Enterprise COllaboration & INteroperability

Enterprise Collaboration Services

Patrick Sitek –
Bremen Institute for Production and Logistics
at the University of Bremen

May, 5th  Budapest
Workshop Agenda

- Enterprise Collaboration Services - Concept
- Enterprise Collaboration Services - Detail
- What’s new in COIN EC Baselines
- Questions & Answers
Understanding Enterprise Collaboration

- OEM determines the SC competencies and network structure
- Aligned by construction
- OEM generates BOs for the SC
- Top-down modeling, structuring and planning
- Full scale competencies visibility
- Centralised enactment & management

- Service Center as a competencies collector
- Manual Alignment process
- Crawlers to discover market BOs
- Top-down modelling, structuring and planning
- Negotiation for scheduling
- Centralised enactment & management

- Specific BE competencies
- Intelligent Alignment process (Agents)
- BO Miners to discover internally-generated BOs
- Participative and collaborative structuring, modeling and planning
- P2P enactment & management
## Enterprise Collaboration Baseline Concept – Business Perspective

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Service for Maintaining Competencies</td>
<td>Service for matching Competencies with Business Opportunity</td>
<td>Service for Tracking Capacities</td>
<td>Service for Maintaining Knowledge and Training</td>
<td></td>
</tr>
<tr>
<td>Business Opportunities Management Baseline Services</td>
<td>Service for Identifying Business Opportunities</td>
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<td>Service for Tracing Progress</td>
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<td></td>
<td>Service for Customer Support</td>
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<tr>
<td>Basic Services for Human Interaction</td>
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</tbody>
</table>

**Main Services:**
- **Matching Competencies:**
  - Maintaining Competencies
  - Identifying Business Opportunities
  - Tracking Capacities
  - Maintaining Knowledge and Training
- **Business Opportunities Management:**
  - Basic Services for Human Interaction
## Existing EC tools and systems

<table>
<thead>
<tr>
<th>Category</th>
<th>Software</th>
<th>Number of Tools</th>
<th>Tool Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web application</td>
<td>Tomcat</td>
<td>10</td>
<td>Virtual Breeding Environment Management (VMBS), Professional Virtual Community (PVC) Management and Governance, PVC Rewarding Tool, Requirement Identification Service (refQuest), E4 (Extended Enterprise Management in Enlarged Europe) Platform, Supported Indicator Definition (SID), Collaboration Opportunity Characterization (COC) Plan, Virtual Organization (VO) Model Repository, Partner Selection (PS), VO Formation</td>
</tr>
<tr>
<td></td>
<td>Apache Web server</td>
<td>2</td>
<td>Collaboration Opportunity (CO) Finder, Customer Support Service (DISCO)</td>
</tr>
<tr>
<td></td>
<td>Microsoft IIS</td>
<td>4</td>
<td>PVC Management and Governance, Planned, Mediated, and Ad-hoc Collaborations</td>
</tr>
<tr>
<td>Web service</td>
<td>Axis</td>
<td>2</td>
<td>Communication Service Set, Activity Management</td>
</tr>
<tr>
<td>Database</td>
<td>MySQL</td>
<td>9</td>
<td>PVC Management and Governance, PVC Rewarding Tool, Planned, Mediated, and Ad-hoc Collaborations, Communication Service Set, Activity Management, refQuest, DISCO</td>
</tr>
<tr>
<td></td>
<td>PostgreSQL</td>
<td>5</td>
<td>VBMS, E4 Platform, CO Finder, COC-Plan, VO Formation</td>
</tr>
<tr>
<td>Programming Language</td>
<td>Java</td>
<td>10</td>
<td>VBMS, PVC Rewarding Tool, Communication Service Set, Activity Management, refQuest, SID, COC-Plan, VO Model Repository, PS, VO Formation</td>
</tr>
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<td></td>
<td>C#</td>
<td>5</td>
<td>PVC Management and Governance, Planned, Mediated, and Ad-hoc Collaborations, E4 Platform</td>
</tr>
<tr>
<td></td>
<td>PHP</td>
<td>2</td>
<td>CO Finder, DISCO</td>
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</tbody>
</table>
- core set of services and tools
- each ellipse represents a business service that is supported by a group of software tools and services
## Member registration

