




# WebServices - Erfahrungen aus einem Europa-weiten Projekt

1B02  
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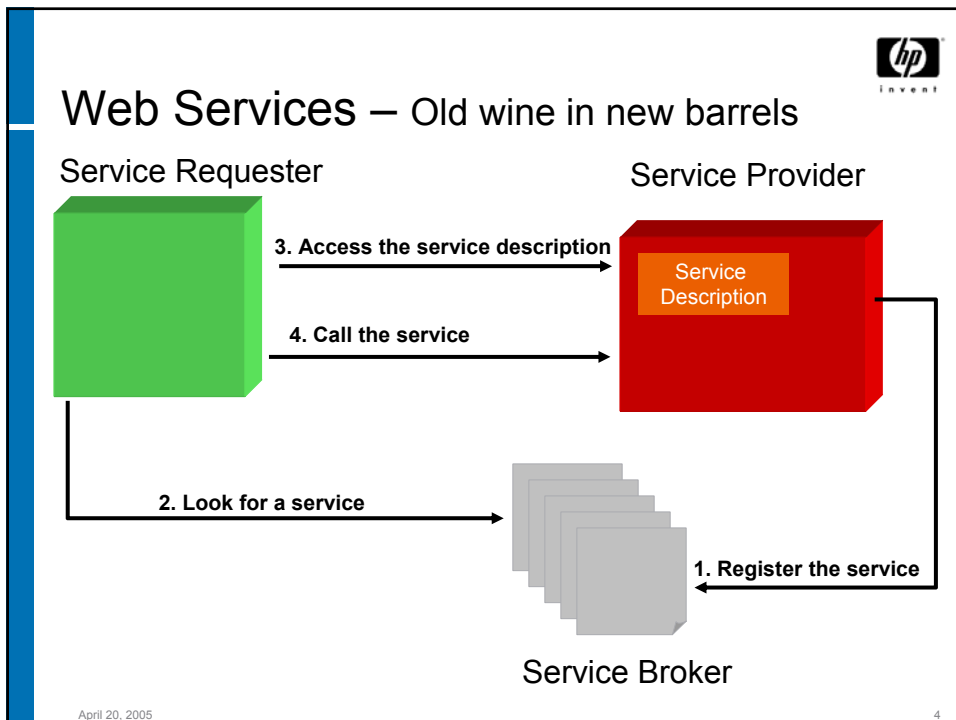
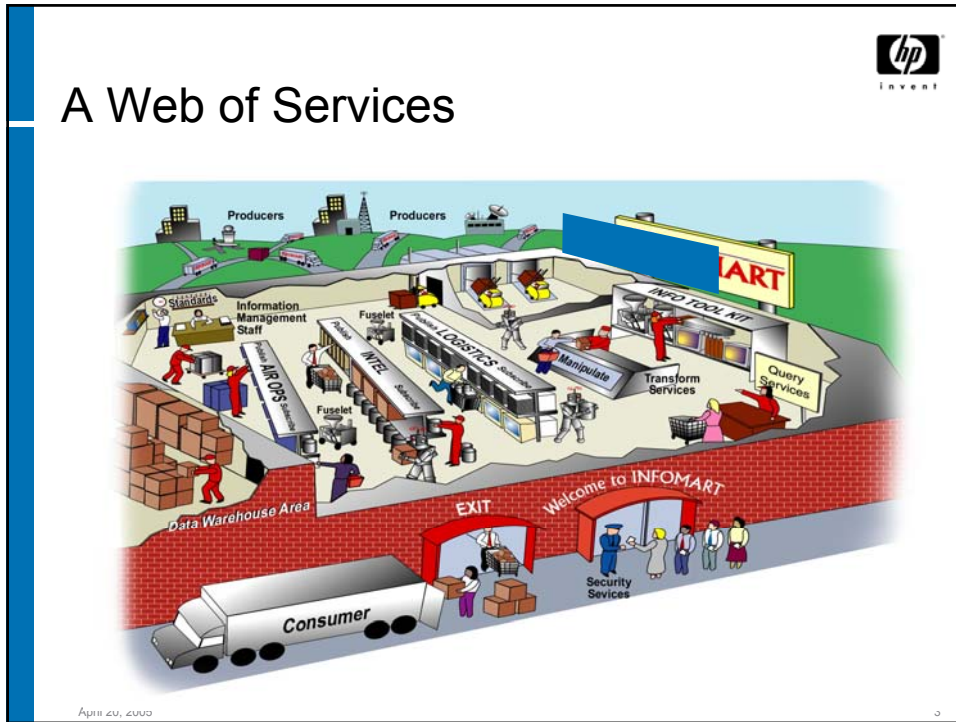


