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Editeur: F. ROSSA JMO C2 / 113 tél: 32394 fax: 33099

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On Interoperability.

In May 2002, the *e*-Commission steering committee examined the results of the stocktaking exercise on Internal Administration and highlighted interoperability problems as a major obstacle for progress towards the e-Commission. The synthesis of Annual Activity Reports (AAR) 2001 confirmed this view and proposed the creation of an inter-service steering committee in charge of producing an "Interoperability action plan" by the end of November 2002 in order to make real progress in this area.

The Informatics Directorate has prepared, in close collaboration with the Commission services, a document that identifies the root causes of interoperability and proposes an ambitious action plan for 2003-2004 to tackle, once and for all we hope, this important problem. It includes "quick wins" that will deliver results before the end of 2003. The document is due to be approved by the "Interoperability Steering Committee" on November 28th, 2002.

In implementing this action plan, the Commission's IT community faces a real challenge. We can not fail to deliver and we should all join forces in order to succeed.

The mission is not without difficulties. We must avoid the trap of believing that with some cosmetic measures, such as "add a few links in a page" or some other stop-gap connectivity fixes, the problem will be solved. The roots of the problem are organisational in the first place and we all know by experience that solving organisational issues in large political organisations takes "time and sweat".

One of the issues identified in the above-mentioned interoperability report is that the general approach to the development of information systems has been, in general, to optimise vertical functions, processes or procedures. It also happens even in corporate processes, which are cross-organisation by nature!!! It does not mean that the systems are bad or that developers have to be blamed for it; most of the time they just develop what they are asked to.

One of the participants in the last e-Commission Steering Committee meeting stated that the reason for it might be that there is no explicit recognition for work done for the common good and participating in corporate initiatives is sometimes considered as penalising the DG's own objectives and deadlines.

Interoperability is above all a state of mind and *esprit*. This is a very strong message which we should address to all IT project managers and developers.

To illustrate it, just look at the rate of reusability of software developed throughout the Commission; it is very low indeed and there are very few cases where software or tools developed by one DG are used extensively by others. Even worse, different teams in the same DG might well be using different methods and tools!!

The following may explain why this is the case:

- Lack of complete description of business processes and associated documentation and background
- Lack of software architecture, modularity and library approach
- Use of a variety of programming methods/tools and versions of same
- Lack of appropriate packaging of the software developed
- Lack of resources to cope with specific requests coming from those having adopted the software
- The "Not Invented Here" syndrome.

There is no doubt that the Commission has excellent software developers and technical project leaders. There is also no doubt that they have done their best to deliver, most of the time under pressure, the systems requested by their users. Still I do not think that our developers have today the state of mind necessary to make a success of, for instance, an "open source" style development project.

To solve the current interoperability problems we must all work together and of course we need the full involvement of users and line managers.

As stated above, the problems of interoperability have organisational roots. In the first place we need to start analysing and documenting the work processes, documenting the data and using common nomenclatures and descriptions. It is only by doing this that we will be able to progress and reach the target.

This action should start immediately in the horizontal DGs, mainly SG, BUDG and ADMIN. They must work together, so that in the medium term, there is increased interoperability and data consistency among current and future corporate systems. It is essential that information is collected once, stored once but used consistently when and where it is needed.

Furthermore, corporate systems should benefit from single sign-on so that the user is authenticated once and may access only the resources for which he has got permission, using the same navigation paradigm (and including the "VISA chain" for managers or "gestionnaires").

From a technical perspective, corporate systems should offer stable interfaces, so that local systems do not have to redevelop the functionality already offered or copy the data to the local application environment.

Our assumption is that if data and functions offered by corporate systems were trusted by local IT teams and users, and continuously available, the development effort for local systems might be decreased by at least 30%. In fact, local systems could just concentrate on the implementation of specific or vertical business processes.

In order to produce what has been described above, we need to define a very sound "Corporate Information Systems Architecture".

This architecture should be like a city map. It should define the overall picture and the rules that will guide how the buildings are built, how and where they fit into the city map and how they connect with each other. At the same time, we need to put in place a governance framework for corporate processes and the associated IT systems. IT governance will guarantee that the interests of all stakeholders are taken into account and that there is a harmonious development of all the pieces of the puzzle.

For the actual development process we need to put in place a "virtual community approach" promoting sharing, cross-evaluation and co-operation for tools, libraries and applications. This will be by itself a big "cultural" change in our house.

As I said before there is no doubt that all our project managers and developers have done their best and have been, in general, successful in delivering the existing systems. It would be unacceptable to throw away all the good things that have been done for the sake of having more integrated systems; on the contrary we need to build on it.

Nevertheless, we should keep in mind the strategic objective of making our systems more inter-operable and therefore we should profit from every opportunity to make systems work better together.

As stated some time ago on these pages, the Informatics Directorate has a clear commitment to information systems and interoperability. As proof of this, a new unit, "Interoperabilité de Systèmes d'Information et Qualite" (ISIQ), has recently been created to run, among other things, the e-Commission project office and the interoperability initiative.

Furthermore, interoperability will be at the heart of the Informatics Directorate's work programme for 2003 and will be the driver for a number of cross-unit actions and projects.

Here and now, we would like to call on the Commission's IT community to join forces with us and work together so that, as we have done consistently in the past, we can all meet this important challenge.

