



UP114

Update on Internet Transaction Server (ITS) and ITSmobile

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Product Manager, SAP AG



Introducing the ITS

Administering the Integrated ITS

Migrating from Standalone ITS to Integrated ITS

SAP GUI for HTML

ITSmobile

Outlook

What is the SAP Internet Transaction Server?

Extends the reach of SAP Systems into the Web

- **Maps SAP Dynpro-based screens to HTML**
- **Knows web transfer protocol HTTP(S) and web page description languages as well as SAP proprietary GUI protocol**

Drives transactions within the SAP System

- **Application Server sees just a SAP GUI**

Separation of Business Logic and Visual Appearance

Can be used with all SAP Releases from 3.11 up to the current releases

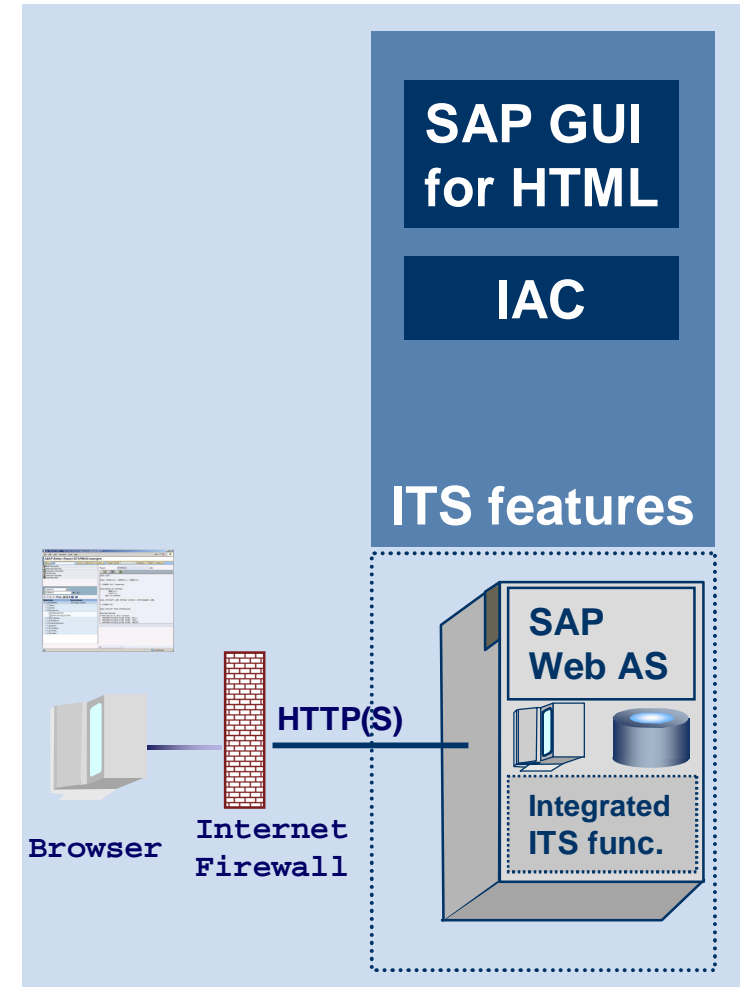
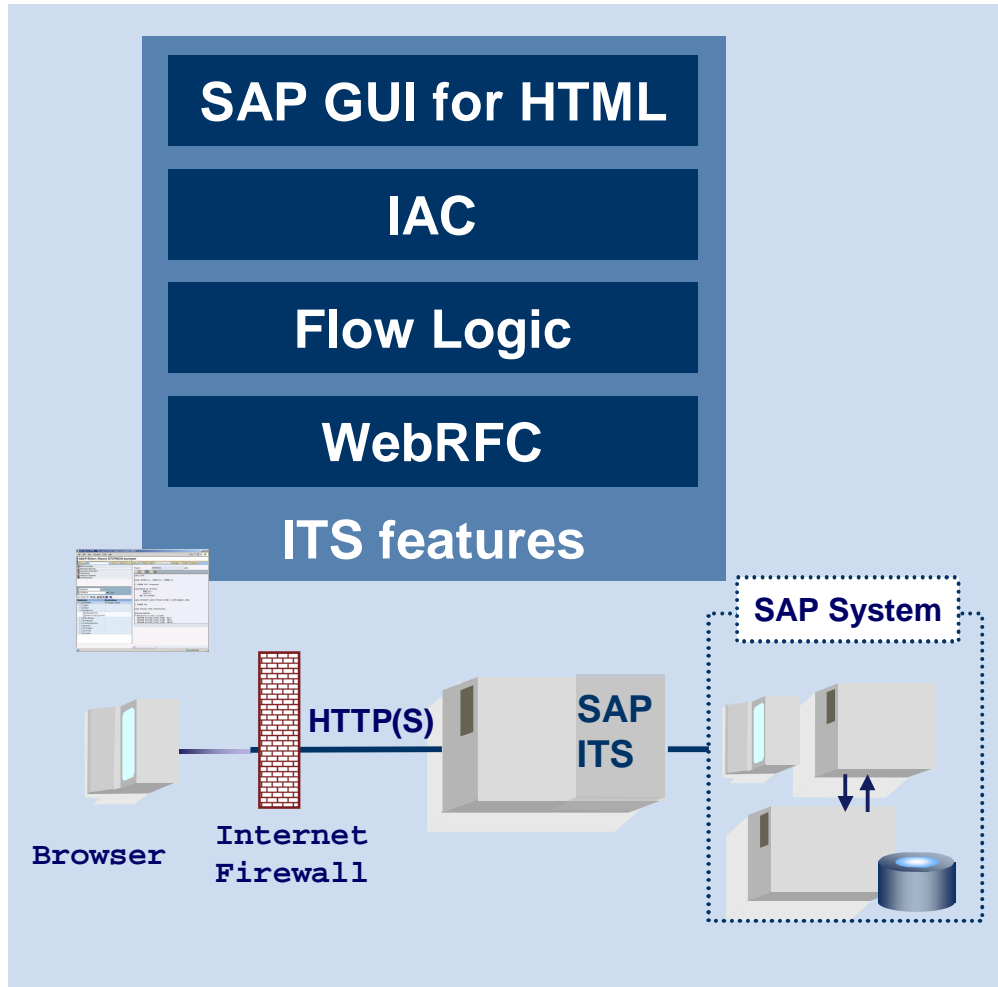
SAP ITS 6.20 standalone