### Details

<table>
<thead>
<tr>
<th>Alignment with EC</th>
<th>Member Registration Tool is offered in the Preparation Phase of an Enterprise Collaboration to organizations and individuals in order to register in the network.</th>
</tr>
</thead>
</table>
| Functionality     | Member Registration Tool process requires the following steps:  
1. Membership applicant creates a **new account**.  
2. Membership applicant chooses whether **to register as an organization or a professional individual**  
3. Membership applicant submits **member data and evidence data**.  
4. Membership administrator is informed about a new applicant.  
5. Membership administrator **evaluates** organization/individual and evidence data of the new applicant and might inquire additional information.  
6. Membership administrator **accepts or rejects** the application.  
7. On a successful application the Membership applicant becomes a member and can access information other members. |
| Licensing         | Creative Commons 3.0 non-commercial license (http://creativecommons.org/licenses/by-nc/3.0/de/deed.en). |
| Contact Person    | Simone Stegel, BIBA, stl@biba.uni-bremen.de |
**Alignment with EC**

Preparation phase: the Company Manager sets up his company profile (workflows that are going to be used, definition of processes and performance data, contributed products or services, assignment of workflows to products)

**Functionality**

Partner Profiling requires the following proceeding:

1. Registration as Administrator / Network Manager.
   a) See all profiles available in the network
   b) See all network members offering specific components/services. See details about single components and process performance of specific supplier as well as uploaded documents regarding the offer.
   c) See and configure all running Enterprise Collaborations

2. Or registration as Network Member.
3. Logged in as a Network Member:
   a) Add components/services and upload documents about component
   b) Define processes needed (VCOR™)
   c) Define key performance indicators for each process (VCOR™)
   d) See all components and referring details offered from network member
   e) Change the details, upload new documents, and configure performance data of existing components
   f) See all Enterprise Collaborations the user is involved in

**Licensing**

Partner Profiling tool is based on Java technologies and is released adopting OSS GNU General Public License v2 license (http://www.gnu.org/licenses/gpl-2.0.html).

**Contact Person**

Simone Stegel, BIBA, stl@biba.uni-bremen.de
Member registration and profiling

- Management of member information and member performance profiling (processes, VCOR KPIs)
- For both individuals and organizations.
Enterprise Collaboration Baseline Services – Prototype Details

- core set of services and tools
- each ellipse represents a business service that is supported by a group of software tools and services
RefQuest is a serious game for the Business Opportunity Creation option, allows the implementation of different ideation processes due to the separation of gaming engine and game content. Actions and events keep the ideation process innovative. This Business Opportunity Creation tool supports the creative ideation process between network members at an early stage in the collaboration phase.

### Functionality
The BO Creation game requires the following proceeding:
1. Login as a player.
2. Choose a perspective.
3. Individual idea generation
4. Common idea generation
5. Idea presentation
6. Idea assessment
7. Complete idea generation.

### Licensing
The BO Creation tool is developed and completely owned by BIBA Business Opportunity Creation (refQuest) on BIBA server at [http://www.games.biba.uni-bremen.de](http://www.games.biba.uni-bremen.de)

### Contact Person
Simone Stegel (stl@biba.uni-bremen.de)
| **Alignment with EC** | The necessity of this tool comes from the necessity of the broker to find in a short time the right BO. The large amount of data available in the web do this research very complex and time consuming. This tool can leverage the broker from these issues presenting in an automatic way the list of suitable BOs.  

The Business Opportunity Discovery Service is a web application looking for CfT (calls for tenders) published in internet web sites.  

