Web Services for Remote Portals (WSRP) Overview

OASIS WSRP Technical Commitee

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Overview

◈ Web Services for Remote Portals (WSRP) will define a standard for interactive, user-facing web services that plug and play with portals.

◈ WSRP will define:
- A WSDL interface description for invocation of WSRP services
- How to Publish, Find, Bind WSRP services and metadata
- Markup Fragment Rules for markup emitted by WSRP services
- Applicable Security Mechanisms, Billing information ?, …

◈ Companies involved in WSRP:
- Bea, Bowstreet, Divine, Epicentric, Factiva, France Telecom, Fujitsu, HP, IBM, Interwoven, Lexis-Nexis, Lotus, Moravia IT, Netegrity, Oracle, Peoplesoft, Plumtree, Silverstream, Stellent, SUN, Sybase, Tibco, WebCollage, SAP Portals, SeeBeyond
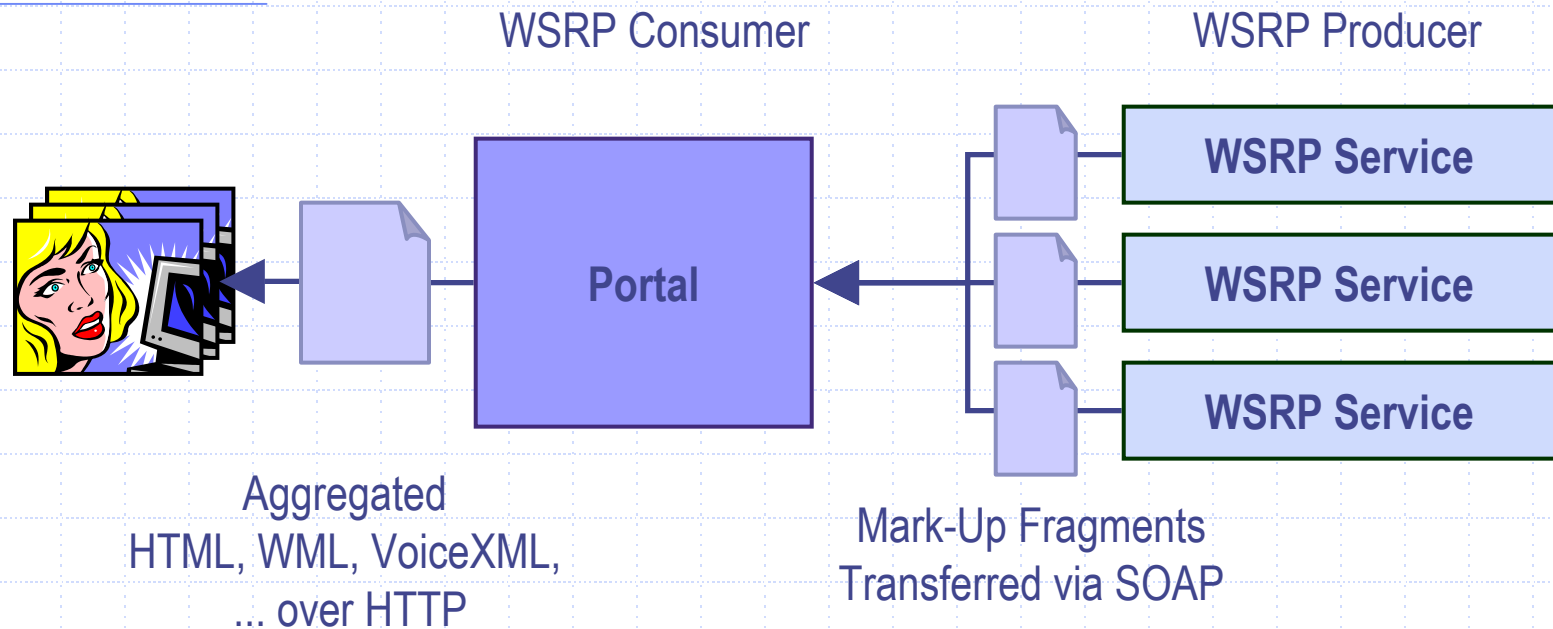
WSRP Services Plug&Play with Portals

