

Business/Workplace-Portals

Inter-organizational use of portal technologies
eSpace Concepts 2 – SS 2003

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G8

- **Portal basics (first lecture)**
 - Concepts and classification
 - Elements and architecture
 - Demo (G8-Portal)
- **Future directions (second lecture)**
 - Scenarios of inter-organizational use of portal technologies
 - Technical and organizational demands
 - Demo of the portal interconnection based on a prototype developed on top of the G8-Portal

G8

- Portal classifications
 - Business portals
 - Workplace portals
- Portal evolution
 - Informational websites (1995)
 - adaptive e-workplace (20xx)
- Portal principles
 - Aggregation
 - Personalization
 - Customization

G8

- Single point of access
 - Content
 - Applications
 - People
 - Processes
- User-orientated process integration
 - Funnel and filter overwhelming information
- Technical and business goals
- Metrics to measure success of portal projects

G8

- Portal elements
 - Places
 - Pages
 - Portlets
- Themes and skins
 - Portal branding
 - Different visual presentation (fonts, color, images, navigation)
- Collaboration
 - Connect quickly the right people at the right time
 - Embedded collaboration inside the portal



PERSONAL
Your information at hand!

für Olaf Hahn!

Abmeldung

Abmelden

Home

Einstellungen

Administration

Place list

Places: Home (dropdown menu showing Home, Projekte LPS, Kooperation Pavone, G8 Architektur)

Page register

Übersicht) G8-Infos News XML Feeds

Online Awareness

Angemeldete Personen: 1 | Place-Chat | Online-Status ändern

Posteingang

zur Mailbox (iNotes) - zur Mailbox (WebUI)

Who	Date	Size	Subject
Holger Ploch	30.04.2003	5271	Hallo Olaf, meine ID für das G8-Portal läuft demnächst aus... könntest ...
Olaf Hahn!	23.05.2002	2760	/G8Portal/DE has certified the ID belonging to Olaf Hahn!/G8Portal/DE. ...
Olaf Hahn!	22.05.2002	5199	My ID is attached. Please certify it and send it back to me by using th ...
Bjoern Brencher	05.09.2001	4815	Diplom-Präsentation
Olaf Hahn!	12.07.2001	8744	Domino.Doc Standort-Upgrade (2.0/2.1)
Ingo Biermann	23.04.2001	616	Publishing approval

Online Awareness

Digital-Uhr (Applet)

Portlet

15:40:45
10-06-2003

Kalender

Dienstag, 10.06.03 (KW24, 161.Tag) zum Kalender

Kein Kalendereintrag für diesen Tag!

ToDo - Nach Termin

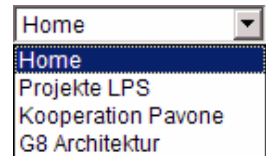
zur ToDo-Liste

- Projektbesprechung (Sametime) 18.09.2001 Current G8-Portal
- Präsentation fertigstellen 25.09.2001 Future UGO
- Präsentation ausdrucken 26.09.2001 Future UGO

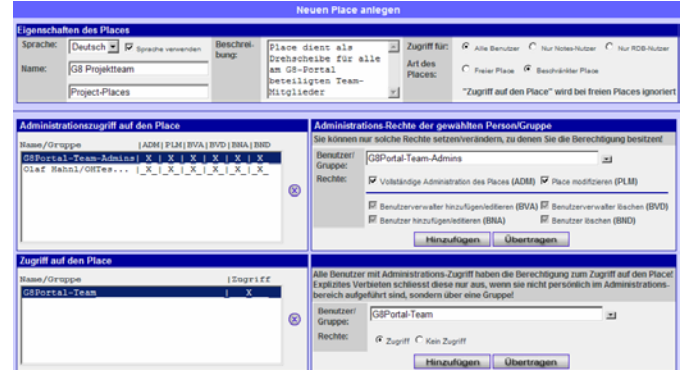


- First meta-/structural level
- Any number of places (per project, task, department, etc.)
 - Access protected with granular access control system
 - Or open, i.e. accessible for all users
- Places could be/are used **together**
 - Shared information space
 - Team/collaborative environment