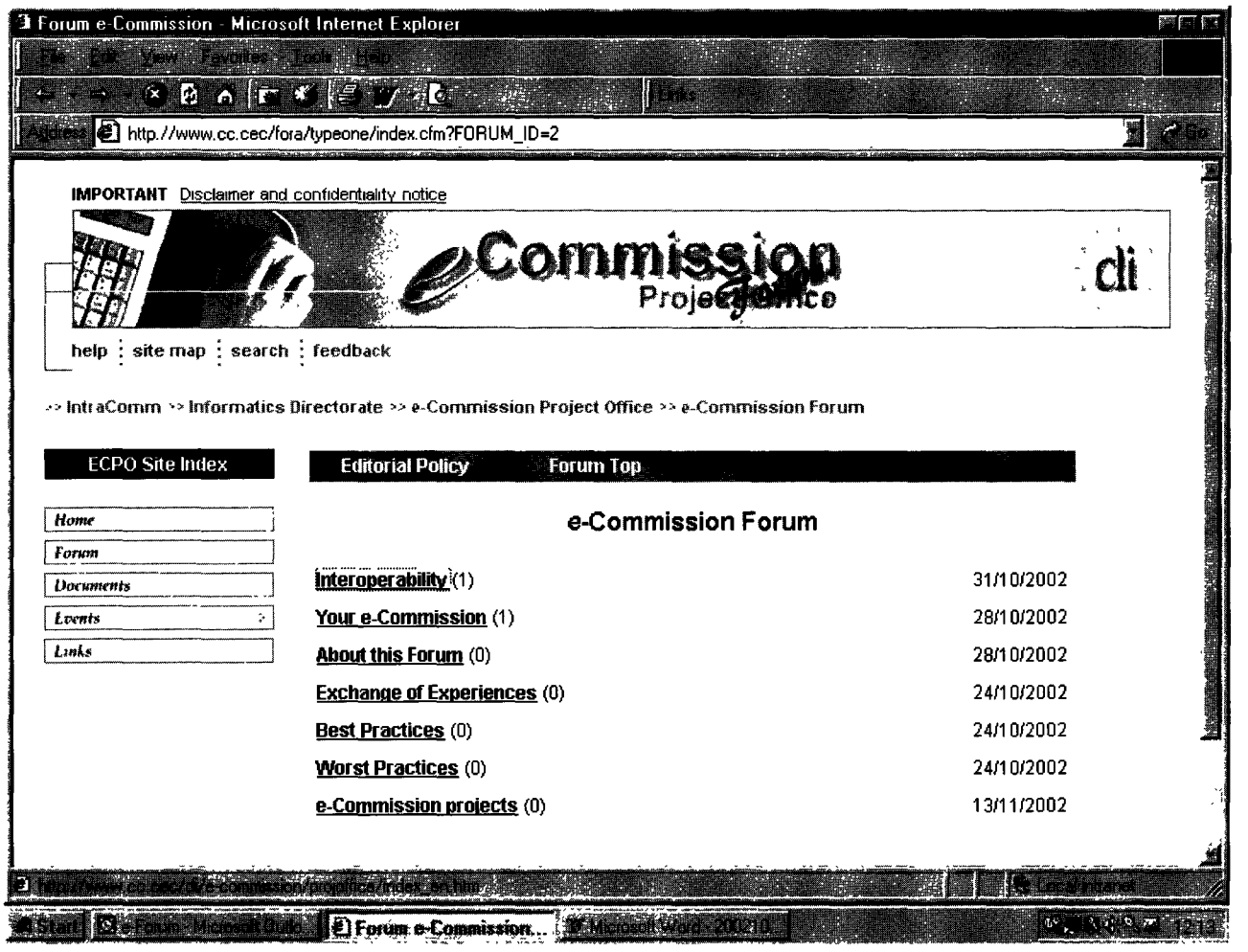
Let's go for it !!!!!

Francisco García Morán

Dès à présent une adresse à sauvegarder!

http://www.cc.cec/fora/typeone/index.cfm?FORUM=ecommission

Le débat sur la *e*-commision est lancé sur votre forum



STB

Des nouvelles de la Famille 1
Hardware and Operating Systems

Distribution de Software et Asset Management

Dans le cadre du projet ETP, une étude technique sur les outils de Distribution de Software et Asset Management a été réalisée et présentée au Sous-comité CTI du 9 octobre.

Les conclusions de cette étude montrent que le marché de ces produits est arrivé à maturité et la migration de plate-forme de la Commission est une excellente opportunité pour y incorporer des technologies avancées pour la distribution de software. Ces technologies, qui font défaut dans la configuration actuelle, concernent principalement la compatibilité avec *Active Directory*, l'intégration avec les méthodes de déploiement *MSI* utilisés par une part grandissante du marché de logiciels et la possibilité de faire de la distribution *multicast*, en mode *push* et pendant la nuit en activant la technique *Wake On Lan.*

Après une recherche de produits sur base de caractéristiques annoncées, nous avons organisé l'évaluation de quatre produits présélectionnes. Il s'agit de: Altiris Express, Landesk Management Suite, Microsoft SMS 2003 et Unicenter Asset Management and Software Delivery de Computer Associates.

Les résultats de l'évaluation montrent que LandDesk propose toutes les technologies recherchées, dans un seul interface qui brille par sa sobriété et facilité d'emploi. Ses parts de marché et sa pérennité semblent donner toutes les garanties nécessaires pour en faire le produit recommandé.

Personne de contact: Javier Cuesta

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Des nouvelles de la Famille 3
Office Automation and Documents Management

Acrobat et PDF

Le projet **PDF-CoDe** .. est en marche. La phase d'analyse et dessin de l'architecture a été achevée avec succès et l'implémentation a commencé. Voir l'article de Emmanuel Genette.

Toujours concernant l'utilitaire de conversion et de génération du PDF, la version 2.06 du produit **PDF-Amyuni** est disponible dans la section DG2DG de IntraComm. La CE ayant acheté une licence site, ce produit peut être utilisé comme alternative pratique pour la génération de fichier PDF. Il faut toute fois faire bien attention à la qualité et à la destination des fichiers PDF obtenus. Le document « Guide à l'utilisation de Amyuni PDF pro 2.06 » (voir http://www.cc.cec/softline/r/products/common/dg2dg/index.htm) décrit synthétiquement les avantages et les limites de ce produit.

Lors de la présentation organisée par la DI le 10 juillet au Forum Informatique, le responsable marketing de Adobe nous a présenté en avant-première les nouveautés 2002-2003 (voir InfoSTB du BI de juillet). Les promesses deviennent réalité et aujourd'hui la version **Acrobat Reader 5.1** dénommé *Ubiquity* est disponible. Cette version est très intéressante car elle offre la possibilité de modifier et signer des documents PDF sans avoir besoin de rien de plus qu'une version gratuite de Acrobat Reader. S'agit-il d'un miracle, d'un mirage ou d'un truc ? Oui et non: les fonctionnalités susmentionnées sont disponibles, mais elles ne sont activées que par le biais d'informations cachées dans les documents, et pour créer ces informations il faut créer les documents originaux sur un système dit *Ubiquity server* qui coûte lui très cher.

Pour le moment Acrobat Reader 5.1 est en évaluation chez DI-STB afin d'identifier les améliorations apportées par rapport à la version précédente et comme version candidate pour la Configuration de Référence finale de la eTP.

Personnes de contact: C. D'Ascanio et E. Genette

Eurolook & Co

Le Eurolook Signature Picker est prêt dans sa première version officielle. Grâce à la collaboration de l'équipe OPTIMAIL (Insem3) et du Secrétariat Général, les formats pour la « signature » des mails *internes* et *externes* ont été définis. Le EL-SignPicker ne fera que rendre plus simple l'introduction de cette signature au bas du mail en extrayant des bases de données Eurolook les informations liées à l'auteur et à sa position dans l'organigramme officiel.

Pour plus de détails contacter M. Leunens.