Registry

Find

Publish

Clients

WSRP Services

Web Clients

Portals

Bind

e.g.
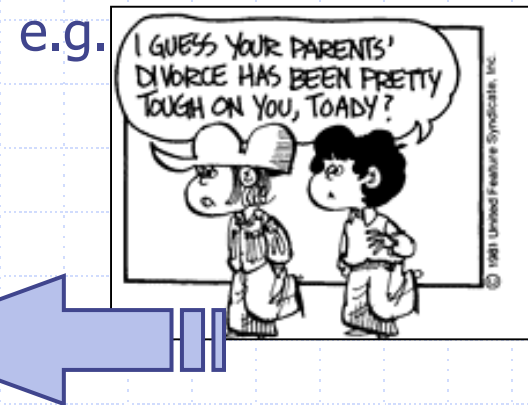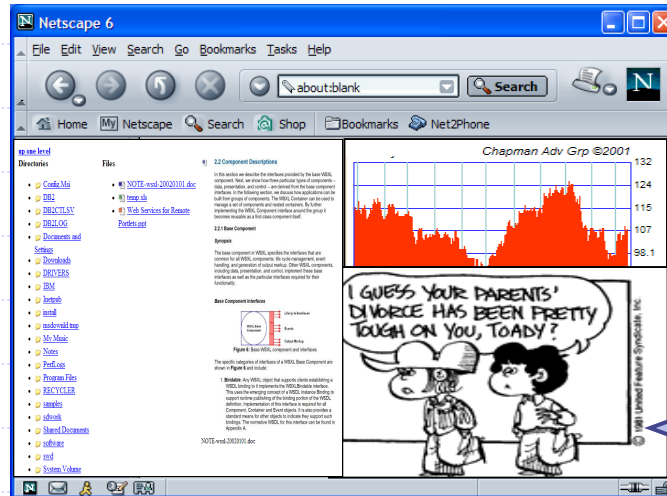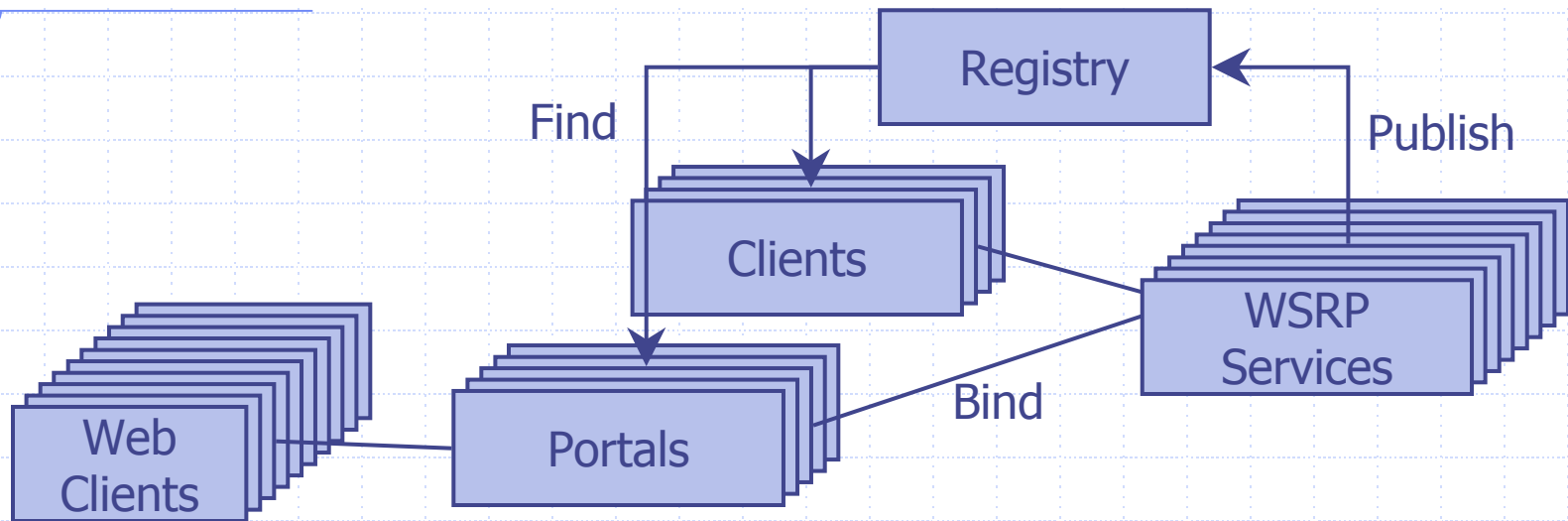
WSRP Goals