- **Standalone Engine can be used with several SAP systems**
- **Supported platforms:**
 - **Windows Server 2000 (restricted support) / 2003 32 bit**
 - **Windows Server 2003 64 bit (AMD64, EM64T)**
 - **Linux IA32 SUSE SLES 8 / 9 / 10 32 bit, RedHat EL 3 / 4 / 5 32 bit**
 - **Linux SUSE SLES 9 / 10 64 bit, RedHat EL 4 / 5 64 bit (AMD64, EM64T)**
- **Under evaluation:**
 - **Windows Server 2008**
- **Please prefer a 64 bit platform**

SAP Netweaver Application Server with integrated ITS

- **Built-in engine which is part of SAP Kernel**
- **No separate installation required**
- **No ITS Web Infrastructure required**
- **Supported on all platforms of SAP NetWeaver Application Server**

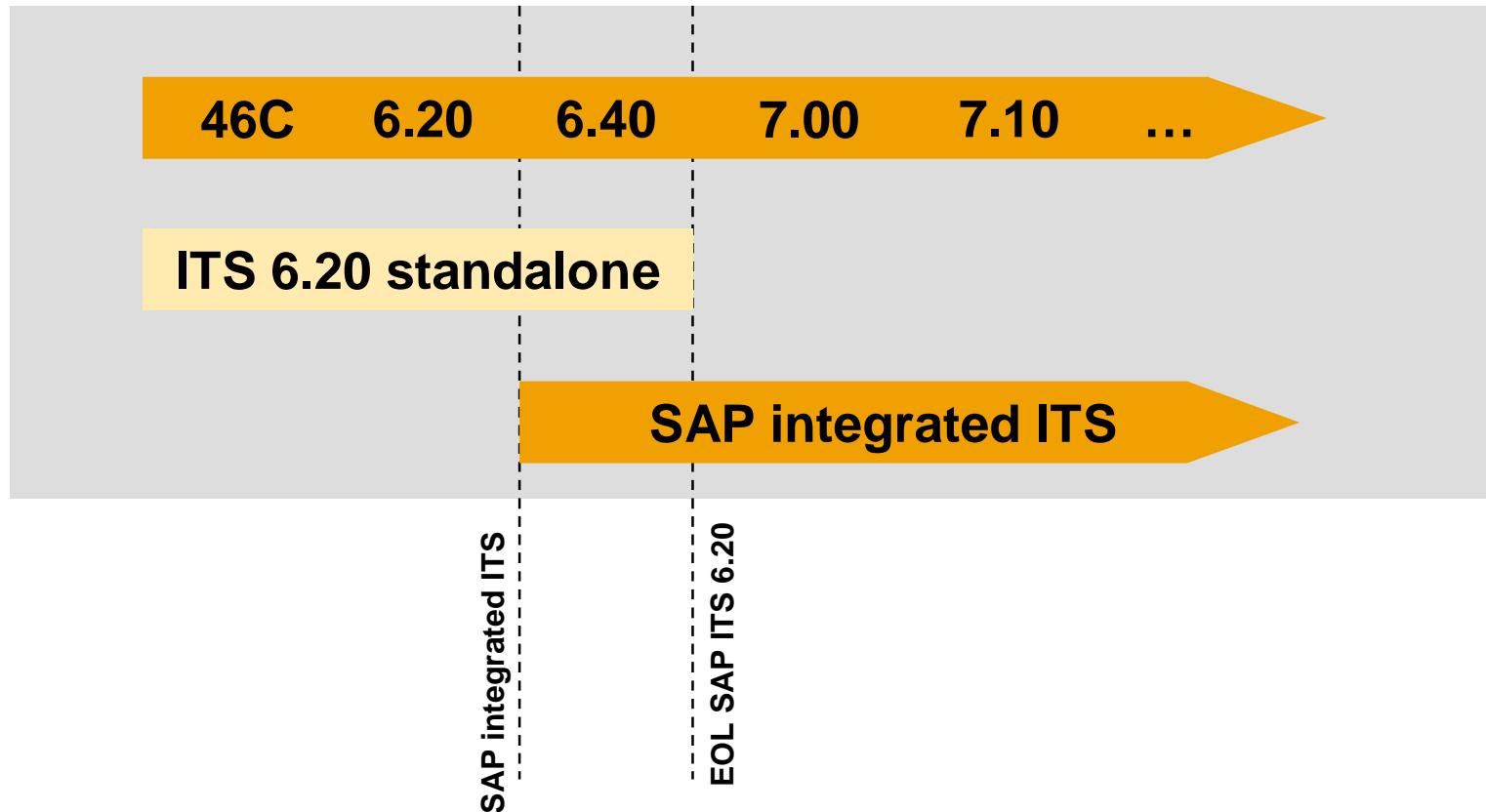
ITS Standalone vs. SAP NetWeaver AS With Integrated ITS



- **ITS 6.20 is long term supported for SAP products based on SAP NetWeaver 2004 and below as long as these products are supported. On SAP NetWeaver systems we recommend the use of the integrated ITS.**
- **ITS 6.20 standalone cannot be used with SAP NetWeaver 7.0. Therefore, ITS services based on Flow Logic and WebRFC are no longer supported with SAP NetWeaver 7.0.**
- **Because SAP integrated ITS is part of the SAP kernel, the maintenance is as long as the maintenance for the SAP kernel**
- **For detailed information, please check Platform Availability Matrix (PAM) to get up to date information (<http://service.sap.com/pam>)**

Supported SAP Releases

Lifetime ITS 6.20 vs. SAP integrated ITS



+++ Make the move today +++

What Are The Advantages of Integrated ITS?

- **highly reduced memory consumption**
- **highly reduced CPU consumption**
- **supported on all platforms of SAP NetWeaver AS**
- **much better stability due to session isolation; In case of a server crash, with ITS 6.20 all users lose their session, with integrated ITS only one session is affected!**
- **simplified system landscape without separate ITS Agate and Web servers**
- **simplified administration which can be done by SAP basis administrators**

Highly reduced TCO



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Good news: If you have a running SAP NetWeaver Application Server the administration of integrated ITS is very easy compared to standalone ITS.

There is just one important parameter you should care of

em/global_area_MB

This parameter sets the size of the global shared memory which is being used from all work processes and holds the ITS session and template data.