Le WEB personnel

Le workshop « Personal Webbing » du 12 septembre a eu un grand succès.

La première partie concernait l'étude sur les convertisseurs des formats bureautiques vers HTML/XML et la présentation de Eurolook/Web 1.2. L'étude a démontré que dans l'état actuel des choses il y 3 alternatives possibles :

(1) continuer à investir et à faire évoluer l'outil EL/WEB qui est actuellement le produit le plus fiable et le plus flexible pour la conversion des documents Word vers HTML,

(2) investir dans un produit de conversion « corporate », d'ailleurs cher, mais qui est le seul produit du marché garantissant la qualité ainsi que la couverture fonctionnelle nécessaire,

(3) dégager une nouvelle stratégie qui s'appuie sur le XML comme format pivot pour convertir dans les différents formats.

Le besoin de réutilisation ou *re-purposing* des documents bureautiques ne se fait pas encore sentir de façon urgente, mais les résultats de cette étude nous donnent une vision à long terme sur les directions à suivre.

La deuxième partie dédiée à la présentation de l'étude Entry-level WCM a mis en évidence que les produits qui satisfont les besoins de gestion du web au niveau local peuvent être regroupés en 2 classes :

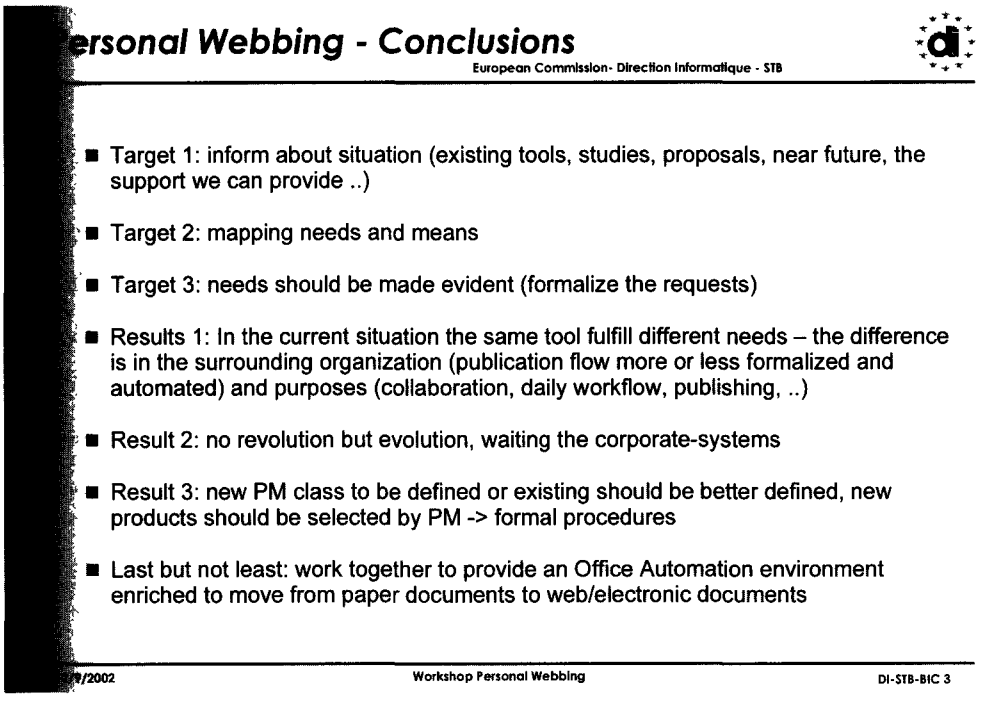
a) ceux qui offrent toutes les fonctionnalités de base et qui sont plus que suffisants pour la gestion des sites web informationnels, du statique au dynamique moyen niveau

b) ceux à forte vocation technologique, qui offrent une plus vaste couverture fonctionnelle et peuvent intégrer différents environnements de développement et systèmes pour les traitement de données multimédia. Ils sont indispensables pour des sites à forte valeur multimédia et dynamique.

Les résultats de cette étude seront présentés au prochain Product Meeting de la Famille 3 pour avancer vers le choix d'un outil (ou 2) spécifique pour le *Entry-Level WCM.*

Et finalement, la dernière présentation a été dédiée à la situation actuelle des Web Tools à la Commission. Le résultat de ce grand travail d'analyse et d'encadrement est très bien décrit dans l'article de Rosa Ordinana.

Pour résumer les objectifs et les résultats de cette présentation voici la toute dernière slide



Les présentations sont disponibles: http://www.cc.cec/di/slf/forum/semsupp/oldsem/12_09_2002.htm

Pour plus d'info veuillez contacter R. Ordinana et C. D'Ascanio.

Office XP Dinstall β

Le 2me package d'installation de Office XP a été livré avec la RC 5.0 Beta 2 ou *Release Candidate* et il est à votre disposition pour tester et vérifier que les composants et la configuration que nous proposons sont suffisants pour vos besoins.

Cette nouvelle version du package prend en compte aussi les inputs provenant du sondage lancé en août. Je saisis l'occasion pour remercier ceux qui ont répondu et de dire aux autres qu'ils peuvent encore le faire sur la nouvelle version.

Vous trouverez toutes les informations concernant le **Office XP - DInstall β**, ainsi que les résultats du sondage, dans l'article de Jari Pekki.

Donc bonne lecture et n'hésitez pas à faire parvenir vos commentaires à Jari Pekki.

Migrating Office Applications to XP

La présentation du 8 octobre a complété la phase d'analyse de l'impact et la recherche de solutions pour la migration des applications VBA et Access de la plate-forme actuelle, NT4+Office97, vers la plate-forme future, WindowsXP+OfficeXP.

Si l'expérience Eurolook 4.1 XP 1 (voir Softline à http://www.cc.cec/softline/u/services/studies/officexp/index.htm) avait mis en évidence les différences entre les 2 plates-formes du point de vue Word, l'étude sur Excel (voir http://www.cc.cec/softline/u/services/workshops/migr2offxp/Excel-VBA-Migration-2-XP-Study-1-1.pdf) a permis de compléter les connaissances pour l'autre application majeure de la suite. Les objectifs principaux de cette étude étaient :

- détecter les points critiques et donner des indications pour mesurer l'effort nécessaire à migrer de Excel 97 à Excel 2002,
- mettre en évidence les avantages que la nouvelle version de Excel offre et comment ils peuvent être exploités.