## Agenda

- Web Service Concepts
- Project
  - Characteristics
  - Overview
  - Architecture
- Why WebServices have been used?
- Hands On Demo
- Web Service Highlights
- Learned Lessons

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## Project Characteristics

- Name of the Project: CATIS II
- Main Application Functionalities
  - Planning for consultants and project managers
  - Reporting of utilization, cost and revenue, resource management
- Timeline
  - Start: 1.09.2003
  - Test version available: 1.02.2004 (30 users)
  - Production version
    - For Germany and Switzerland since one year (1000 users)
    - For Northern European Countries (1000 users)
- Team
  - Start with Development Team of about 6 members
  - 6 developers plus two offshore resources (colleagues from DGS India HP)

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## CATIS II Overview


- CATIS II is a **web based management information system** for resource and capacity management.
- Main functional areas are
  - Edit Weeklies (Booking of Labor Data) and
  - Reporting
- CATIS II comes with a Web-based portal as
  - The main entry point and
  - Delivering role-based views/functionalities

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# CATIS II Portal Highlights



Welcome to CATIS II Release 1.5


@hp

Add My Link | Log Off

PeopleFinder:  >>

Search:  >>

Home
Consultant
Project Manager
RM
Client Administrator
Administrator
Developer
ReportDeveloper
Logout



Role: Consultant


- Feedback
- Work as ...
- Maintain User Data
- Preferences
- PlanningWeeklies
  - Edit Weeklies
  - Comparison Report
  - CATW Link
  - Weekly Report
  - Lost and Found
  - Temp Proj. Catia I
  - Temp Proj. Catia II
- Reports
  - Standard Utilization
  - Normalized Utilization
  - Utilization Details
  - Activity Report
  - Engagement List
  - Labor Costs
  - Labor Costs YTD
- Cust. Data
- Show S&C
- Tools
- TrainingMaterial

Monthly Closing: 30-Jul 2004 03:00

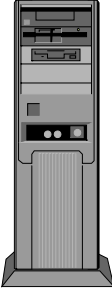

	Date / Time	From	Message	Action
<input type="checkbox"/>	9/8/2004 10:24:56 AM	282834	Preallocation for Test2, 456: Mocchi, Mario accepted	
<input type="checkbox"/>	9/8/2004 9:51:34 AM	282834	Preallocation for TestPreallocation, 1234: Mocchi, Mario accepted	
<input type="checkbox"/>	7/6/2004 1:02:33 PM	CATIS II	New training material is available for CATIS II, including update information for the current/new version 1.3. Please use the link in TrainingMaterial to access it in KMS.	
<input type="checkbox"/>	7/5/2004 7:07:13 PM	CATIS II	Dear user, CATIS II will have a downtime and be upgraded to Version 1.3 on July 7, 2004!	