No separate administration tools needed anymore.
Admin-Tool no longer exists

You can administrate the integrated ITS completely with the following SAP transactions

- **RZ10 / RZ11**
Definition of profile parameters
- **ST11**
Error Log Files
- **SM21**
System Log
- **SITSPMON**
Status of the integrated ITS
- **SICF**
Configuration of the ITS-ICF-services

Features of SITSPMON

- **Memory statistics to answer question like “How much global memory of my application server is being used by integrated ITS?”**
- **The memory statistics can now show the details of any application server**
- **Change profile parameters**
- **Invalidates Template and MIME caches both locally and system wide**
- **Business HTML runtime statistics to decrease your server load (with NetWeaver 7.0)**
- **Advanced features like overview mutex locks and template cache**



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Running IACs With The Integrated ITS (1)

- **Services written for standalone ITS don't run out of the box with the integrated ITS. They have to be configured in Internet Communication Framework (ICF) of SAP NetWeaver Application Server.**
- **Reason: SAP NetWeaver AS and ITS standalone were too different to make them fully compatible. But differences are mostly hidden. For a dynpro-based IAC service developed according to our recommendations, it only takes minutes to migrate it to the integrated ITS.**

How to run a dynpro based IAC service with integrated ITS:

- **Publish the service in SE80 to site "Internal".**
- **Create service in ICF of NetWeaver Application Server (recommended location below /sap/bc/gui/sap/its) with transaction SICF**
- **Bind the service to ITS handler class and configure a GUI connection**
- **Add required parameters from standalone ITS service to ICF service**
- **Run the service from ICF**

1.) Differences between standalone ITS and integrated ITS you have to keep in mind

- **no global service available in ICF, from where other services inherit parameter settings**
- **no “ITS” login available. Logon always means to logon to the SAP server, which receives requests before ITS. A custom login page handler class can be defined in SICF in the service definition**
- **hard coded mime references with path /sap/its/mimes don't work. Use ~UrlMime instead to get correct mime path.**
- **ICF doesn't understand ITS specific parameters like ~login, ~language, ~password, ~client in the URL. Use sap-user, sap-language, sap-password, sap-client instead.**
- **using ~service in URL doesn't work. Use the service name directly.**

2.) Differences between standalone ITS and integrated ITS you have to keep in mind

- **connection specific parameters like ~messageserver, ~systemnumber, ~appserver, ~connectstring, ~group etc. don't make sense in WebAS environment.**
- **Check IAC migration guide and service parameter guide on <http://help.sap.com>**
- **SAP TechEd 2004 Hands-on Session: Migration of Existing ITS Services from Standalone to Integrated SAP Internet Transaction Server, PRTL255,**
- **Check out <http://sdn.sap.com> for the PDF of this session**

SAP GUI Debugger is no longer available

Use the new HTTP debugger instead (Req. 6.40 SP14).

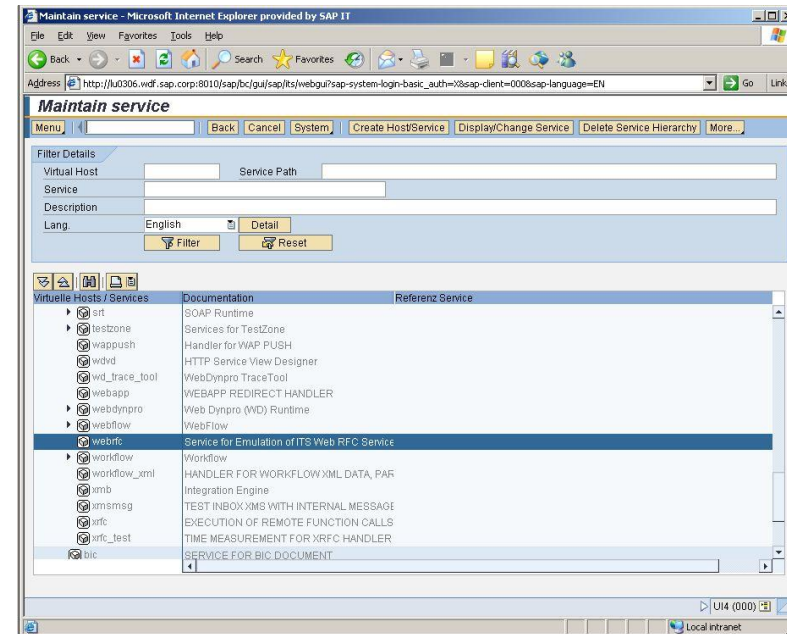
- You can set HTTP breakpoints in ABAP editor
- You can debug sessions of other users
- You will drop to the new ABAP debugger automatically when the breakpoint is reached

SAP Note 722735

Migrating WebRFC And Flow Logic Services

Migrating WebRFC services

- **Note 979467** describes how to use the WebRFC service delivered with SAP NetWeaver 7.0
- The WebRFC service can be found in transaction SICF in **DefaultHost/sap/bc/webrfc**