Application output data are exported to other services to give the possibility to manage discovered BOs. Data are stored into Business Opportunity Model by “Business Opportunity Service” web services. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Licensing</strong></td>
<td>The license is to be determined.</td>
</tr>
<tr>
<td><strong>Contact Person</strong></td>
<td>Drago Trebeznik, JSI, <a href="mailto:drago.trebeznik@ijs.si">drago.trebeznik@ijs.si</a></td>
</tr>
</tbody>
</table>
Software tools and services:
- Business Opportunity Discovery Service
- Business Opportunity Creation Tool
Enterprise Collaboration Baseline Services – Prototype Details

- core set of services and tools
- each ellipse represents a business service that is supported by a group of software tools and services

**Preparation Phase**
- Member registration and profiling

**Formation Phase**
- Business Opportunity creation and discovery
- Business Opportunity characterisation
- Business Opportunity rewarding
- Partner Search & Suggestion
- Partner Selection & VO Formation

**Management & Operation Phase**
- Collaboration Operation Service
- Activity Management Service
- Product Management Service

**Dissolution Phase**
- Customer Support Service
- Member Rewarding

Centralised Profiles, Competencies & Business Opportunity Service
Communication Services
The Business Opportunity Rewarding Tool is offered to motivate parties interested in an enterprise collaboration in contributing business opportunities.

The Business Opportunity Rewarding tool developed as a Java portlet runs within the COIN Baseline EC Portal and accesses the COIN Centralized Profiles, Competencies and Business Opportunity Service.

<table>
<thead>
<tr>
<th>Alignment with EC</th>
<th>The Business Opportunity Rewarding Tool requires the following proceeding:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Administrator created a list of incentives.</td>
</tr>
<tr>
<td></td>
<td>2. Member uploads BO idea.</td>
</tr>
<tr>
<td></td>
<td>3. Administrator is informed about a new item.</td>
</tr>
<tr>
<td></td>
<td>4. Administrator evaluates the item and enters a score.</td>
</tr>
<tr>
<td></td>
<td>5. Member accesses the incentives list and can select an incentive.</td>
</tr>
</tbody>
</table>

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Simone Stegel, BIBA, stl@biba.uni-bremen.de
Software tools and services:
- **Business Opportunity Rewarding Tool**

- Reward organisations creating new business opportunities for the cluster
- Score is defined and maintained for each member of the enterprise collaboration
Enterprise Collaboration Baseline Services – Prototype Details

- core set of services and tools
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Alignement with EC | BO Characterization tool allows a user to make BO decomposition, *identify needed competencies* and make a rough planning of the EC. The BO decomposition is done in terms of *products* to be manufactured as well as Bill of Material and/or *activities* to be performed as well as Work Breakdown Structure.

Functionality | The “WBS service” provides the creation of a complete Work Breakdown Structure (WBS) getting in input in a BOM with activities (tasks) to be performed to create the related item.

The service allows the creation of the WBS by the usage of different algorithms such:
- As Soon As Possible (ASAP)
- As Late As Possible (ALAP)
- minimum usage of resources

The output of the computation is returned to the caller by an XML file.

Licensing | All third party software components and libraries are released under Apache Licence or Sun licence.

Contact Person | Michele Sesana, TXT, michele.sesana@txt.it
Software tools and services:
- Business Opportunity Characterization Service and Tool for Manufacturing

- Characterization of a Business Opportunity in terms of BOM (Bill Of Material) definition, BOM item information, tasks, and required competencies to perform them. BO formalization in a structure (WBS).
Enterprise Collaboration Baseline Services – Prototype Details

- core set of services and tools
- each ellipse represents a business service that is supported by a group of software tools and services

Preparation Phase

Formation Phase
- Business Opportunity creation and discovery
- Business Opportunity characterisation
- Business Opportunity rewarding

Management & Operation Phase
- Collaboration Operation Service
- Activity Management Service
- Product Management Service

Dissolution Phase
- Customer Support Service
- Member Rewarding

Member registration and profiling

Partner Search & Suggestion
Partner Selection & VO Formation

Centralised Profiles, Competencies & Business Opportunity Service
Communication Services
## Details

| Alignment with EC | The purpose of partners search (PS) tool is to assist the broker in the **selection** of the most suitable members for a EC regarding the requirements of a given and characterized business opportunity (BO).