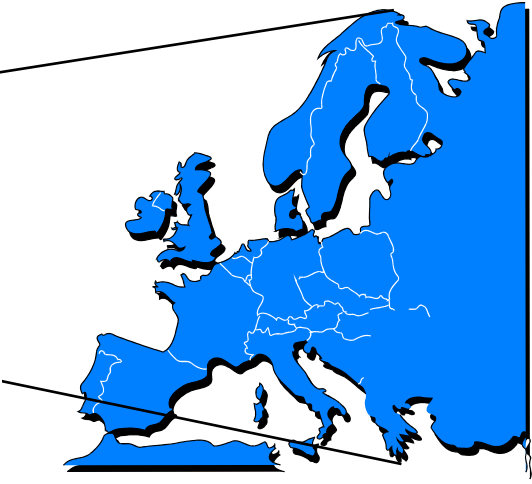
remove selected messages    select all    select none

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 Site Version : CATIS II Release V1.5-02 | 
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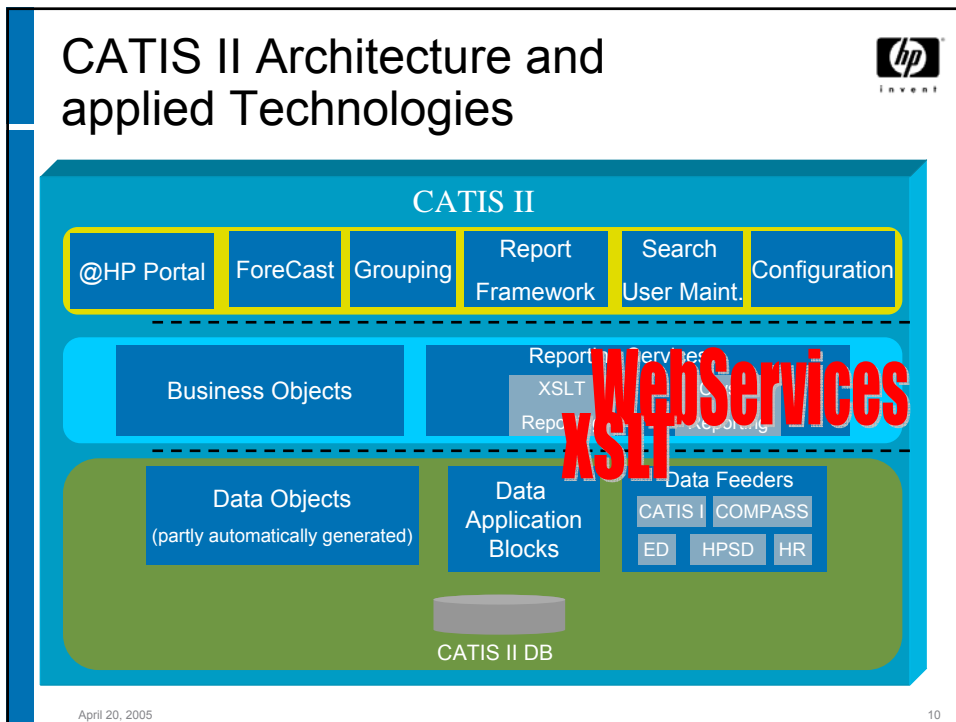
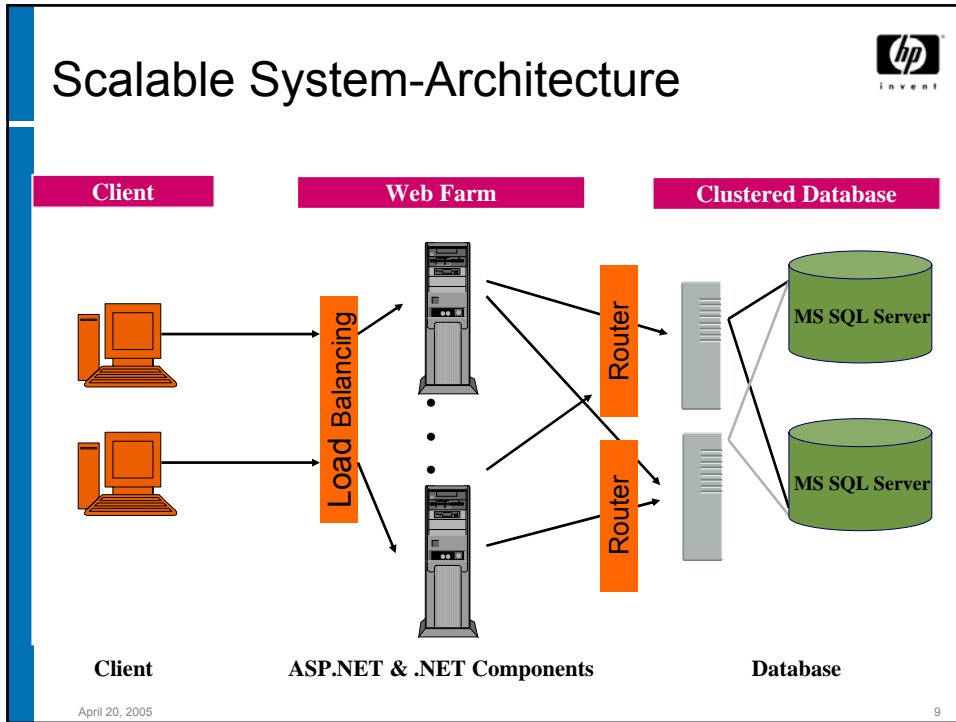