L'étude a pris comme exemple trois applications réelles dont nous remercions les fournisseurs : deux développées par des équipes de Eurostat, le *DB2XL* et le *QI_Output*, et une par l'équipe Cordis, *Electra*. Pour résumer les conclusions principales : fort probablement la plupart d'applications Excel 97 ne demanderont que des changements modestes, voire aucun si on tolère des dysfonctionnements mineurs, et les autres ne requerront pas un gros investissement pour être mises à jours. Le facteur qui influencera principalement l'importance de l'effort à consentir sera le nombre total des applications à vérifier et, éventuellement, à modifier, couplé avec la disponibilité des connaissances techniques nécessaires pour le faire.

Grande vedette de la journée, la présentation sur le destin d'Access a finalement donné des réponses au sujet le plus difficile de la migration : plus encore que les profondes différences entre Access 97 et 2002 (entre autre le support Unicode et le nouveau format **adp**) l'incertitude sur le futur du produit n'a fait que rendre plus difficile l'élaboration des stratégies possibles. Sûrement le passage à la plate-forme eTP demandera un effort majeur de migration pour les applications Access, mais si l'approche de ne faire que le nécessaire et de migrer vers des solutions ColdFusion+Oracle les applications les plus importantes (surtout multi-user) est choisie, les deux prochaines années permettront de réduire les risques d'une migration ultérieure en attendant que Microsoft dissipe le brouillard autour de son outil.

La présentation VBA-Sniffer a été le moment le plus pragmatique de la journée : il s'agit d'un outil réalisé par DI-STB et qui permet de détecter (*sniff*) les programmes VBA susceptibles de nécessiter une migration, les macros, les bases des données Access, et autres. L'outil prend en input une liste d'*extensions* (.dot, .xla, .mdb, ecc) et un *scope* de recherche (un drive, un ou plusieurs répertoires). L'exécution créera des fichiers résultats dont un fichier contenant la liste de tous les programmes trouvés et leurs caractéristiques. Il peut être exécuté en deux modes : *light* pour un premier recensement et *advanced* pour une analyse plus approfondie, la différence résidant dans les détails reportés dans les fichiers résultats. L'outil est disponible sur Softline : http://www.cc.cec/softline/r/products/desktopapp/offaut/office/index.htm#tools

Et last but not least, quelques conseils pratiques en guise de résumé final.Il faudrait

(1) faire un inventaire de l'existant et planifier les actions faire en synchronisation avec la migration proprement dite;

(2) acquérir les connaissances à temps (cours de formation pour équipes techniques et power-users, demander du conseil)

(3) être opportuniste, migrer seulement ce qui est vraiment nécessaire, en tolérant les dégradations non fonctionnelles;

(4) exploiter les *environnements alternatifs* (Terminal Server, VM-ware) là où la migration n'est pas réalisable dans le temps disponible

(5) réécrire en pensant au futur, nouvelles applications pour la nouvelle plate-forme.

Côté formation, la disponibilité des cours techniques Office XP n'est que la première étape (voir Syslog formation). Des cours pour combler le « gap » entre VBA/VB sur la plate-forme NT+Office 97 et WindowsXP+OfficeXP seront bientôt organisés par la DI et les cours avancés pour le produit Office XP (y compris Access) sont disponibles sur demandes.

Pour plus d'info veuillez contacter C. D'Ascanio, M. Limbos et J. Pekki.

Elargissement

Les nouveaux membres arrivent, et la eTP sera la plate-forme qui en 2004 devra garantir de pouvoir travailler avec toutes les nouvelles langues ainsi que les « locales » nécessaires. Dans ce cadre nous travaillons à compléter l'analyse de tous les composants de cette plate-forme, tant au niveau système d'exploitation qu'au niveau produits. Les premiers résultats concrets sont déjà inclus dans nouvelle beta de la Configuration de Reference 5.0.

Personnes de contact: C. D'Ascanio et J. Pekki.

Et encore ....

La nouvelle version de la RC 5.0, la *release candidate*, contiendra les même produits que la beta de juillet, mais leur configuration a été refaite pour tenir compte des feedback obtenus de la phase beta. D'autres produits non distribués avec la RC 5.0, parmi lesquels Visio 2002 et MS-Project 2002, seront sous la loupe dans les mois à venir afin d'être testés et configurés sur Windows XP. Ceux qui sont intéressés par ces produits et souhaitent participer à cette analyse sont invités à nous le signaler.

Merci de contacter C. D'Ascanio et J. Pekki.

ETP training news

The training strategy in the framework of ETP project, which was presented in the CTI of mai and in the CTI-ETP sub-committe of 27-6, has two parts, one dealing with *end-users* and the other one with *IT staff*.

End-user training will consist of an introduction video, websheets, and a "hands-off" presentation and a "hands-on" session. This end-user training, addressed to all Commission's staff, is currently being developed: pilot courses will be organised in November in order to get it ready by the end of 2002, before the roll-out phase of the ETP project is expected to begin.

On the other hand, IT staff ETP training is mainly organised around 4 courses, 2 on the Office XP suite and 2 on W2000 and WXP. A letter to the IRMs with the table of contents of each of these courses was recently sent, so as to make an estimation of interested people in these courses to plan the organisation of the courses in a synchronised way with the roll-out.

The courses on Office XP are already being delivered by the Forum -see Syslog Formation- , and for the OS courses, there will be some pilot courses in October and November, aimed at facilitating the participation in the ETP mini-pilot as well as at validating the courses themselves.

For information please contact Ramón Chismol.

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Des nouvelles de la Famille 4 Information Systems Infrastructure

Apache Support & Apache 2 evaluation

At the CTI request, DI-STB has made available to the DGs an on-site support for Apache. The support is intended to help DGs with the implementation of Apache in their projects and to give advice and recommendations on the installation and usage of the software. Several documents on the subject are available on Softline

http://www.cc.cec/softline/r/products/development/generalinfo/generalinfo.htm#apache

As part of the activities of the on-site support, an evaluation of Apache 2 is on going an expected to be completed by December 2002.

For additional information, contact G. JOULAIN, F. TIERCIN or R. RUIZ DE LA TORRE .

Document and Content Management

Following different studies and tests carried out by DI-STB, a proposal regarding Oracle Workflow and Oracle IFS was made in the product meeting of 24/09/02 and approved by the CTI of 25/09/02. The proposal consisted in including in the list of products of the EC Oracle Workflow and Oracle IFS in class B.

Since Oracle iAS is necessary to run IFS, the Oracle contract has been modified to make possible the acquisition of iAS. DI has foreseen the acquisition of a number of licenses to cover the needs of the DGs and of the Data Centre from now till the end of the contract (April 2004).

In order to facilitate the usage of both tools in projects, DI-STB is developing with the support of Oracle and the collaboration of interested DGs high level java APIs that will allow programmers to integrate those tools in their projects with a reduced development effort.