Migrating Flow Logic services

- **Note 1057274** points you to a documentation on how to migrate Flow Logic services to IAC services which can run in integrated ITS



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SAP GUI For HTML: Client Platforms

Internet Explorer on Windows

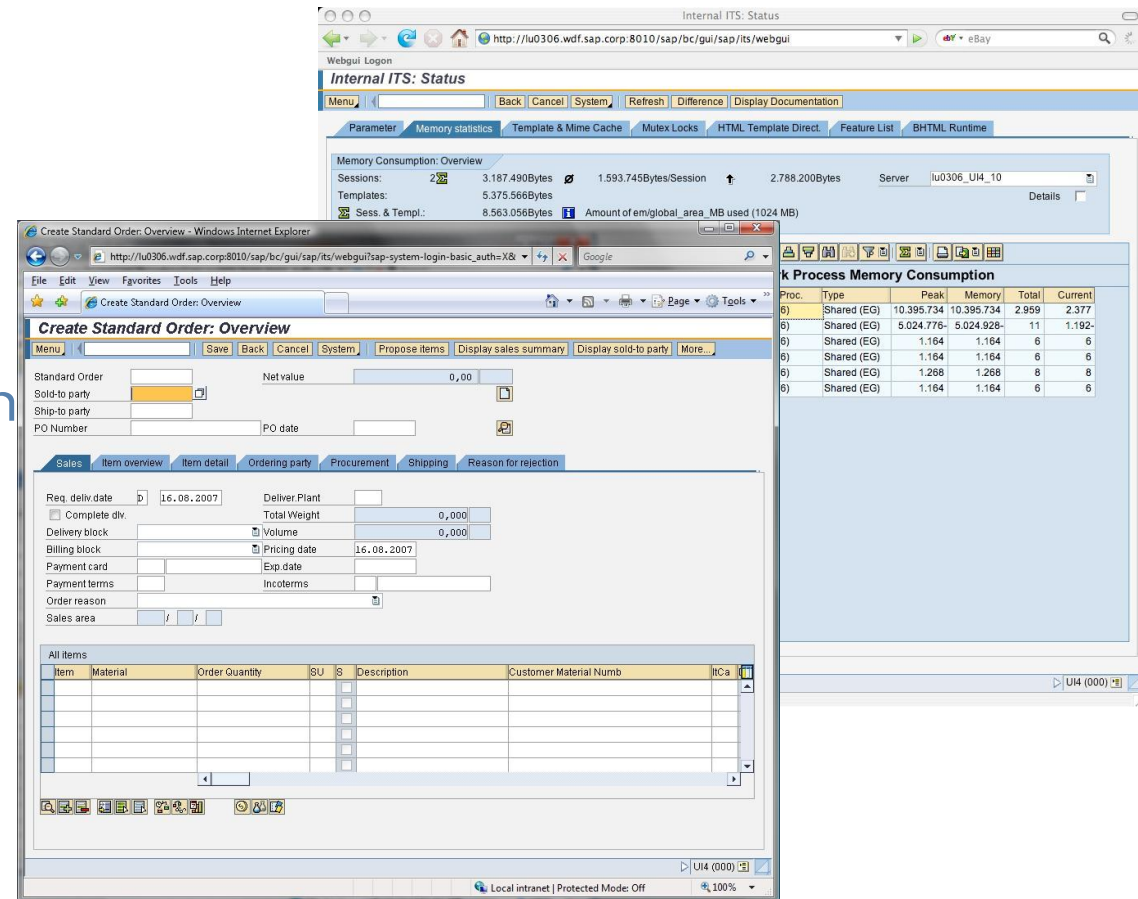
- Internet Explorer 6.0
- Internet Explorer 7.0