# Multi-Client Capability



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## Why Web Services have been used?

- Openness for different Clients
  - WebBrowsers, Windows Forms, Compact Framework applications
  - PDA, Mobiles, Laptops
- Flexible Portal
  - Most Web Service-based reporting technologies can be integrated
- Development
  - Easy integration of newest reports into the portal

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## Hands on Web Services ...




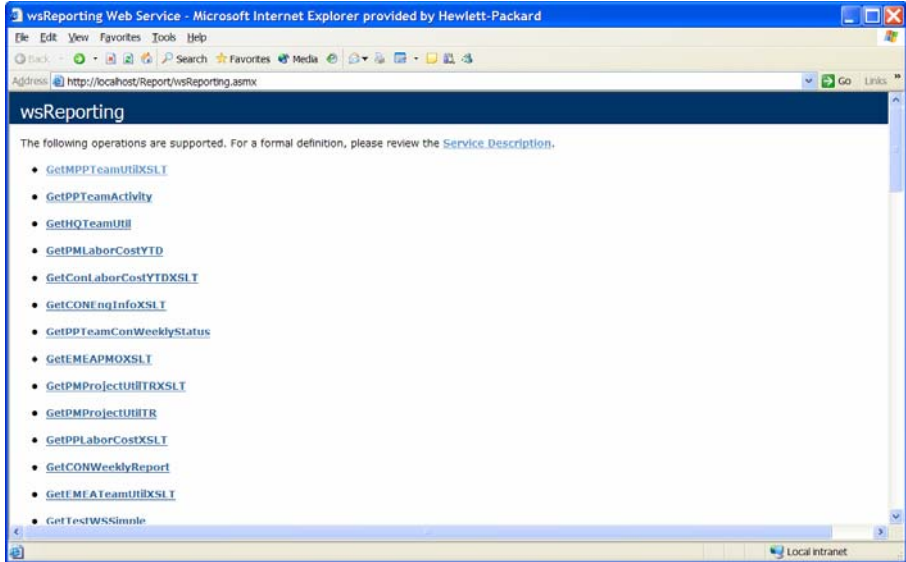
*Show Time*

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## Demo - Web Service Methods