In parallel, DI-STB has started comparative tests between iAS and WebLogic to have objective elements for the comparison of both application servers.

For additional information about these issues, please, contact Roland VAN WAAS or Rafael RUIZ DE LA TORRE.

J2EE

Different activities are carried out in the domain of J2EE developments. Some of them have been mentioned in the section above: development of high level APIs for Oracle Workflow and Oracle IFS and comparison of iAS to WbeLogic. Some others are briefly mentioned here:

⇒ Tests about different approaches to persistence in J2EE applications and their impact in performance. Still in test phase.

⇒ Evaluation of Java IDEs and proposal of a holistic approach to software development. Still under discussion. To be presented at the CTI early 2003.

⇒ Production of guidelines for the development of JSP/servlets applications. They would be possibly available by the time you are reading this.

For additional information contact: R. VAN WAAS or R. RUIZ DE LA TORRE..

XML

The XML project intended to recommend tools in the areas of parsers, editors and repositories has been completed. The technical report has been approved by the project group. A copy of the final reports can be found in Softline

(http://www.cc.cec/softline/u/services/studies/xml/index.htm).

The findings of the project will be presented to the CTI for information.

For additional information about this project, please, contact Pascal BRAHY or Rafael RUIZ DE LA TORRE at DI-STB.

Portal

DI-STB has started a market survey to evaluate the market offerings in the field of Portals and to gather specific requirements that the EC may have in the field. The work plan is structured in the following phases:

PHASE 1: Define the context of the market of the products for creating Enterprise Portals and the scope of these products

PHASE 2: Establish the needs of the Commission in the field of Enterprise Portals and establish the frame of technical reference of the market of Enterprise Portals adapted to the Commission

PHASE 3: Analysis of products representative of the market of Enterprise Portals and adapted to the Commission's needs

PHASE 4: Guide for the evaluation and selection of a product in the Commission

The project, at the time of writing this, is almost completed with only a final presentation to the DGs of the findings of the project pending.

The findings don't allow us to identify a single candidate product that could be proposed at the EC level since the market sector is considered very volatile still but they include a list of EC requirements in the form of questions that could eventually be taken as the basis for a Call for Tenders.

The findings of the project will be presented to the CTI.

Interested DGs are kindly invited to contact Blanca RODRIGUEZ-ANTIGUEDAD or R. RUIZ DE LA TORRE.

Oracle 9i evaluation

Considering the evolution of Oracle products, DI-STB has completed an evaluation of Oracle 9i. The evaluation's main objective is to find to which extend existing applications running on Oracle 7.3.4 and Oracle 8 will continue to work on the new version and what are the advantages introduced for new developments.

The tests haven't allowed us to discover any major problem that would suppose a real issue to the adoption of Oracle 9i.

The results of the evaluation will be presented to the CTI for decision.

For additional information about this project, please, contact G. JOULAIN or R.. RUIZ DE LA TORRE .

Macromedia

The Macromedia contract has been signed at the beginning of the summer. A presentation of the contract has been made on June the 21st 2002 at Brussels. The presentation slides are available at http://www.cc.cec/softline/r/products/development/generalinfo/generalinfo.htm#cf.

DI has started an evaluation of ColdFusion MX, the new version of the product, covering new functionality and migration of existing applications. The results of the evaluation are available at http://www.cc.cec/softline/r/products/development/generalinfo/generalinfo.htm#cf.

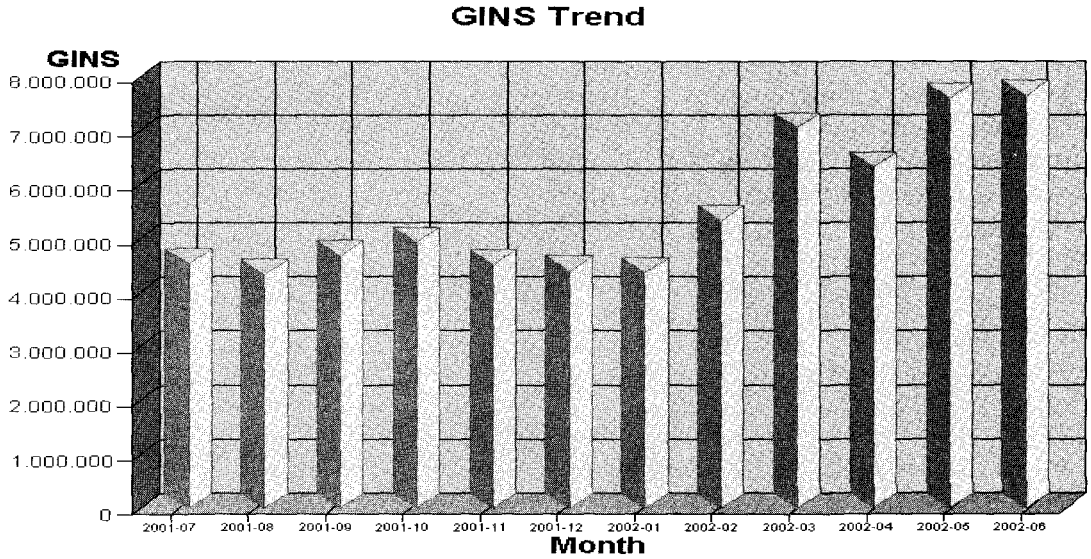
DGs have been invited to complement the evaluation by carrying out their own pilot projects. This second phase of the evaluation will be completed in December and the results will be presented to the CTI for decision.

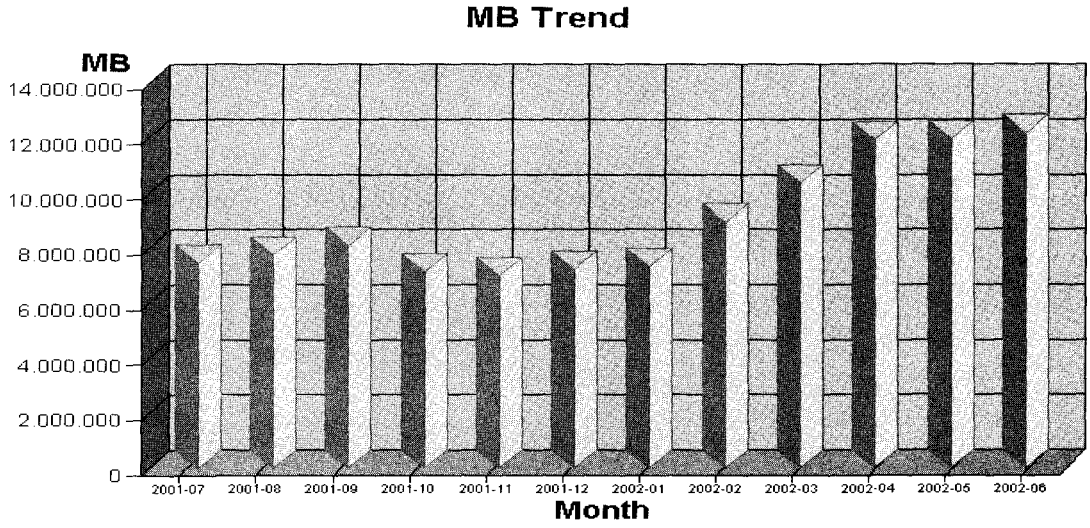
For additional information, please, contact G. GUTFREUND or R. RUIZ DE LA TORRE.