Place list

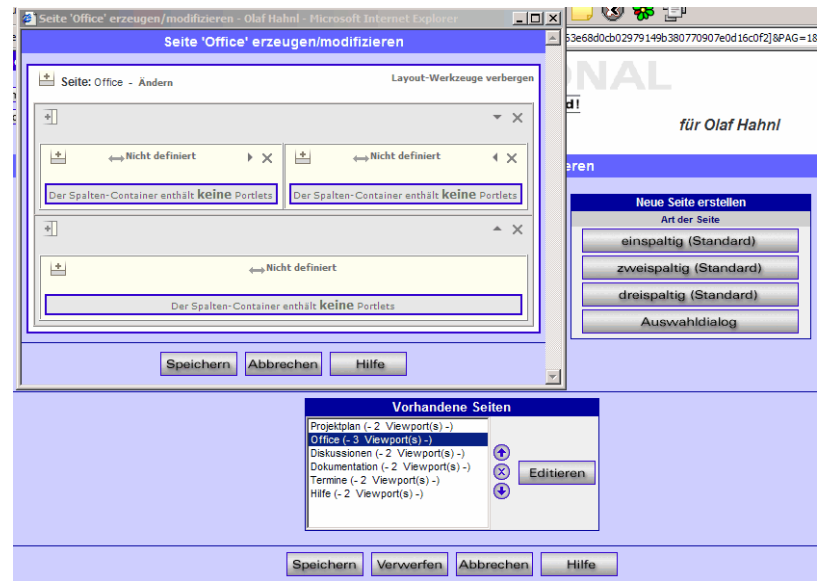
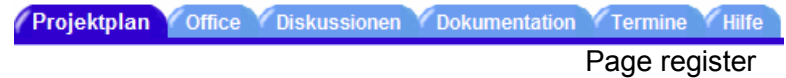


Dialog to create/modify/delete a place



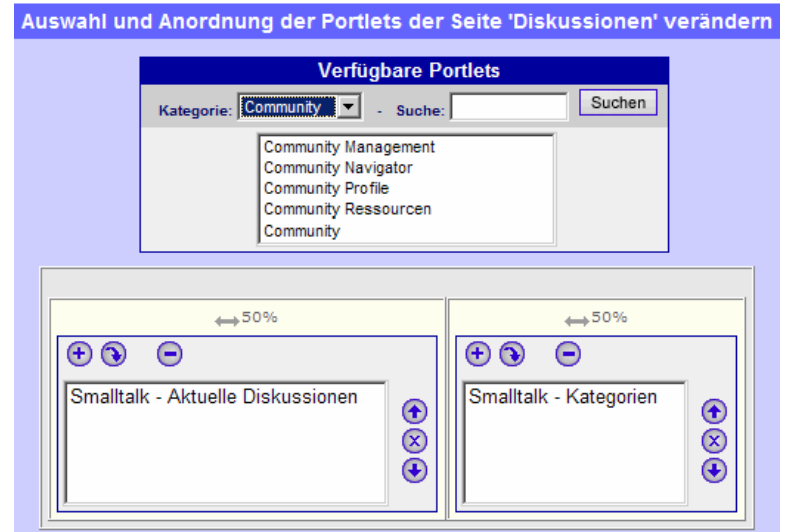


- Sub-structure below place level
- Any number of pages per place
 - Flexible layout per page (any number of rows and columns)
 - At the same time “Cooperate Identity” is taken care for