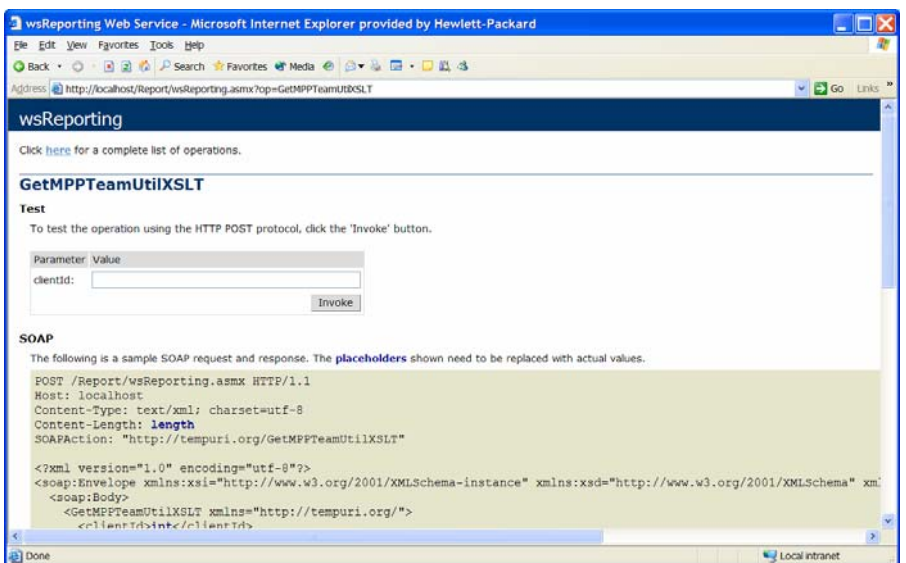
The following operations are supported. For a formal definition, please review the [Service Description](#).

- [GetMPPTeamUtilXSLT](#)
- [GetPPTeamActivity](#)
- [GetHQTeamUtil](#)
- [GetPMLaborCostYTD](#)
- [GetConLaborCostYTDXSLT](#)
- [GetCONengInfoXSLT](#)
- [GetPPTeamConWeeklyStatus](#)
- [GetEMEAPMOXSLT](#)
- [GetPMProjectUtilTRXSLT](#)
- [GetPMProjectUtilTR](#)
- [GetPPLaborCostXSLT](#)
- [GetCONWeeklyReport](#)
- [GetEMEATeamUtilXSLT](#)
- [GetTestWSSimple](#)

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## Demo – Invoke a Web Service Method





Click [here](#) for a complete list of operations.

### GetMPPTeamUtilXSLT

**Test**

To test the operation using the HTTP POST protocol, click the 'Invoke' button.

Parameter	Value
clientId:	<input type="text"/>

**SOAP**

The following is a sample SOAP request and response. The **placeholders** shown need to be replaced with actual values.

```
POST /Report/wsReporting.asmx HTTP/1.1
Host: localhost
Content-Type: text/xml; charset=utf-8
Content-Length: length
SOAPAction: "http://tempuri.org/GetMPPTeamUtilXSLT"

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetMPPTeamUtilXSLT xmlns="http://tempuri.org/">
      <clientId>int</clientId>
    </GetMPPTeamUtilXSLT>
  </soap:Body>
</soap:Envelope>
```

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## Demo – Result of the Web Service