Plates-formes

		Disponibilité		Charge total CPU (TINS)	Charge total CPU (TINS)	Charge total CPU (TINS)
		juin-02	2 T 2002	Jan 2001 Juin 2001	Jan 2002 Juin 2002	juin-02
SIEMENS	BS2000	100,00%	100,00%	1.248	486	81
MILES	UNIX	99,93%	99,97%	23.757	3.227	598
HP MILES	HP-UNIX	100,00%	99,97%	5.695	50	9
AMDAHL	MVS	100,00%	100,00%	904	132	-----
SINCOM	HP-UNIX	99,91%	99,85%	17.620	24.278	2.438
PRODCRAY		100,00%	100,00%	5.903	655	5.903

Ces chiffres ne couvrent pas pour le moment les serveurs NT. Un effort particulier est actuellement en cours pour en extraire également des données comptables.





Charge par DG (GINS + MB)

	GINS 12 mois	GINS Juin 2002	MB Juin 2002
ADMIN	6.350.097	564.842	2.149.514
AGRI	320.186	20.258	61.548
AIDCO	1.280.676	141.160	133.370
AUDIT	4.816	388	313
BUDG	25.210.531	2.357.429	2.771.534
CDC	6.399	499	1.909
CJ	37.179	2.712	19.225
COMP	50.313	7.139	6.273
DC	4.440.022	556.902	562.640
DEV	109.862	16.371	33.989
EAC	1.538.046	300.948	257.851
ECFIN	170.476	39.253	201.057
ECHO	205.502	51.634	185.010
ELARG	220.416	48.531	182.186
EMPL	275.008	39.569	31.655
ENTR	57.993	7.203	28.256
ENV	129.633	19.307	36.517
ESTAT	8.263.539	1.123.732	2.024.136
FC	54.488	9.530	1.627
FISH	185.709	22.894	39.889
IAS	54.488	9.530	1.627
IGS	54	1	97
INFSO	61.797	10.830	6.052
JAI	68.733	11.575	28.407
JRC	57.264	9.794	11.914
MARKT	109.697	17.021	102.593
OLAF	2.441	56	3.277
OPOCE	4.361.858	718.681	961.254
PRESS	5.514.404	792.039	759.867
REGIO	326.381	32.718	164.996
RELEX	948.106	92.009	97.491
RTD	176.596	24.459	39.156
SANCO	630.651	98.640	280.633
SCIC	59.392	10.177	2.150
SDT	3.289.422	388.271	725.891
SG	1.450.787	175.721	246.982
SJ	55.388	9.643	1.719
TAXUD	467.720	25.961	288.339
TRADE	160.684	18.713	9.040
TREN	187.645	18.789	11.410
Totals	**66.894.399**	**7.794.929**	**12.471.394**

Business Information Technology for a Quality Administration

Part B: Enterprise Content Management (ECM) (Functional Requirements and Technical Architecture)

Overview of This Document

The goals of this document are threefold:

- Give a complete description of the functional coverage and the technical foundation of *Enterprise Content Management* Systems,
- Define the specifications of an ideal product satisfying the EC's needs, and
- Give some indications about costs *(Only available in version on Softline http://www.cc.cec/softline/u/services/studies/denise/index.htm).*

The quite complex, if not sometimes confusing ECM "functional universe", was for ease of discussion broken down into more limited functional modules, as illustrated by Figure 1. The modules correspond in the ideal case to the functional coverage of market products, but it is also clear that in many cases no precise limits can be drawn and functional overlap exists.

The first part of this document starts out with the Management Summary introducing the term *Enterprise Content Management.*

Part two discusses the key questions relevant for specifying an ideal product, i.e. selecting an appropriate solution for the Commission's needs. This is followed by a definition and description of our notion of *Document Management*, *Content Management*, *Workflow* and *Web Content Management* (part three). This is done from a functional point of view so as to clarify the structural dependencies involved. Part four is devoted to a more technical discussion, which looks behind the implementation aspects of these systems.

The results are summarised in part five.

1. Management Summary

Transparency and effectiveness are the cornerstones of quality administration. Almost all-administrative effort results in information in the form of documents, consequently effective document management is key, even mission-critical.

If the quality of administration is to satisfy verifiable criteria, document creation processes have to be documented to make them "auditable"; and if these processes are to be continuously improved and enhanced, then having the right software tools to do so is essential.

Since the advent of using the Web for document management purposes (cf. Web Content Management or WCM; see 3.7), documents are no longer perceived as the smallest unit of information but rather as a dynamic compilation and visualisation of information content at a given moment in time.

An Enterprise Content Management System (ECM; figure 1) offers the functionality needed urgently to manage the EC's documents and all types of digital content, regardless of the publishing media. In addition to integrating the technologies currently deployed within the Commission, such a system would offer a new range of advanced process centric functionality.

Most importantly, the ECM would be for the users a universal, simple-to-understand, and simple-to-use environment to handle documents and knowledge assets and to have access to the knowledge assets of the others.