Page register & page customizer

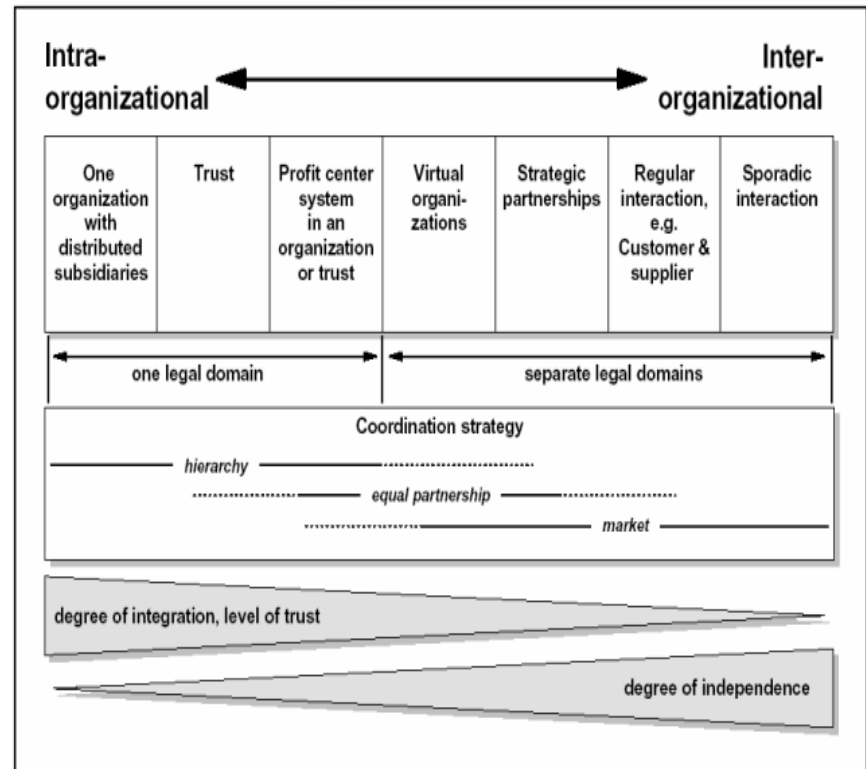
- Actual element which carries information – Portal „windows“
- Provides access to processes, applications, information, etc.
- Can be placed anywhere on a page without restrictions in number of occurrences



G8

- **Many forms of organizations**

- Intra- and inter-organizational
- Short- to long-term
- Tightly to loosely coupled
- Hierarchical to market coordination
- Always need to share information and to coordinate



Riempp 1998

G8

- **IT as an „enabler“ for (new) forms of organizations**
 - Help to overcome location- and time-difference
 - Linking of business functions
 - Reduction of run- and response-time
- **Front-end vs. back-end integration**
 - „On the glass“
 - Combination of user interfaces from different applications
 - Linking of back-end systems
 - SAP or production planning systems etc.

G8

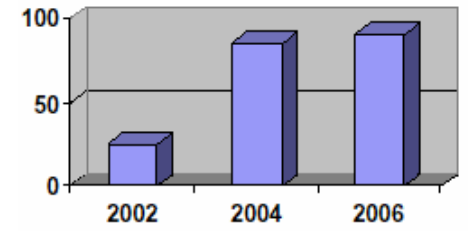
- **Specificity of the binding**
 - Is the investment bound to only one partner (idiosyncratic investments [Williamson], sunk-costs)
 - Also usable differently (with other partners)
 - **Flexibility of the binding**
 - How fast can a “link” between systems of the involved companies be established or un-established
 - Which costs arise from this
- Direct effect for the forms of possible cooperation, especially with regard to the timeframe

- Portals play a more and more important role in companies as central information hub (B2E)
 - Offer a **single point of access** for employee
 - Companies are starting to “open” up their portals or establish new portals for customers and partners (Extranet /Internet portals) (B2B)
- Companies work together with more and more customers and partners in different relationships (every variation between loosely to tightly coupled and intra- to inter-organizational)
- This results in employees working with at least one (or even more) internal portal(s) and a number of external portals

The single point of access is lost!

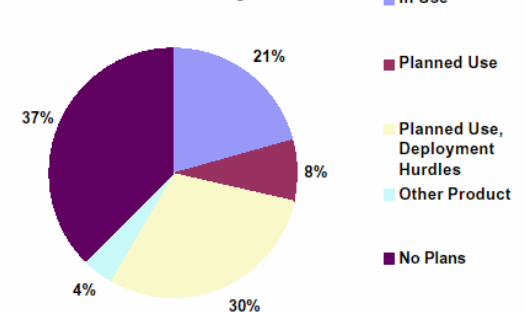


META: % of Organizations that Have Deployed a Portal



META Group 2001

Plumtree: "Do You Plan to Deploy Your Portal to Users Outside Your Organization?"