- Enable **interactive**, **user-facing** web services to be **easily plugged** into standards-compliant portals
- Let anybody **create and publish** their content and applications as user-facing web services
- Let admins browse directories for WSRP services to plug into their portals **without programming effort**
- Let **portals publish portlets** so that they can be consumed by other portals without programming
- Make the Internet a **marketplace** of visual web services, ready to be integrated into portals

Scenario: Use of WSRP in Portals

WSRP Consumer

WSRP Producer

Portal

WSRP Service

WSRP Service

WSRP Service

Aggregated
HTML, WML, VoiceXML,
... over HTTP
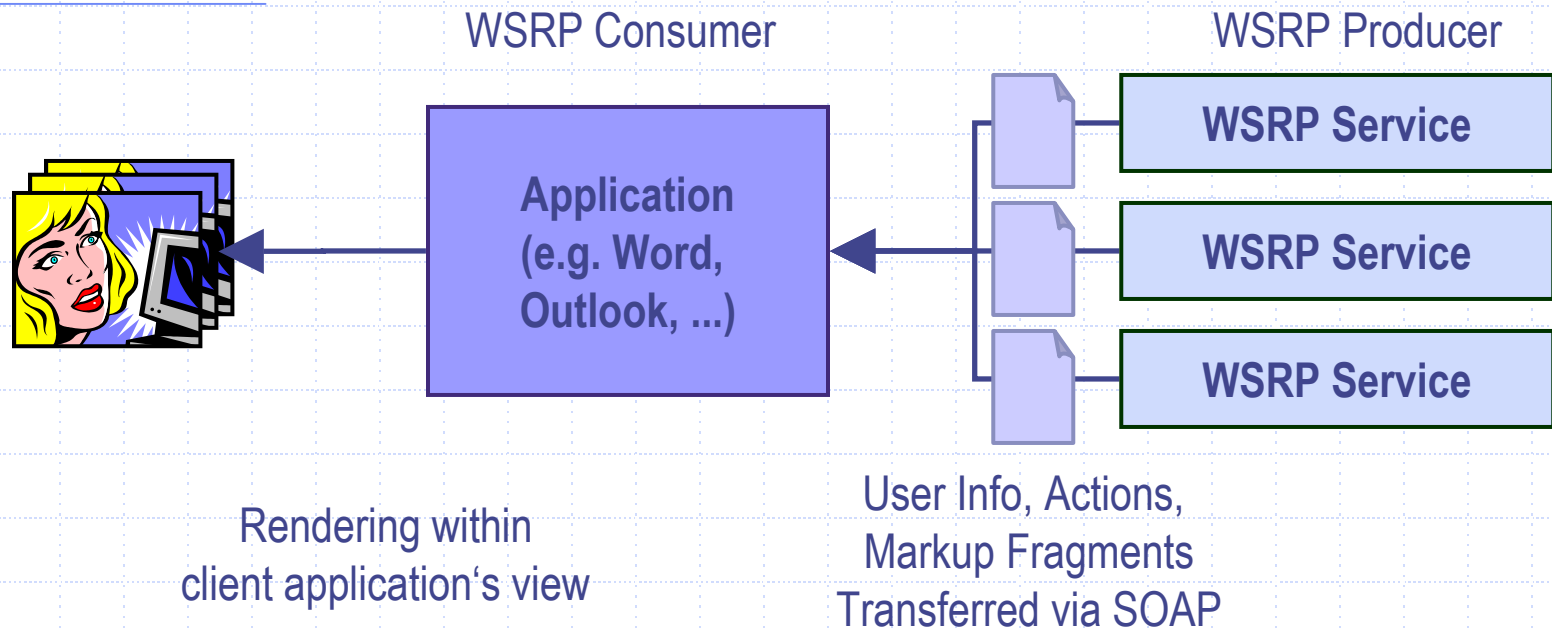
Mark-Up Fragments
Transferred via SOAP

