup and use in a lab environment. (*Note: This principle applies to any RF solution with any technology*). PEAK's involvement with an ITSMobile project safeguards the implementation and eliminates misguided efforts.
6. Client wishes to start a multi-phased project either starting with SAP Console and migrating to ITSMobile or running both simultaneously. PEAK understands how to safely design such projects and avoid costly oversights such as incorporating incompatible features or poor mobile device selection.

HOW DOES ITSMOBILE COMPARE WITH SAP CONSOLE?

At a high level, data collection solutions built using SAP Console and ITSMobile are very similar. Companies should not over-analyze when selecting one solution over the other. There is tremendous value in engaging PEAK as a trusted advisor for any such analysis. Unless an ITSMobile solution is built using some features only available with ITSMobile, it is completely feasible to switch between SAP Console and ITSMobile. However, ITSMobile **does** require more technical skills to implement than SAP Console (or WebSAPConsole).

In general, ITSMobile transactions are created by first writing an RF program in ABAP, then converting all the screens to “ITSMobile templates”. The ITSMobile templates are the screens displayed on the RF terminals. Each screen however still refers back to the original ABAP program for the business rules and flow logic. As an example, picture an RF program as two related components – a user interface (screens, buttons, fields, etc.) and business functions (validations, database updates, etc.). With SAP Console, both components are only ABAP. With ITSMobile both components start off as ABAP, but the user interface for ITSMobile is converted (during development) to HTML and JavaScript, which is required to become accessible from a web browser.

Is ITSMobile is better than SAP Console? There is no correct answer, as it depends on many factors. It is true that ITSMobile is more flexible, but it requires more skill and can be clunky if not implemented correctly. SAP Console is easier to implement and well known. The most attractive feature of ITSMobile from a business perspective is it does not require a separate server like SAP Console and it provides a graphical user interface.

The key element that both solutions share is that all the business logic is still created in the SAP ABAP programming language. The tables below indicate other key similarities and differences between the two solutions.

Key Similarities	Key Differences
<ul style="list-style-type: none"> • Both approaches can be used for creating SAP data collection solutions • Application logic written in ABAP • Real-time • Requires individual SAP user logins • Works best with client software designed for data collection (e.g. Wavelink, etc.) 	<ul style="list-style-type: none"> • SAP Console has a long history, ITSMobile is a relatively new approach • SAP Console requires a separate windows server - ITSMobile does not • SAP Console is text-based, ITSMobile is web-based • SAP Console transactions are ABAP only - ITSMobile transactions are written in ABAP and then converted to HTML and JavaScript • Patch levels are a larger consideration with ITSMobile and it requires a deeper understanding of the “Web Server” functionality in SAP NetWeaver

SUMMARY

We hope this paper has been useful for understanding more about SAP ITSMobile and what services PEAK can offer clients to ensure a successful implementation. It is important to remember that the ITSMobile solution is still evolving and many of the critical features are only available in later patch level releases.