Mozilla Firefox 1.5 and

- Windows
- Linux
- Mac OS X

Under evaluation

- Mozilla Firefox 3.0

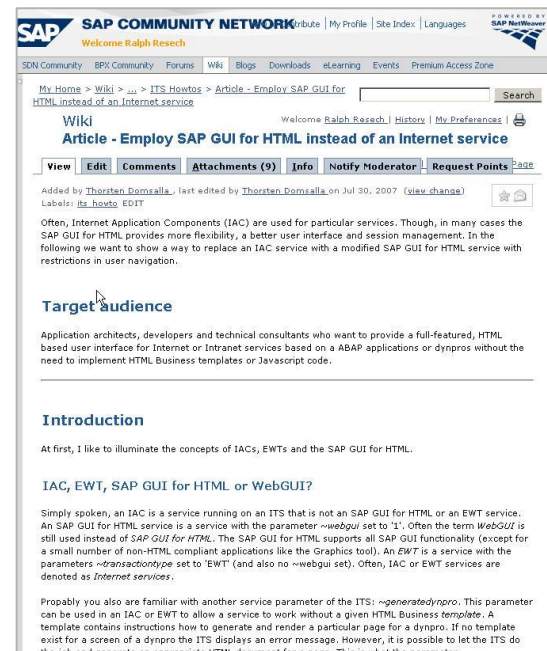
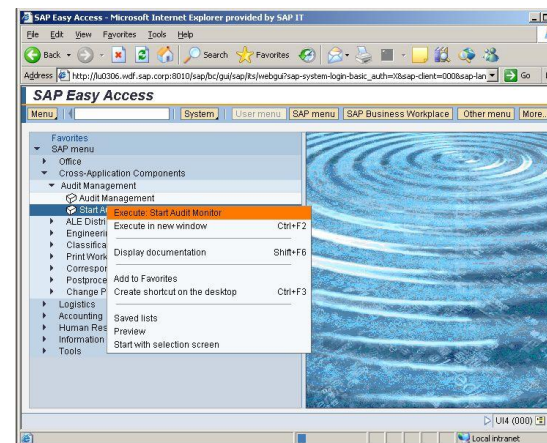


For details please check note 325616 or the Platform Availability Matrix: <http://service.sap.com/pam>

What's New in SAP GUI For HTML

Functional enhancements in latest service packs for SAP NetWeaver 7.0

- Document viewer selection is now based on OS settings
- Full support of the context menu
- Dropdown listbox works similar as in SAP GUI for Windows
- Clipboard import and export from ABAP
- Improved keyboard support (CTRL-F for search, CTRL-G for continue search, CTRL-P for printing)
- Customizing of title area (see ITS Wiki for details)
- New control Dynpro Splitter



Limitations of The SAP GUI For HTML

Because of the technical attributes of HTML or the Web Browser, the use of SAP GUI for HTML is somewhat restricted as compared to the use of a GUI, which works on operating system level.

- **Drag and Drop does not work**
- **The controlling of an OLE automation server is not possible**
- **Keyboard navigation is limited as known from other web applications**
- **Office integration is view only**
- **It does not support multiple sessions. If you need multiple sessions you have to do multiple logins.**
- **To see if a transaction is supported for use with SAP GUI for HTML check in transaction SE93**
- **Anyway most of the transactions work perfectly**

For detailed information see note 314568



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What Is ITSmobile

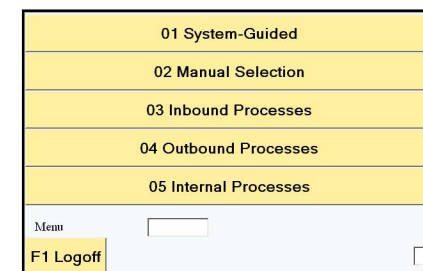
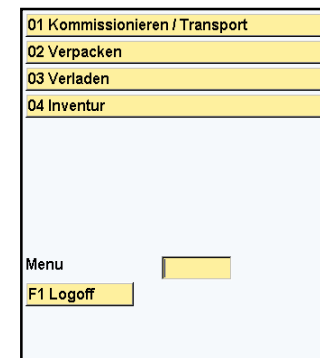
ITS can be used to access SAP applications from mobile devices like handheld barcode scanners

ITSmobile is based on template technology

- There has got to be a template for each screen (IAC / HTML Business)
- The templates can be generated in SE80
- Generated templates can be changed according to your needs and to your devices
- Device specific extensions can easily be added

Access the SAP system directly (integrated ITS)