- ◆ Portals can aggregate presentation from many WSRP services
- ◆ WSRP services can be aware of portal context
  - ■ User profile from portal
  - ■ Desired locale and markup-type
  - ■ User's device type

Scenario: Portal sharing Portlets

WSRP Consumer

WSRP Producer

Portal

WSRP Wrapper

Server Portal

Portlet

Portlet

Portlet

Huge number
of users

Portals as Intermediaries,
Caching offloads requests
from WSRP provider
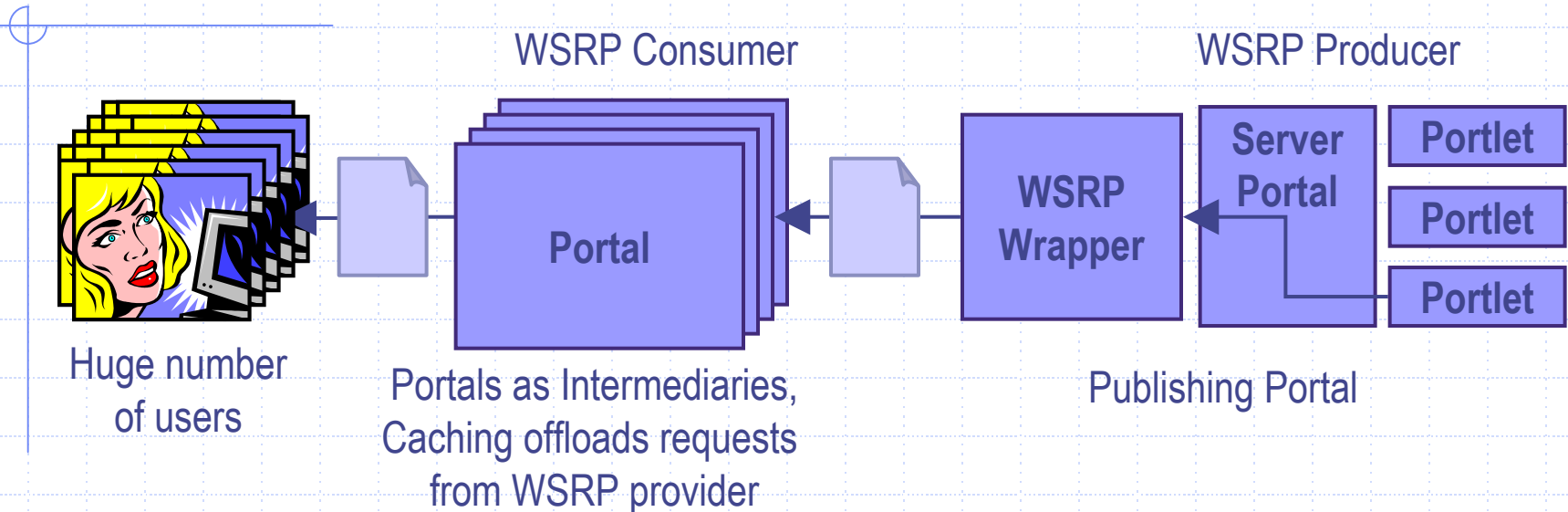
Publishing Portal

◆ Administrator publishes portlet as WSRP service to UDDI using portal's admin
   user interface

◆ Administrator of other portal finds WSRP service using portal's UDDI browser
   and binds to it with a few mouse-clicks

◆ Users of the second portal can select remote portlets like any local portlet and
   put them on their pages

◆ In this case, the portal providing a portlet as a WSRP service adheres to the
   WSRP protocol and contracts just like any other WSRP service, the

Scenario: Use of WSRP in Client Apps

WSRP Consumer

WSRP Producer

Application (e.g. Word, Outlook, ...)