Plumtree 2002

G8

- Different needs exist due to different nature of relationships
- From consolidating different portals into a “meta”-portal to portal cooperation and integration
- Front-end integration not exchange of mass data (production planning, stock-keeping, etc.), reason why this approach is better suited for “knowledge-/information-intensive“ cooperation
- Also organizational requirements (trust, security, etc.)
- Derivation of three scenarios

Goal: Bringing back the single point of access!

G8

Share single information by only providing portlets (related to WSRP)

- Loosely coupled
- No way to determine or to predict in which context information is shown – requester decides
- Possibly able to customize portlet properties on requester's side
- No direct context between provider and requester (broadcast schema 1:n)

- Application: pure content provider (e.g. stock quotes)

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Share information in a broader context by “sharing” or providing whole pages and eventually places

- Portlets are presented in a certain context with other portlets
- Portlets on a page are normally predefined by the provider
- Some kind of common context but only one-way distribution from provider to requester (broadcast schema 1:n)

- Application: Supplier-customer relationship (e.g. sales information consisting of datasheets, order and order tracking system etc. for the customer)

G8

Share places in a “cooperative” manner

- More tightly coupled but also highly flexible
- Portal place as companies spanning information space of federate (cooperating) portals
- Every “member” can contribute portlets and pages respectively information, processes, etc.
- Participative (work)place design
- Same context between partners who share project or task related “workplace“ (cooperation 1:1 or n:m)
- Application: Cooperation (e.g. joint product development)

G8

- Meta-data layer (Place, Page, Portlet)
 - Properties of a place (name, access-control, etc.)
 - Number, names, and ordering of the pages
 - Number, ordering, and properties of the portlets
 - Matching through (asynchronous) synchronization (specifics: conflict resolution, deletion marks, only exchange of differences)
- Portlet content layer
 - Content of the portlets is created and displayed synchronously (specifics: replacement of portlet types, treatment of unavailable portlets, portlet routing)
 - Caching mechanisms to guarantee high performance



Demo

G8

Resources & Discussion

Project-homepage: <http://gcc.upb.de/k-pool/FederateG8>

Business Computing Portal: <http://winfo.upb.de>

Demo Portal: <http://g8.upb.de>



Base-state

- Empty portal 1 (blue)
 - Empty portal 2 (consumer – pink)
- (Place lists only contain Home place)





Eigenschaften des Places

Sprache: Sprache verwenden Beschreibung: Zugriff für: Alle Benutzer Nur Notes-Nutzer Nur RDB-Nutzer

Name: Art des Places: Freier Place Beschränkter Place

"Zugriff auf den Place" wird bei freien Places ignoriert

Administrationszugriff auf den Place

Name/Gruppe | ADM | PLM | BVA | BVD | BNA | BND

| | | | | | |

Administrations-Rechte der gewählten Person/Gruppe

Sie können nur solche Rechte setzen/verändern, zu denen Sie die Berechtigung besitzen!

Benutzer/Gruppe:

Rechte: Vollständige Administration des Places (ADM) Place modifizieren (PLM)

Benutzerverwalter hinzufügen/editieren (BVA) Benutzerverwalter löschen (BVD)

Benutzer hinzufügen/editieren (BNA) Benutzer löschen (BND)

Zugriff auf den Place

Name/Gruppe | Zugriff

- Kein Benutzer/Gruppe definiert -

Alle Benutzer mit Administrations-Zugriff haben die Berechtigung zum Zugriff auf den Place! Explizites Verbotien schliesst diese nur aus, wenn sie nicht persönlich im Administrationsbereich aufgeführt sind, sondern über eine Gruppe!

Benutzer/Gruppe:

Rechte: Zugriff Kein Zugriff

Remote-Portale mit Zugriff auf den Place

Name

Remote-Portal & Administrator-Rechte auf dem Remote-Portal

Wählen Sie ein Remote-Portal aus und geben Sie den dortigen Place-Administrator mit Rechten an.