The output of the PS tool is a list of potential EC configurations including an **associated expected performance** for each possible configuration with respect to the applied performance criteria. |
|---|---|
| Functionality | Main functionalities:

- **Import**: Read import data about tasks and required competencies from the Business Opportunity Model.
- **Search**: The partner search will look for the potential partners that have the required competences / processes as well as resource availability to be part of the new EC.
- **Generation** and **Analysis** of suggested EC: presents not only the best arrangements but also **additional information regarding special characteristics** of each partner |
| Licensing | Has to be determined. |
| Contact Person | The service has been created in a past project by VTT, for WP4.1 purposes has been adapted and integrated by TXT, contact person is Michele Sesana (michele.sesana@txt.it) |
Software tools and services:
- *Partner Search Service*

- Search for relevant partners (from the cluster member pool)
- Web service implementing and executing search algorithms
- The service suggests the most suitable members for an Enterprise Collaboration regarding the requirements of a given business opportunity (BO)
Enterprise Collaboration Baseline Services – Prototype Details

- core set of services and tools
- each ellipse represents a business service that is supported by a group of software tools and services
### Alignment with EC

Creating a new EC and selecting the appropriate partners.

The Partner Selection and EC Formation tool manages information about ECs during the Formation phase. It provides mechanisms for **storing information on created ECs** in the data-structure as well as **structuring, storing, and providing inheritance information** to the formation process. The innovation lies in the combination of organizations and individual profiles representing a highly dynamic collaborative network.

### Functionality

The Partner Selection and EC Formation tool requires the following steps:

1. **Administrator** can **create** a new EC.
2. Administrator can **choose** partners according to a list retrieved from Partner Search & Suggestion or choosing other partners distinguishing organizations and individuals.
3. Administrator can **edit** information about each EC and can edit EC documents.
4. **Member** can **access** information on each EC.
5. All running and terminated ECs are displayed.

### Licensing

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### Contact Person

Simone Stegel, BIBA, stl@biba.uni-bremen.de
Software tools and services:
- Partner Selection Tool
- VO Formation Tool

Mechanisms for storing information on created ECs
- Structuring, storing and providing inheritance information to the EC formation process.
Enterprise Collaboration Baseline Services – Prototype Details

- core set of services and tools
- each ellipse represents a business service that is supported by a group of software tools and services

Preparation Phase

<table>
<thead>
<tr>
<th>Preparation Phase</th>
<th>Formation Phase</th>
<th>Management &amp; Operation Phase</th>
<th>Dissolution Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member registration and profiling</td>
<td>Business Opportunity creation and discovery</td>
<td>Collaboration Operation Service</td>
<td>Customer Support Service</td>
</tr>
<tr>
<td></td>
<td>Business Opportunity characterisation</td>
<td>Activity Management Service</td>
<td>Member Rewarding</td>
</tr>
<tr>
<td></td>
<td>Business Opportunity rewarding</td>
<td>Product Management Service</td>
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<td></td>
<td>Partner Search &amp; Suggestion</td>
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</tr>
<tr>
<td></td>
<td>Partner Selection &amp; VO Formation</td>
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<td></td>
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</tbody>
</table>

Centralised Profiles, Competencies & Business Opportunity Service

Communication Services
## Activity Management Service

| Alignment with EC | The Activity Service is a Web service offers support for *dynamically managing activities* of users and teams. The Activity Service supports the creation and management of activities of people within a collaboration scenario.

For the COIN baseline scenario the Activity Service is used to *support the execution of tasks in the operational phase*. Once the activities are created, they are managed and tracked by the Mediated Collaboration Service. To read the tasks of a particular BO and convert them to activities a conversion service provided by TUV can be used. |
| --- | --- |
| Functionality | - representing structures to organize and link
- tasks to perform
- participants of these tasks
- resources and artefacts to use or to produce

- creating/editing/delegating/deleting activities

- activities can be managed ad-hoc, without the need for a predefined workflow |
| Licensing | The license is to be determined. The Activity Service is currently not released for public use, but a running instance is managed and provided by TUV. |
| Contact Person | Hong-Linh Truong, TUV, truong@infosys.tuwien.ac.at |
Software tools and services:
  - *Activity Service*

  - Creation and management of activities of people within an EC
  - Information about responsible and involved users, time constraints, and applicable resources
  - Records any changes to activity structures during runtime
  - Allows to analyze deviations from planned collaborations