WSRP Service

WSRP Service

WSRP Service

Rendering within
client application's view

User Info, Actions,
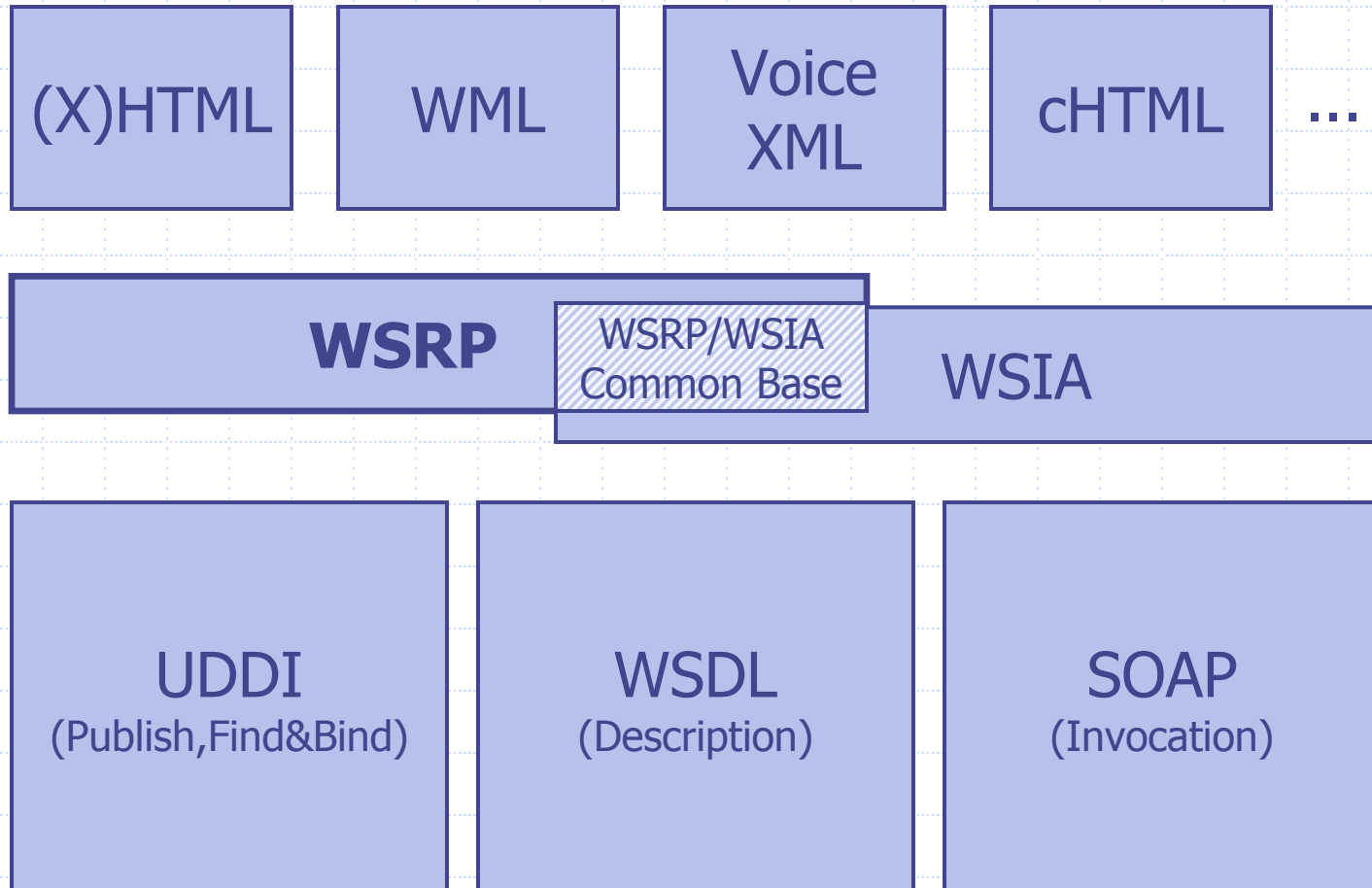Markup Fragments
Transferred via SOAP