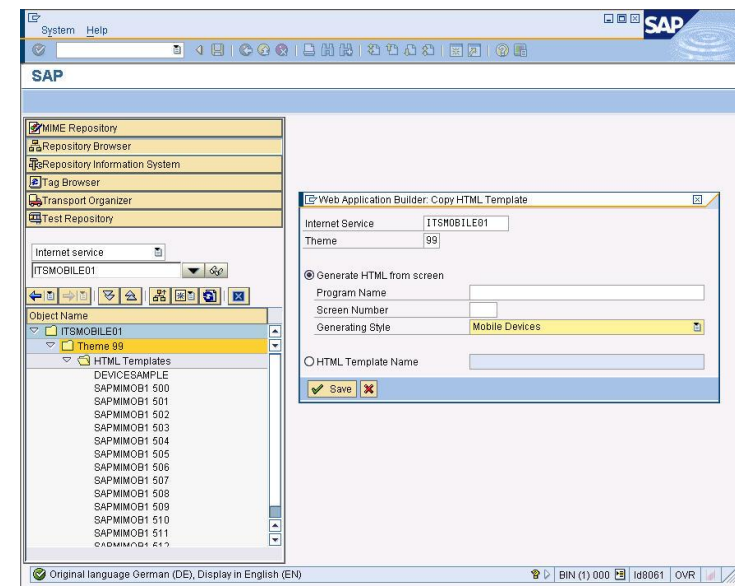
- No middleware needed
- No additional hardware needed



The Template Generator

To make the creation of the HTML Business templates easier, we offer a template generator for mobile devices

- **The generator is part of the development workbench (SE80)**
- **The generator is available in source and can easily be enhanced and changed according to you needs**
- **The template generator is available in**
 - **NetWeaver 7.0 from SAP Basis 7.00 SP11**
 - **NetWeaver 04 from SAP Basis 6.40 SP21**
 - **R/3 Enterprise from SAP Basis 6.20 SP63**
 - **R/3 4.6C from SAP Basis 4.6C SP55**



The challenge with mobile applications

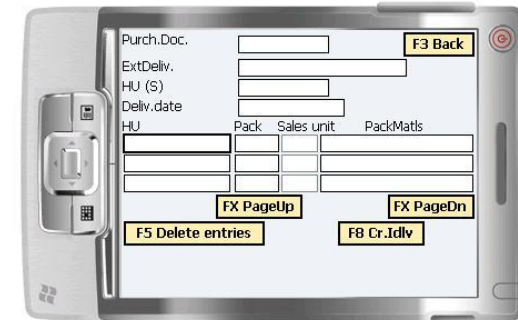
- There are a lot of different browsers around having a different feature set (with a very limited common base)
- The support for F keys is implemented in a different way by the vendors
- Different kinds of devices (e.g. handheld vs. fork-lift truck terminals)
- Various input methods (F keys, Barcodes, Voice, RFID)

What the generator is and what it is not

- The generator provided by SAP serves the common base
- Device-specific extensions can be plugged in easily
- You can have more than one set of templates at one time (e.g. for different devices)
- The generated templates can be taken as basis for an own development
- You can derive your own generator with your feature set and visual design from the one SAP provides

You can use the ITS to connect mobile devices to SAP applications

- If your device has a web browser installed
- If your device is permanently online
- If your application is written in ABAP Dynpro



Visualization is based on IAC programming model

- There has to be an HTML Business template for each screen
- Development and transport of the templates is done in the SAP system
- You have the full control on the design and layout only depending on the capabilities of your browser





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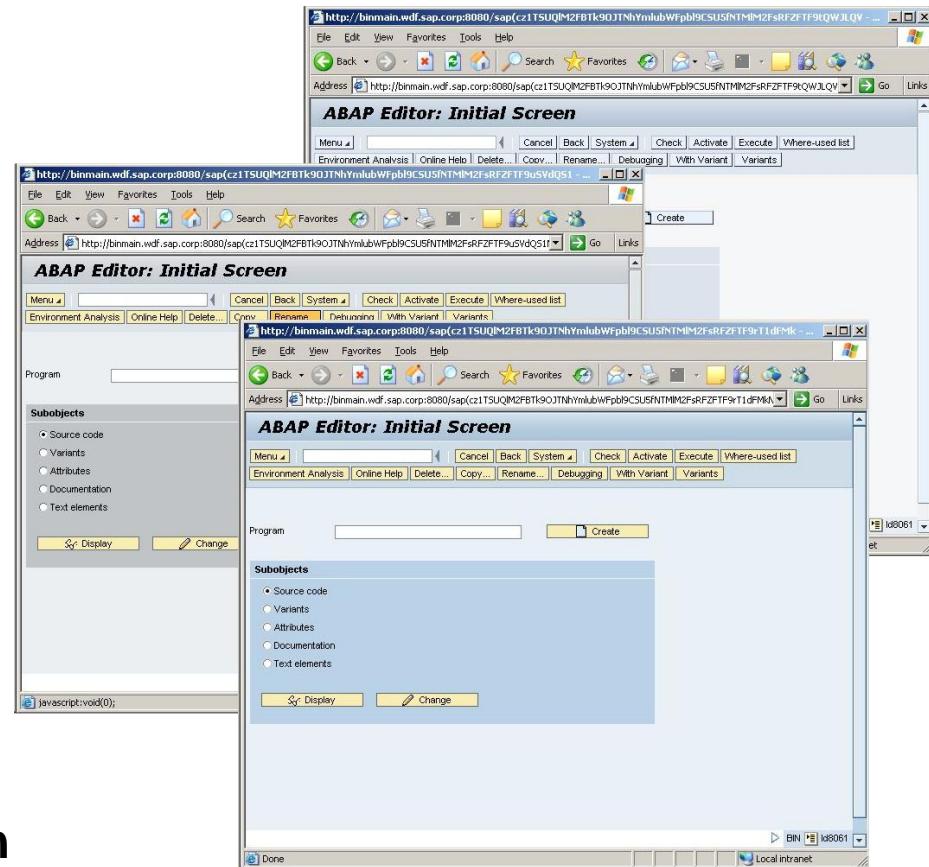
What Will Be Next?