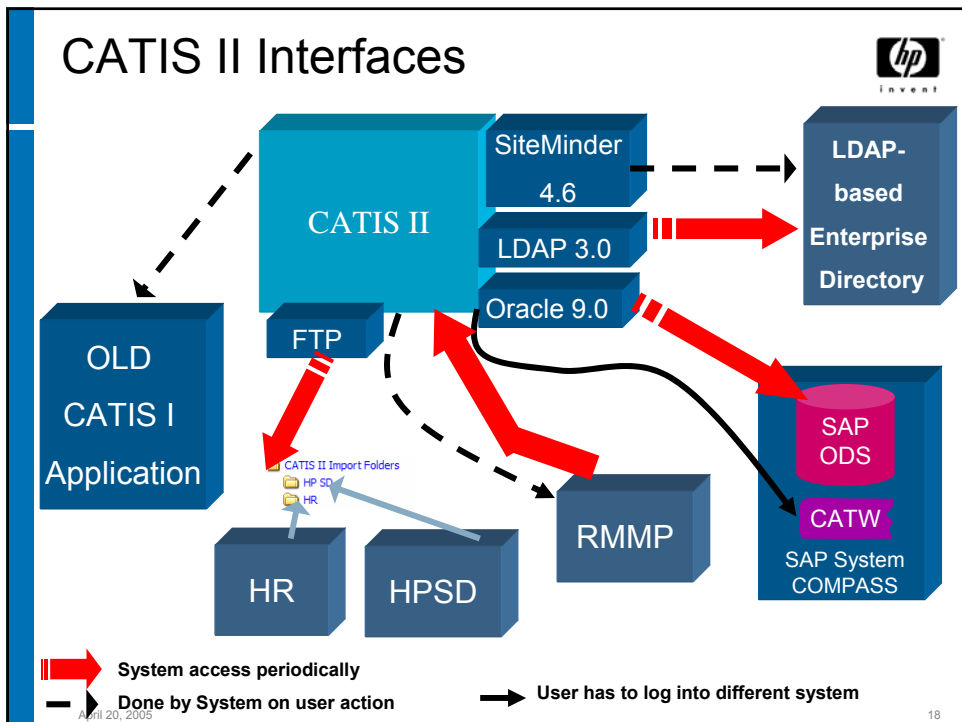
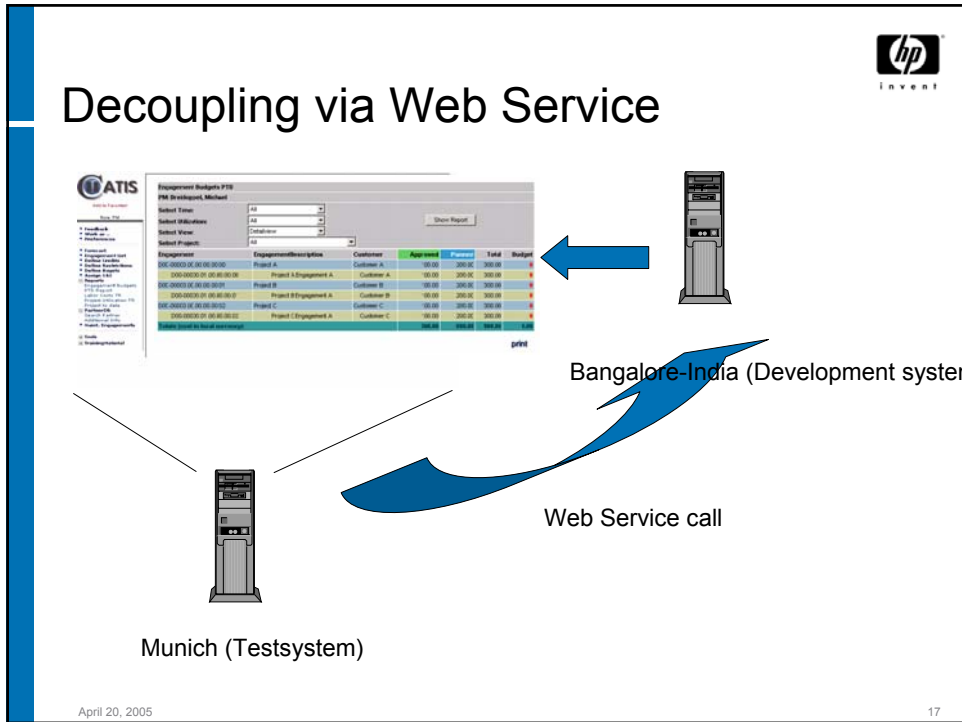
```
<?xml version="1.0" encoding="utf-8" ?>
<string xmlns="http://tempuri.org/"><?xml version="1.0" encoding="UTF-8"?> <xslt:stylesheet version="1.0"
xmlns:xslt="http://www.w3.org/1999/XSL/Transform" xmlns:msxsl="urn:schemas-microsoft-com:xslt"
xmlns:user="urn:my-scripts" xmlns:user2="urn:my-scripts"> <xslt:param name="ToExcel" select="NO"/>
<msxsl:script implements-prefix="user" language="CSharp"> <![CDATA[ public string currentDate()
{ DateTime t1 = DateTime.Now; DateTime t2 = new DateTime(t1.Year, t1.Month, 1); return t2.ToString(); } public
int compare(string t1, string t2) { DateTime dt1 = DateTime.Parse(t1); DateTime dt2 = DateTime.Parse(t2); if
((dt1.Year < dt2.Year) || (dt1.Year == dt2.Year && dt1.Month < dt2.Month) || (dt1.Year == dt2.Year &&
dt1.Month == dt2.Month && dt1.Day < dt2.Day)) return 1; if ((dt2.Year < dt1.Year) || (dt2.Year == dt1.Year &&
dt2.Month < dt1.Month) || (dt2.Year == dt1.Year && dt2.Month == dt1.Month && dt2.Day < dt1.Day)) return -1;
return 0; // return DateTime.Compare(DateTime.Parse(t1), DateTime.Parse(t2)); } public string createDateTime
(string str) { return DateTime.Parse(str).ToString(); } public string getUrl(int past, int future) { return
"http://localhost/ShowReports.aspx?MonthPast=" + past.ToString(); } ]]> </msxsl:script> <xslt:output
method="html"/> <xslt:template match="/"> <SCRIPT language="JavaScript"> <![CDATA[ URLToPortal = true;
function navigateBackForward(direction) { yearNr = document.getElementsByName("YearNr")[0].value;
employeeId = document.getElementsByName("EmployeeId")[0].value; loginId = document.getElementsByName
("LoginId")[0].value; monthPast = document.getElementsByName("MonthPast")[0].value; monthFuture =
document.getElementsByName("MonthFuture")[0].value; utilizationCat = document.getElementsByName
("UtilizationCat")[0].value; normalized = document.getElementsByName("NormalizedField")[0].checked;