Remote-Portal:

Remote-Benutzer/Gruppe:

Rechte: Vollständige Administration des Places (ADM) Place modifizieren (PLM)

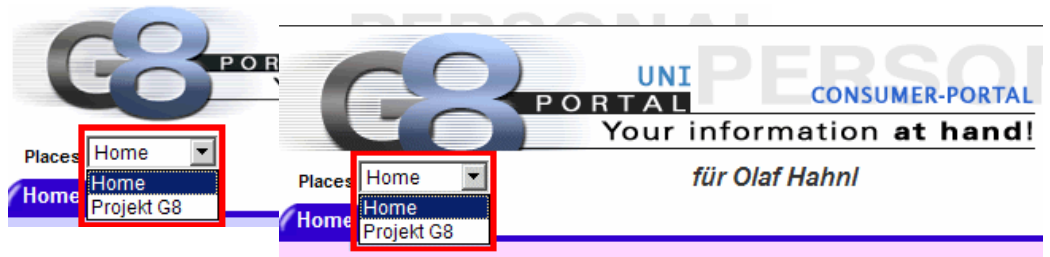
Benutzerverwalter hinzufügen/editieren (BVA) Benutzerverwalter löschen (BVD)

Benutzer hinzufügen/editieren (BNA) Benutzer löschen (BND)

Synchronisation:

Step 1

- Creation of a new place in portal 1 (blue)
- Portal 2 (consumer – pink) is added with access-rights
- New place is instantly available in portal 1 and also transferred to portal 2





Abmeldung

Abmelden

Home

Einstellungen

Places:

G8 UNI PERSONAL PORTAL
Your information at hand!
für Olaf Hahn!

Home Discussion

Wettervorhersage Home

17.06.

Kiel Rostock Stettin
Hamburg Schwerin
Broningen
Hannover Berlin
Münster
Kassel Leipzig
Dresden

G8Portal Personen Edit

Tobias Altemeier
Mark Aufenanger
Philipp Behre
Wolfgang Bernartz
Markus Bertelt
...

Step 2

- Creation of a new page in portal 1 (blue)
- Adding of two (local) portlets into portal 1 (blue)

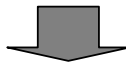
The screenshot shows the 'G8 PERSONAL CONSUMER-PORTAL' interface. The main heading is 'Your information at hand!'. Below this, there's a section for 'Eigenschaften des Places' (Properties of the Place) for 'Projekt G8'. A dialog box from Microsoft Internet Explorer asks 'Wollen Sie den Place wirklich synchronisieren?' (Do you really want to synchronize the place?). The 'Place synchronisieren' button is highlighted with a red box. Below the dialog, there are buttons for 'Place löschen', 'Speichern', 'Verwerfen', and 'Abbrechen'. At the bottom, there's a map titled 'UNI COORDINATOR: Wettervorhersage' and a list of users under 'UNI COORDINATOR: G8Portal Personen'.



Step 3

- Synchronization of the place from portal 2 (pink) with portal 1 (blue)
- Pages and portlets of the place from portal 1 (blue) are received and displayed in portal 2 (pink)
- Added portlets are internally „remote portlets“ for portal 2, no difference for the end-user

The screenshot shows a federated portal interface with two columns. The left column (blue) contains a clock showing 13:12:11 on 12-06-2003, a weather forecast for 17.06. with a map, and a list of coordinators: Tobias Alteimeier, Mark Aufenanger, Philipp Behre, Wolfgang Bernartz, and Markus Bertelt. The right column (pink) contains a list of persons: Tobias Alteimeier, Mark Aufenanger, Philipp Behre, Wolfgang Bernartz, and Markus Bertelt, and a weather forecast for 17.06. with a map. The background features a large 'G8' logo and the text 'UNI PERSONAL Your information at hand!'.



The screenshot shows the federated portal interface after a portlet move. The left column (blue) now contains the list of coordinators, the weather forecast, and the clock showing 13:24:18 on 12-06-2003. The right column (pink) contains the list of persons and the weather forecast for 13.06. with a map. The clock in the right column is now 13:12:11 on 12-06-2003. The background features a large 'G8' logo and the text 'UNI PERSONAL Your information at hand!'.



Step 4

- Adding of a new portlet in column 1 in portal 2 (pink)
- Moving of one portlet from column 2 into column 1 in portal 1 (blue)
- Synchronization of both portals
- Automatic conflict-resolution