### Activities

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Progress</th>
<th>Start</th>
<th>Status</th>
<th>Edit activity properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapter__adapter_drilling</td>
<td>B0: Centrifuge Machine, Component: Adapter, Task: adapter-drilling</td>
<td>0</td>
<td>15/01/2007 0.00.00</td>
<td>pending</td>
<td>Edit activity properties</td>
</tr>
<tr>
<td>Adapter__adapter_milling</td>
<td>Milling</td>
<td>0</td>
<td>28/01/2009 8.00.00</td>
<td>pending</td>
<td>Edit activity properties</td>
</tr>
<tr>
<td>MechanicalSystem__assembly</td>
<td>B0: Centrifuge Machine, Component: Mechanical System, Task: assembly</td>
<td>1</td>
<td>26/12/2006 0.00.00</td>
<td>running</td>
<td>Edit activity properties</td>
</tr>
<tr>
<td>Positioner__assembly</td>
<td>B0: Centrifuge Machine, Component: Positioner, Task: assembly</td>
<td>1</td>
<td>13/01/2009 6.00.00</td>
<td>running</td>
<td>Edit activity properties</td>
</tr>
<tr>
<td>Revolute__revolute_lathing</td>
<td>B0: Centrifuge Machine, Component: Revolute, Task: lathing</td>
<td>0</td>
<td>01/01/2002 0.00.00</td>
<td>pending</td>
<td>Edit activity properties</td>
</tr>
<tr>
<td>RotorAssembly__assembly</td>
<td>B0: Centrifuge Machine, Component: Rotor Assembly, Task: assembly</td>
<td>0</td>
<td>17/01/2007 0.00.00</td>
<td>pending</td>
<td>Edit activity properties</td>
</tr>
<tr>
<td>Rotor__rotorfabrication_lathing</td>
<td>B0: Centrifuge Machine, Component: Rotor, Task: rotor fabrication lathing</td>
<td>0</td>
<td>15/01/2007 0.00.00</td>
<td>pending</td>
<td>Edit activity properties</td>
</tr>
</tbody>
</table>
Enterprise Collaboration Baseline Services – Prototype Details

- core set of services and tools
- each ellipse represents a business service that is supported by a group of software tools and services

Preparation Phase

Member registration and profiling

Formation Phase

Business Opportunity creation and discovery
Business Opportunity characterisation
Business Opportunity rewarding
Partner Search & Suggestion
Partner Selection & VO Formation

Management & Operation Phase

Collaboration Operation Service
Activity Management Service
Product Management Service

Dissolution Phase

Customer Support Service
Member Rewarding

Centralised Profiles, Competencies & Business Opportunity Service
Communication Services
The Collaboration Operation tool is a **problem-solving environment**, based on a process of collecting and evaluating contributions from the activity members by the **activity leader**, who is the problem responsible.

The moderator is also the responsible for compiling the **solution form**, taking into account the experts suggestions, deciding:
- which contributions shall be included in the solution and,
- at closing time,
- who participate in the activity.

Contributions can be **evaluated, accepted or rejected** by activity leader, **downloaded** by other members, and in the end of the activity the leader can **summarize** all suitable contributions and upload the final result.

<table>
<thead>
<tr>
<th>Licensing</th>
<th>Has to be determined.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Person</td>
<td>Lidia Garavaglia, TXT, <a href="mailto:lidia.garavaglia@txt.it">lidia.garavaglia@txt.it</a></td>
</tr>
</tbody>
</table>
Software tools and services:
- **Collaboration Operation Tool**

- Problem-solving service
- Collecting and evaluating contributions from activity management service
- Compile solution forms, taking into account the experts suggestions, deciding which contributions shall be included in the solution
- Sent information to responsible people
- core set of services and tools
- each ellipse represents a business service that is supported by a group of software tools and services
The Product Management Service is designed for the operational phase of the EC. The Product Management Service consists of many web services, based on DISCO project.

**Functionality**

It enables product developers to *share documentation* of their products and assemblies, and *structure* their complex products in catalogues, categories and different configurations.