utilizationCat = utilizationCat.replace(" ", ""); //alert("yearNr = " + yearNr + " monthPast = " + monthPast + "
monthFuture = " + monthFuture + // "UtilizationCategory = " + utilizationCat + " Normalized = " +
normalized); //alert("Vor der Berechnung: " + monthNr + " " + year); if (direction == "back") { monthPast =
((monthPast*1) + 1)*1; monthFuture = ((monthFuture*1) - 1)*1; } else {if (direction == "forward") { monthPast
= ((monthPast*1) - 1)*1; monthFuture = ((monthFuture*1) + 1)*1; } //alert(monthPast + "-" + monthFuture);
if (URLToPortal == true) { top.document.frames["PANEL1"].location.href = 'ReportCatis2Standard.aspx?
Report=MPPTeamUtil' + '&EmployeeId=' + employeeId + '&MonthPast=' + (monthPast*1) + '&MonthFuture=' +
(monthFuture*1) + '&UtilizationCategory=' + utilizationCat + '&Normalized=' + normalized + '&LoginId=' +
loginId ; } else { top.document.location.href = 'ReportCatis2Standard.aspx?Report=MPPTeamUtil' +
'&EmployeeId=' + employeeId + '&MonthPast=' + (monthPast*1) + '&MonthFuture=' + (monthFuture*1) +
'&UtilizationCategory=' + utilizationCat + '&Normalized=' + normalized + '&LoginId=' + loginId ; } } function
navigate(utilizationCategory, normalizedVal) { if (utilizationCategory == "") { alert("No Utilization selected.");
return; } yearNr = document.getElementsByName("YearNr")[0].value; employeeId =
document.getElementsByName("EmployeeId")[0].value; loginId = document.getElementsByName("LoginId")
[0].value; monthPast = document.getElementsByName("MonthPast")[0].value; monthFuture =
document.getElementsByName("MonthFuture")[0].value; utilizationCat = utilizationCategory.replace(" ", "");
normalized = false; //normalizedVal; //alert("yearNr = " + yearNr + " monthPast = " + monthPast +
" monthFuture = " + monthFuture + // "UtilizationCategory = " + utilizationCat + " Normalized = " + normalized); if
(URLToPortal == true) { top.document.frames["PANEL1"].location.href = 'ReportCatis2Standard.aspx?