- ◆ Applications may embed WSRP Services through plugin mechanisms, e.g. COM Components or ActiveX Controls
- ◆ In this case, the plugin in the client application adheres to the WSRP protocol and contracts, just like a portal would

Abstract Portal ⇔ WSRP Interaction

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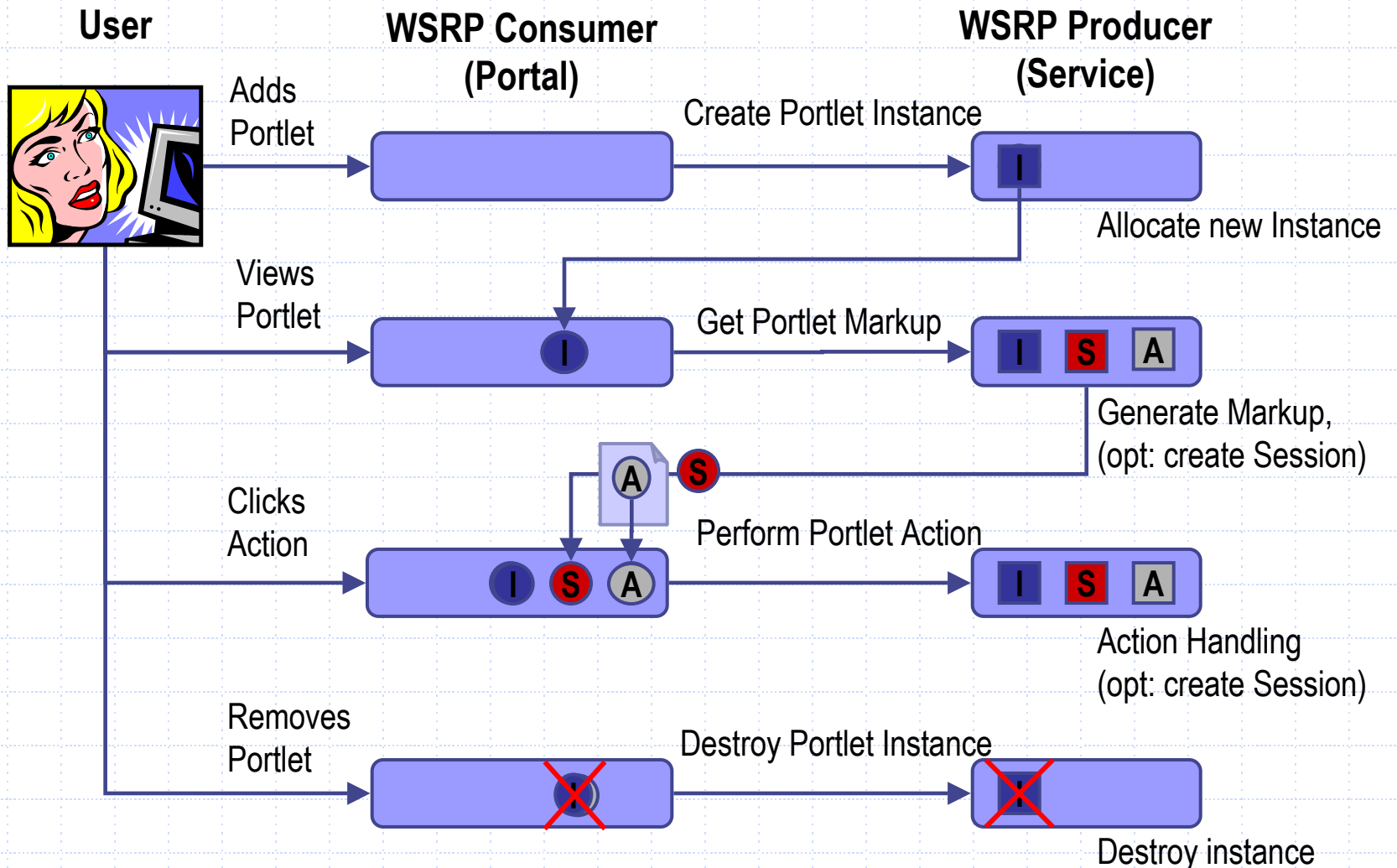
WSRP and related Standards

| (X)HTML | WML | Voice XML | cHTML | ... |

| **WSRP** | WSRP/WSIA Common Base | WSIA |

| UDDI (Publish,Find&Bind) | WSDL (Description) | SOAP (Invocation) |

Portal Architecture and WSRP

Clients →

HTTP
HTML WML VoiceXML ...