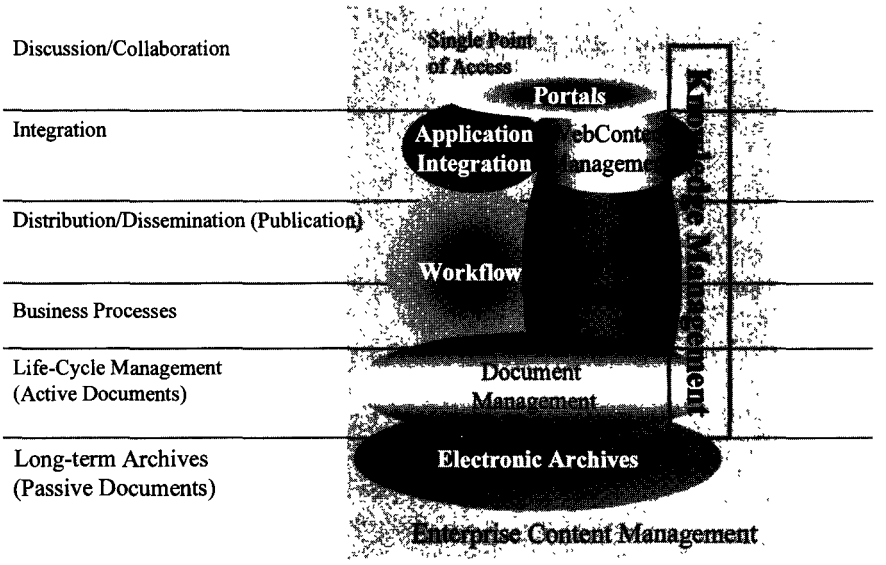


Figure 1: Enterprise Content Management (ECM)

All of an enterprise's information must be made available on a uniform platform. ECM is based on the following key components, which are described in more detail in the following sections:

Electronic Archives: An archive is used for the long-term storage and control of passive documents, files or records. Usually, the archived data is unchangeable (see 3.2.).

Document Management: Document Management Systems (DMS) are targeted at the control, protection, and accessibility of/to enterprise information assets in the form of documents. DMSs handle content and descriptive information (metadata), and add one or more representations to *content* resulting in *documents* (see3.3.).

Workflow Management: Managing and publishing content is a business process. A Workflow Management System (WMS) coordinates and automates this process, and ensures that users perform and complete the tasks assigned to them (see 3.4.).

Content Management: A Content Management System (CMS) manages customised (pieces of) information (content) independently of their publishing medium. It is comparable to a Document Management System except that the CMS includes Workflow Management and content pieces are managed instead of entire documents (see 3.5.).

Application Integration: Implementing business processes also requires the integration of existing legacy applications. Integrating applications into CMSs assigns data of a legacy application to documents (see 3.6.).

Web Content Management: Web pages can be generated dynamically from content pieces. This is the main reason why content management evolved from document management. Web Content Management (WCM) is focused on the problem of publishing information on a Website — analogous to publishing information in a journal. This also includes Website management (see 3.7.).

Portals: Being a personalised user interface and single-point-of-access based on a Web browser, portals enable access to different internal and external information sources and integrate or substitute existing user interfaces for host access or client computing. Middleware technology is used to collect and condense structured and unstructured information (see 3.7.).

As a concept rather than technology, **Knowledge Management** (KM) uses (Web) Content Management and Application Integration to add external content sources (and, hence, external knowledge) and to make knowledge available to and shareable with an organisation's co-workers (see 3.8.).

KM functions and portal technology are needed for solving collaborative tasks, as are workflow-based CMS for boosting the productivity of administrative processes.

The integrative component is portal technology: Application integration features (insofar as they are visible to the user) are based on individualised portals (see 3.9 and 3.6.). A full-featured enterprise-wide CMS with a universal workflow tool is needed, not merely a Web publishing application. Relevant content from outside the enterprise should be integrated as well (Content Syndication; see 3.8.1.).

Consequently, ECM serves as an integrative middleware integrating or replacing classical host or client-/server applications with content-based applications.

From a technical point of view it should be noted that the cross-platform compatibility or (better) uniform database technology and application development infrastructure offered by ECM substantially facilitate application integration and software development throughout the enterprise.

2. Developing an Ideal Product Specification

In order to find the appropriate match between the Commission's needs and an ECMS, the following eight questions need to be answered about the system under consideration:

(1) How much customisation and eventually development will it require?

(2) How granular and wide-ranging is content control?

(3) How easy is it to use and hence to encourage content providers[1] to contribute to it?

(4) How robust are its workflow capabilities?

(5) How easy is it to integrate with other systems and infrastructures?

(6) How onerous is security management?

(7) How well does it scale and distribute?

(8) How easy is dissemination of multilingual content?

The ideal product specification detailed below is in answer to these questions.

2.1. Minimal Customisation Needed

Is the ECM *already* relatively compatible with the Commission's Business Processes and information systems?

This is the key question with respect to future costs.

Generally content management vendors take one of the following two approaches: Offering either best of breed or an integrated solution. Which strategy is the most appropriate for the Commission depends on whether the complementary systems are already in place, in this case a best of breed solution is appropriate or not, making an integrated solution more adequate.

DMSs/CMSs and best-of-breed building blocks are hardly available today at the Commission, consequently a **complete solution** would be useful.

2.2. Content Control Features

Can text, images and templates (content control code) be managed together? The level of content control granularity and scope can impact substantially on how rich the system's capabilities are — as well as how complex the system is to maintain.

To efficiently control each piece of content, an appropriate storage schema is key: **XML-based** storage of content pieces and metadata is just as important as an **object-oriented** approach to manage the content (see 4.1.2.1). Content, templates and appropriate representations need to be clustered flexibly and dynamically.

[1] A distinction is made between "content providers" and "normal read-only users" for clarification. Many users in the EC are content providers.

2.3. Usability

Content Providers

All content providers are to contribute to the future ECM. If content is up-to-the-minute and everybody throughout the organisation uses the ECM as their primary information source, collaboration and information will be significantly simplified and the targeted benefits will be achieved.

Content providers confidence and, hence, acceptance primarily depend on **system stability**, performance (see 2.7. for details) and usability. Unforeseen system behaviour undermines this confidence, the consequence being that they are less inclined to entrust their valuable content to the system, thus also undermining the goals of collaborative work in the process of content creation.

Since the Microsoft Office Suite is used throughout the Commission, easy, homogeneous **integration with Microsoft Office** is necessary (see 4.3.2.1.): Using the ECM must be at least as easy and intuitive as using a file system (the ECM should feature a **WebDAV** interface; see 4.2.).

General Users

A **personalised portal** (see 3.9.) to access the ECM is needed as content syndication (see 3.8.1) and notification (see 3.8.2) are important for collaborative tasks; the portal is a single point of access for the user and, hence, also has to enable application integration (see 4.4.2). If the user interface of the ECM is able to reside within other user interfaces (e.g. portal bridges), the ECM itself can be used as a content provider within other portal applications.

2.4. Workflow Capabilities

The European Commission has two main equally important requirements:

- One requirement concerns the support of collaborative work for organising decision-making processes: this work is generally of a relatively unstructured nature and contains many ad-hoc processes.
- Another requirement pertains to highly structured workflows, making necessary a close link between electronic documents and structured application data (e.g. accounting data; see 3.4.).

Small user groups who collaboratively author documents and deliberate decisions have to be supported as do highly structured work process at the Commission or even European level.

The system's workflow capabilities have to dovetail with the Commission's way of working. Consequently, **serial** and **parallel approval** flows, as well as **"consensus" flows** (e.g., three out of four approve), are usually required (see 3.7.1.).