**Licensing**

The Product Management Service is published under GNU Lesser General Public License. For more information about GNU LGPL please visit http://www.opensource.org/licenses/lgpl-3.0.html

<table>
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<tr>
<th>Alignment with EC</th>
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<tr>
<td>Functionality</td>
<td>It enables product developers to <em>share documentation</em> of their products and assemblies, and <em>structure</em> their complex products in catalogues, categories and different configurations.</td>
</tr>
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<td>Licensing</td>
<td>The Product Management Service is published under GNU Lesser General Public License. For more information about GNU LGPL please visit <a href="http://www.opensource.org/licenses/lgpl-3.0.html">http://www.opensource.org/licenses/lgpl-3.0.html</a></td>
</tr>
<tr>
<td>Contact Person</td>
<td>Alberto Olmo, ISOIN, <a href="mailto:aolmo@isoin.net">aolmo@isoin.net</a></td>
</tr>
</tbody>
</table>
Software tools and services:
- Product Management Service and Tool
- Share documentation of products and assemblies
- Structure complex products in catalogues, categories and different configurations
Enterprise Collaboration Baseline Services – Prototype Details

- core set of services and tools
- each ellipse represents a business service that is supported by a group of software tools and services
## Details

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alignment with EC</strong></td>
<td>The Customer Support Service is designed for the dissolution phase of EC. The Customer Support Service consists of many web services, based on DISCO project.</td>
</tr>
<tr>
<td><strong>Functionality</strong></td>
<td>It enables <em>end customers to access</em> the information of products and assets resultant from the EC project, with a structured classification in catalogues, categories and different configurations of the complex product.</td>
</tr>
<tr>
<td><strong>Licensing</strong></td>
<td>The Customer Support Service is published under GNU Lesser General Public License. For more information about GNU LGPL please visit <a href="http://www.opensource.org/licenses/lgpl-3.0.html">http://www.opensource.org/licenses/lgpl-3.0.html</a></td>
</tr>
<tr>
<td><strong>Contact Person</strong></td>
<td>Alberto Olmo, ISOIN, <a href="mailto:aolmo@isoin.net">aolmo@isoin.net</a></td>
</tr>
</tbody>
</table>
Software tools and services:
- Customer Support Service and Tool

- Access information of products and assets resultant from the EC project
- Structured classification in catalogues, categories and different configurations of the complex product
Enterprise Collaboration Baseline Services – Prototype Details

- core set of services and tools
- each ellipse represents a business service that is supported by a group of software tools and services

Preparation Phase

- Member registration and profiling

Formation Phase

- Business Opportunity creation and discovery
- Business Opportunity characterisation
- Business Opportunity rewarding
- Partner Search & Suggestion
- Partner Selection & VO Formation

Management & Operation Phase

- Collaboration Operation Service
- Activity Management Service
- Product Management Service

Dissolution Phase

- Customer Support Service
- Member Rewarding

Centralised Profiles, Competencies & Business Opportunity Service

Communication Services
### Alignment with EC

Credits are a performance indicator, their function is represent and monitor individuals’ activities in terms of *participation* in each of the workspaces, so that every member of an EC and especially the administrator can check their behavior and compare it to the expected one.

### Functionality

To do that the first feature exposed is available to the administrator that, using AdminCreditsService tool, *decides* how many credits are due to every action executed by the users. Another feature given to the administrator is the possibility to *visualize* credits related to individuals in order to understand their behaviors.

The main functionalities of the tool is the *automatic assignment of credits* to the individuals by their performed actions in one or more workspaces (stored in the database), through information coming from external tools using this functionality exposed by SetCreditsService.

### Licensing

Has to be determined.

### Contact Person

Lidia Garavaglia, TXT, lidia.garavaglia@txt.it
Software tools and services: 
*Individual Credit Management Tool*

*Individual Rewarding Tool*

- Members can be rewarded for their skills and technical competencies
- Gained credits as performance indicators for participated activities in the portal can be seen

<table>
<thead>
<tr>
<th>Skills</th>
<th>Technical Knowledge</th>
<th>Language</th>
</tr>
</thead>
</table>

Select one or more technical competencies and a level:
- CIC programming
- Tooling
- Machining
- Assembling
- Cost estimation
- Product optimization
- Legal assistance