Portal Server

Portlet API

Local Portlets

Generic Portlet Proxies

Other Portals →

WSRP

Internet/Intranet

WSRP

WSRP Services

Publish/Find Web Services (SOAP)

UDDI Registry

WSRP and Portlet API(s)

Platform Independent Web Service Interface	Web Services for Remote Portals (WSRP)		
Platform specific, local Portlet APIs	Java Portlet API (JSR 168)	C# „Portlet API" (.NET) · · ·	WSRP Impl. on plain J2EE or .NET platform

Portlet APIs may be defined for different programming languages;
WSRP can bridge between the different platforms, leveraging platform
independence of Web services

Goal:
Portlets written to Portlet API can be published as WSRP services
WSRP services can be integrated through Portlet Proxies written to Portlet API

WSRP TC Areas of Work

◆ Business Scenarios

◆ WSRP/WSIA − Common Interfaces

◆ WSRP Interfaces & Protocol

◆ WSRP Publish, Find, Bind & Metadata

◆ WSRP Markup Fragments Rules/Styles

◆ WSRP and Security, Identity, SSO ...

Business Scenarios

◆ Content/Application Provider providing WSRP Service

◆ Portal publishing Portlets as WSRP Services

◆ Syndicated Content / Billing via WSRP

◆ Enterprise Application

◆ Current Awareness

◆ Cooperating WSRP Services

◆ Multimedia Sports Portal / Mobility

WSRP/WSIA – Common Interfaces

◆ Define common interfaces to be shared by WSRP and WSIA

- Basic life-cycle operations
- Basic operations for processing actions and getting markup

WSRP Interfaces & Protocol

- ◆ Define the operations for WSRP services
  - ■ Advanced life-cycle operations, e.g. for creation of instances
  - ■ Advanced operations for processing actions/getting markup
    - ◆ User profile information contained in requests
    - ◆ Device information contained in requests
    - ◆ Locale information contained in requests
  - ■ Protocol defining interaction between portals and services
    - ◆ Allowed order of operation invocation
    - ◆ Contracts for handling instances and sessions
    - ◆ Caching considerations

WSRP Publish, Find, Bind & Metadata

◈ Define method used to publish services to UDDI

◈ Define metadata to be provided when publishing service

  ▪ Name, Titles, Descriptions

  ▪ Supported Markups / Locales

  ▪ Hints for caching

  ▪ ...

◈ Define method to find WSRP services in UDDI

WSRP Markup Fragments Rules/Styles

◆ Define valid markup fragments for

- HTML / XHTML (#1 priority)
- WML, cHTML, VoiceXML (after covering HTML / XHTML)

◆ Define URL rewriting

◆ Define namespacing/prefixing

WSRP and Security, Identity, SSO ...

- ◆ Define how security mechanisms and protocols can be employed with WSRP
- ◆ Define how Identity is to be provided by consumers to producers
- ◆ Define how SSO via a consumer to multiple producers may be achieved

Planned WSRP Milestones for 2002

◆ May 2002:   WSRP Scenarios / Use Cases

◆ July 2002:   First draft of WSRP Specification

◆ August 2002:   First version of Impl proving that spec works

◆ October 2002:   Final draft of WSRP Specification

◆ November 2002:   Update of Impl to reflect final draft

◆ December 2002:   WSRP Specification 1.0, Update of
                         Impl. to reflect 1.0 spec, Compliance Test Kit

◆ 2003 Start next cycle for WSRP Specification 2.0 ...

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- Tim Granshaw, **SAP Portals**
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