The Future of SAP Internet Transaction Server: Integration of SAP ITS in SAP Web Application Server

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Learning Objectives

As a result of this lecture, you will be able to understand:

- Why SAP integrates ITS into SAP Web AS
- Which components of ITS are integrated into SAP Web AS
- How SAP integrates ITS into SAP Web AS
- How SAP will support existing ITS applications
Agenda

SAP Internet Transaction Server
- Overview
- Programming models of SAP ITS
- ITS 6.20 status quo

SAP Web AS Technology
- Business Server Pages (BSP)
- Web Dynpro

The future of SAP ITS
- Standalone ITS
- SAP Web AS with integrated ITS functionality

Summary
SAP Internet Transaction Server 6.20

Extends the reach of SAP Systems into the Web

- Maps SAP screens to HTML, WML or similar web formats
- Using web transfer protocol HTTP(S)

Drives transactions within the SAP System or calls function modules, BAPIs, etc. in the backend system

- Application Server sees just a SAP GUI

Separation of Business Logic and Visual Appearance

Downward compatible (towards ITS and Web Application Server releases)

- ITS 6.20 can be used to access SAP products based on SAP Web Application Server releases 6.20 and below. ITS 6.10 and 4.6D C4 can be used to connect to SAP products based on SAP Basis 4.6D and below.
### ITS 6.20 Architecture Details

- **User Request**
- **Call WGate**
- **Send Prepared Request**
- **Load Service File**
- **SAP System**

**SAP Internet Application Component**
- **Input**
- **Output**

**AGate**
- **HTML Templates**
- **Flow Files**
- **Load HTML Templates / Flow Files**

**Browser**
- **Web Server**
- **WGate**
- **HTML Page**
- **Load Service File**

### SAP GUI for HTML and ITS 6.20: Server Platforms

**Server platforms (AGate)**
- Windows 2000 Server
- Windows Server 2003 (32-bit)
- Linux /x86 SUSE SLES8, RedHat ES/AS 2.1

**Web Server platforms (WGate)**
- Apache Module
  - Linux/Intel
- Netscape Enterprise Server ("Iplanet Application Server")
  - Windows 2000, Solaris 7 or above
- Microsoft IIS
- Sun One WebServer on Solaris with ITS 6.20 p5
**SAP GUI for HTML and ITS: Client Platforms**

- **Internet Explorer on Windows**
  - IE 5.5 SP2 or above (IE 6, ...)

- **Netscape 6.2 on Windows (with SAP ITS 6.10)**
  - See also: SAP Note 325616
  - Depending on screen structure, rendering with Netscape might be slower

- **Netscape 7.0 or higher on Windows (with SAP ITS 6.20)**

- **Netscape 7.0 or higher on Linux (with SAP ITS 6.20)**

- **Support for Netscape 7 on Mac OS X planned**

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**SAP ITS 6.20: Programming models**

- **SAPGUI for HTML**: Emulation of a full feature SAPGUI in a web browser (inside-out)
- **Internet Application Components**: Creating Web-like HTML User Interface for SAP Dynpro Applications (inside out)
- **Flowlogic application**: call function modules, BAPI, ITS-driven (outside-in)
- **WebRFC**: call function modules which generate HTML pages
SAP GUI for HTML and SAP ITS 6.20: current status

- Improved rendering performance and smaller network footprint between ITS and backend system
- SAPGUI for HTML supports a vasting majority of the SAP transactions
  - New Enterprise portal compliant design (SAP Streamline)
  - Flicker-free screen rendering of HTML pages
  - Disconnect on close, terminate backend session when user navigates away or closes the browser. No more hanging R/3 sessions
  - Full moveable popup windows
  - Full keyboard support, important for professional users
- Accessibility/Section 508
  - Improved HTML generation in SAPGUI for HTML, for a better Screen reader support
  - Major building block for US Section 508 compliance
  - Allows blind users to access SAP systems
  - Will also be important in Europe, due to new disability laws in EU

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Summary
### Business Server Pages

- The Business Server Pages (BSP) UI model was the first attempt to create Web UIs using the HTTP connector of SAP Web AS 6.20 (ICMan)
- BSP provides a rich set of UI elements and a close integration into the ABAP development workbench which makes the development of Web applications very easy
- BSP does not support other clients than browsers
- BSP does only support UI programming with ABAP. No Java Support.
- Not downward compatibility to Dynpro programming model

### Web Dynpro

- New UI programming model, successor of classical Dynpro (SAPGUI)
- "Web Dynpro is SAP’s development and runtime environment to create professional user interfaces for business applications powered by SAP NetWeaver"
- Web Dynpro provides a JAVA and ABAP stack for UI programming
- Web Dynpro conversion allows to retrieve the screen information from a dynpro and transfer it into Web Dynpro metadata repository
- Web Dynpro will support a wide range of clients: Web-Browsers, mobile devices and native smart clients
- Converted dynpro can be used as a starting point to create new Web Dynpro applications
- Dynpro conversion will have several restrictions
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Summary

ITS future in one statement

Starting with SAP Web AS 6.40, SAP GUI for HTML and the IAC runtime will be integrated into SAP Web Application Server to provide downward compatibility for Web Dynpro and save our customers investments.

In addition, the (existing) SAP ITS can be used in conjunction with SAP Web AS 6.40 or above and will be supported long term (during lifetime of SAP R/3 Enterprise).
The Goal

To integrate ITS into SAP Web AS reuse as much as possible of the existing Web AS infrastructure:

- Wgate replaced by ICMan
- Store template and services in the SAP database, not in the file system
- Reuse ABAP software logistic for template and services distribution
- Replace ITS registry with SAP profile parameters
- Use workprocess roll area for ITS session information
- Simplified system landscape and reduced TCO
- Completely hide behind SAP Web AS. No more separate installation required

ITS vs. Web AS with integrated ITS functionality

Both SAP ITS and SAP Web AS with integrated ITS functionality can co-exist.
Summary

- The integration of ITS functionality into SAP Web AS allows a smooth migration from dynpro programming model to Web Dynpro.
- It provides downward compatibility and preserves your investments into dynpro programming model.
- SAP Web AS 6.40 will be shipped with integrated ITS functionality. A ‘standalone’ version of ITS 6.40 is not planned.
- Major components of SAP ITS like i.e. Wgate, will be replaced by SAP Web AS functionality.
- Web AS w/ integrated ITS functionality will only support IAC runtime and SAPGUI for HTML. Flowlogic runtime and WebRFC will not be included. SAP ITS ‘standalone’ version supports these programming models.
- SAP will long-term support the SAP ITS standalone version, which can coexist with the SAP Web AS w/ integrated ITS functionality.

Further Information

Public Web: service.sap.com/sap-its

Related Workshops/Lectures at SAP TechEd 2003

- UI Clients for SAP NetWeaver, UI101, Wednesday 1:30pm, room 117
- How to convert your ABAP Dynpro to Web Dynpro MetaData, ABAP259, Wednesday 4:15pm, room 102, and Friday 8:00am, room 312
- SAP ITS 6.20: Installation, Administration, Security and Tuning, Hands-on, PA351, Thursday 8:00am, room 123
Questions?

Q&A

Feedback

Please complete your session evaluation and drop it in the box on your way out.

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

Thank You

The SAP TechEd ’03 Las Vegas Team