**Individual Trends**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Workspace</th>
<th>Amount</th>
<th>Behaviour</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juan Reina</td>
<td>knowledge</td>
<td>2</td>
<td>document</td>
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<td>Jose Luis Cantos</td>
<td>social</td>
<td>2</td>
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<td>2008-11-12 16:53:53</td>
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</tbody>
</table>
- core set of services and tools
- each ellipse represents a business service that is supported by a group of software tools and services
Human collaboration within EC is a major goal. One preliminary for strong collaboration is communication which is performed by using several different technologies, like e-mail, instant messaging, chats and Voice calls via Skype. TUV provides different single Web services which offer these functionalities.

| Alignment with EC | The CommunicationPortlet provides a GUI for using the Email Service, Instant Messaging Service, and SkypeWeb Service. It enables the end-user directly to utilize these communication facilities and demonstrates their features, which are:
-Sending an e-mail notification
  - To one recipient, to a list of recipients
- Sending an IM notification
  - To one recipient, to a list of recipients
- Creating a chat room and invite other users
- Utilize SkypeWeb features, such as
  - Starting a conference call, Starting a text chat, Sending Files via Skype

These functionalities realize Ad-Hoc collaboration features, which enable direct and synchronous communication between specific activity members.

| Licensing | The license is LGPL v3. The third party software components and libraries included in the current release are using diverse open source licenses.

| Contact Person | Hong-Linh Truong, TUV, truong@infosys.tuwien.ac.at |
Software tools and services:
- Email Service,
- Instant Messaging Service,
- Skype Web Service,
- Notification Service,
- Communication Portlet

Communication services:
- Communication between humans through e-mail, instant messaging and voice chat
- Utilize the communication services directly
- Services can be used by other services/tools to distribute relevant information
- Notify about important events in all collaboration phases
Enterprise Collaboration Baseline Services – Prototype Details

- core set of services and tools
- each ellipse represents a business service that is supported by a group of software tools and services
## Business Opportunity Service - Details

<table>
<thead>
<tr>
<th>Alignment with EC</th>
<th>The Business Opportunity Service is a java enterprise application exposing a web service. The purpose of this service is to give an <em>easy high level interface to manage data</em> about the Business Opportunity which means that any tool will save and add part of the Business Opportunity model during the execution of its activities.</th>
</tr>
</thead>
</table>
| **Functionality** | The current version of the service is a web service allowing access to the BO Model triggering the low level functionalities exposed by “COIN Data Level Business Opportunity Access Service”. This service features are:  
- Create a new BO  
- Edit BO data  
- Delete a BO  
- Find a specific BO  
- Get a list of BO comply with some parameters  
- Define the status of the BO and the related tool that is allowed to access to related data |
| **Licensing** | Has to be determined. |
| **Contact Person** | Michele Sesana, TXT, michele.sesana@txt.it |
Service to Access the Profiles, Competencies and Business Opportunity Common Repository

Software tools and services:
- Profiles, Competencies, Business Opportunities models and database,
- Access to the common Profiles and Competencies Service,
- Business Opportunity Access Service

- Support of business opportunity information, individual credits, profiling, human interaction information
- Manages the core data model schema which is used by all baseline tools and services.
- All tools and services can save/retrieve required data from different, but common, models without any concern of who inserted these data, what is the data structure of the other modules and who will use the saved data
What’s new in COIN EC Baselines?

- Common Data and Models Base with 59 implemented entities
  - Former software has been decoupled in three levels, separating business logic, presentation layer and data
  - Business logic has been encapsulated into reusable web-services
  - Data exchanged by applications are now managed by a common database and private data of application stay on legacy databases
  - Harmonisation of Networks of individuals (PVCs) and Enterprises
The players log into the game using a standard Web Browser.

What's new in COIN EC Baselines?

Creating Business Opportunities
What’s new in COIN EC Baselines?

Human Interaction Communication Services

- Communication Portlet (Part of Mediated Collaboration Support)
- Partner Registration
- Partner Search and Suggestion
- Instant Messaging Service (+Chat) (uses TUV Backend)
- SkypeWeb Service (uses Skype Backend)
- E-Mail Service (uses TUV Backend)
- Notification Service
- ...
Thank you for your attention

Patrick Sitek

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