Using Unified Rendering for the SAP GUI for HTML

- Will use the same rendering as other SAP applications (unified look and feel)
- Allows the full use of themes
- Seamless integration in the Enterprise Portal

Enhancing ITSmobile with

- A generator for Voice integration
- RFID integration
- Further requirements? Give us a note in ITS forum on SDN





SAP Public Web:

SAP Developer Network (SDN): www.sdn.sap.com

Internet Transaction Server (ITS) Forum

Internet Transaction Server (ITS) Wiki

Business Process Expert (BPX) Community: www.bpx.sap.com

ITS on service marketplace: service.sap.com/sap-its



Related SAP Education and Certification Opportunities

<http://www.sap.com/education/>



Related Workshops/Lectures at SAP TechEd 2007

UP115 Update on the SAP GUI Family

UP217 Using NetWeaver SAPSetup for Efficient SAP Front-end Software Distribution and Deployment

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QUESTIONS – SUGGESTIONS – DISCUSSION



Feedback

Please complete your session evaluation.

**Be courteous — deposit your trash,
and do not take the handouts for the following session.**

Thank You !

SAP Certifications Related to SAP TechEd Topics

Topic	Exam Level	Certificate Title	Solution Basis
ABAP	Professional	SAP Certified Development Professional - ABAP System Interfaces with SAP NetWeaver 7.0	SAP NetWeaver 7.0
ABAP	Professional	SAP Certified Development Professional - ABAP System Interfaces with SAP NetWeaver 7.0	SAP NetWeaver 7.0
ABAP	Associate	SAP Certified Development Consultant – ABAP Dev with NetWeaver 2004	SAP NetWeaver 2004
ABAP	Associate	SAP Certified Development Associate – ABAP with SAP NetWeaver 7.0	SAP NetWeaver 7.0
ADM	Professional	SAP Certified Technology Professional – NetWeaver 7.0 Platform	SAP NetWeaver 7.0
ADM	Professional	SAP Certified Technology Professional – NetWeaver 7.0 Security	SAP NetWeaver 7.0
ADM	Associate	SAP Certified Technology Associate – SAP Web AS Platform with Oracle	SAP NetWeaver 2004
ADM	Associate	SAP Certified Technology Consultant – NetWeaver 7.0 SysAd with Oracle	SAP NetWeaver 7.0
BI	Associate	Solution Consultant SAP NetWeaver '04s – SAP BI	SAP NetWeaver 7.0
E2E	Associate	SAP Certified E2E Application Management Expert – Change Control Mgmt	SAP NetWeaver 7.0
E2E	Associate	SAP Certified E2E Application Management Expert – Root Cause Analysis	SAP NetWeaver 7.0
Java	Professional	SAP Certified Development Professional – JAVA with NetWeaver 7.0	SAP NetWeaver 7.0
Java	Associate	SAP Certified Development Associate – JAVA with NetWeaver 7.0	SAP NetWeaver 7.0
MDM	Associate	SAP Certified Application Associate – Master Data Management 5.5 (SP04)	SAP NetWeaver 2004
SM	Associate	Solution Consultant SAP Solution Manager 4.0 – Implementation Tools	SAP NetWeaver 7.0
SOA	Associate	SAP Certified Associate Enterprise Architect	Enterprise SOA
XI	Associate	Certification Development Consultant SAP NetWeaver 2004s	SAP NetWeaver 7.0

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