```


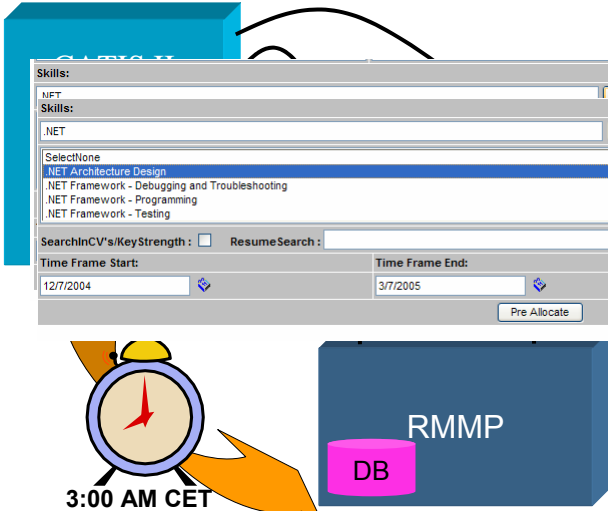
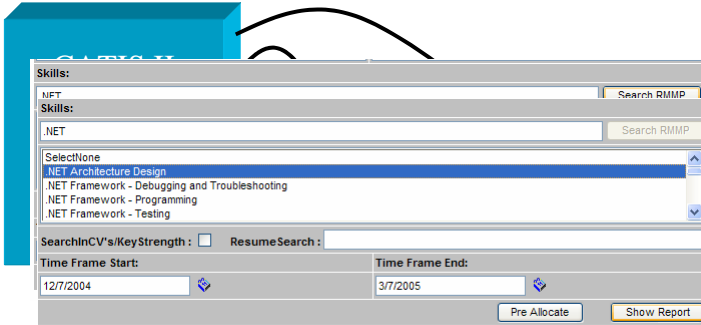
## Web Service Highlights





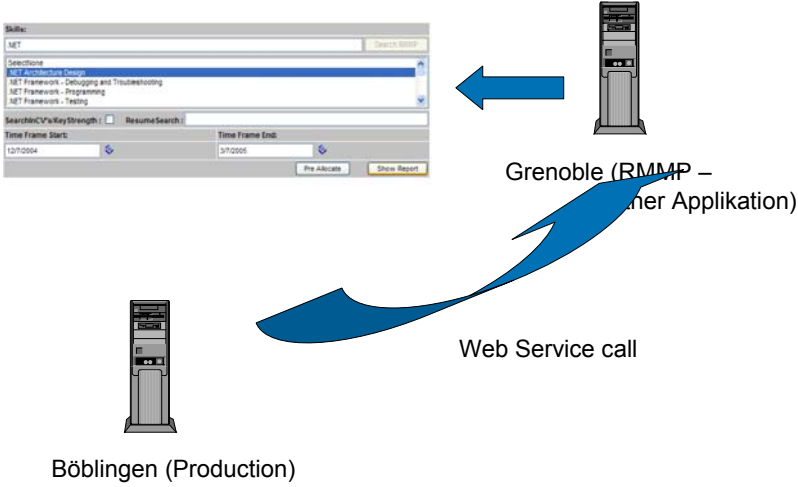


# RMMP Interfaces



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# Physical distribution for production environment



Böblingen (Production)

Grenoble (RMMP - Partner Application)

Web Service call

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## Learned Lessons **also for future HP projects with you!**

- Business Drivers for Web Services have been
  - Time to Market
  - No tight coupling of systems
  - Political issues
- Offshore support has cut the costs and has speed up the development (but needs a knowledge sharing investment before).
- HP with lots of international projects has enabled the easy EMEA rollout in the organisation itself.
- Web Service .NET based architecture
  - has proven to be highly flexible and
  - is accompanied by short development cycles.

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Wenn sie Interesse haben an der

### ***Integration von .NET/Java und SAP***

dann sollten Sie sich meinen Vortrag 3H07 am Donnerstag, 7. April 2005, im Raum Augustus nicht entgehen lassen.

#### Contact

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