Un-Do, delegation, send-back and designating substitutes are necessary for flexibility reasons. An administrator must be able to provide a well-defined **emergency exit** to avoid dead-end processes.

2.5. Integration with Other Systems and Infrastructures

Microsoft Windows (NT, 2000, XP) and Microsoft Office Tools are used on the client side and at the departmental level. At the back office, most of the Commission's servers are Unix/Oracle-based. The latter also host the Commission's business-critical applications.

The ECM server needs to integrate **Oracle as a database** for metadata management and **Unix, Windows 2000 and Windows XP as the operating system**. Simpler systems are conceivable at the departmental level, systems, which feature less in the way of functionality, thus facilitating system administration. Microsoft technology will continue to dominate here. On the client side, integration with Microsoft Office (via XML) is necessary at minimum (see 4.3.2.).

The ECM must work smoothly with its fellow systems. To achieve this, a standardised interface like **ICE** needs to be provided (see 4.1.2.4.). At minimum **XML-based import/export** functionality has to be provided.

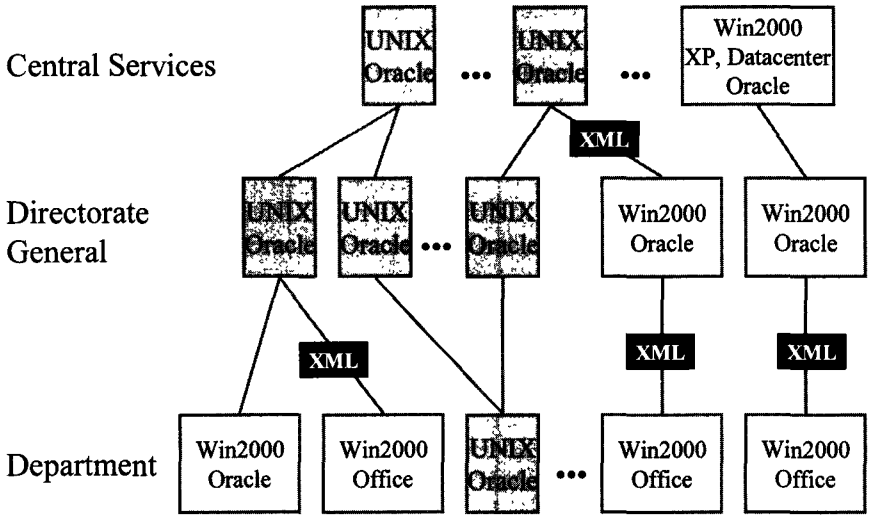


Figure 2: Technical Infrastructure and Integration via XML

Microsoft and the Java community comprehensively support XML-based technologies. These technologies form the future link between department and enterprise solutions, thus enabling a seamless transition between the tools used: Centrally deployed solutions can unite departments, with departmental solutions also serving as full-fledged tools at the same time.

If plug-ins for ERP applications (like SAP) are lacking, a well-defined **application programming interface** (API) is necessary in any event. This should be **Java-based** and **J2EE**-compliant (see 4.3.2.2.).

2.6. Security and User Management

Information has to be made available in an individualised manner so that no unauthorised attempt is made to access it. This can be achieved by way of **personalised portals and content**, since a portal is the single point of access to all relevant information. Sophisticated user authentication is mandatory.

Optimal security is mandatory in view of the variety of users and applications that will use the content management system — as well as in view of the importance of the content. The ECM has to use the Lightweight Directory Access Protocol (**LDAP**) directories so as to minimise the administrative burden (see 3.10.2).

The ECM must be able to manage access rights to each piece of content as well as to all control structures (metadata, links etc.).

2.7. Scalability and Distribution

Despite the focus on openness and modularisation, system **performance** must not be sacrificed, as thousands of users have to be supported. Although satisfaction of all other criteria can be easily determined by way of examination and testing, the **references of the vendor** are still decisive here.

Scalability strongly depends on how the system works with content creation *and* content delivery systems. This in turn depends on the system's architecture.

For Web publishing, a fast content delivery system accommodating large numbers of users needs to be separate of content creation. A special application server (see 4.1.2.1) should also produce dynamic content to enable portal personalisation.

For the Commission's internal needs, *integrated, fast content creation and dynamic content delivery* would be the best solution for internal use (Commission's intranet).

Scalability is to be achieved by an ECM capable of being (transparently) *distributed* over many servers.

2.8. Multilingual Dissemination

The Commission is demanding the ability to "write once, distribute world-wide". A CMS is needed that makes it easy to manage a network of sites offering standard content but takes into account the linguistic and cultural point-of-view of the Web visitor.

It is crucial that the ECM be fully compatible with **Unicode standards** and that it support **multilingual user interfaces** (Greek and Latin character sets simultaneously). **Language-specific full-text retrieval** is also necessary.

2.9. Conclusion

Various systems might be considered for solving the above tasks. All of these systems have one thing in common: they provide the middleware for application integration, in so doing forming the basis for future business-critical applications.

It is here that the **architecture** of these solutions plays a key role:

- The ECM can be distributed on many Unix (or derivatives) servers.
- The ECM uses Oracle as the database,
- Application development and integration tasks are to be solved using the J2EE development environment.
- Smooth integration with Microsoft Office environment including the email system is mandatory.
- The Commission's LDAP directory must be used for user administration.
- Multilingual user interfaces and full support of Unicode are mandatory.
- Content storage and integration of other content (including Microsoft Office-based content) is to be XML-based.
- Content control is to be object-oriented.

The Commission needs a full-fledged integrated content management solution:

- Personalised access to KM functions like content syndication and notification via a portal are desirable.
- Content creators are also content readers; both types of users have to be efficiently supported and be able to concurrently work on up-to-the-minute content.
- An integrated, easy-to-use workflow system concentrates on document flow, yet still offers some sophisticated features for exception handling.

3. Terms & Definitions

The semantics of and the relationship between the following terms have to be clarified, as these terms are used differently by vendors and consultants. Whereas the former proceed from a very concrete understanding, the latter sometimes tend to use these concepts in a philosophical or highly abstract sense:

- Document
- Content
- Electronic Archives
- Document Management System (DMS)
- Content Management System (CMS)
- Workflow Management System (WMS)
- Web Content Management (WCM)
- Knowledge Management (KM)
- Enterprise Application Integration (EAI)
- Portal

3.1. Document and Content

Below the focus is on the electronic representation of information.

Content *is an authored, but not necessarily structured, information object. This refers to* ***the information itself****. Content is independent of a publishing medium.*

Examples of content:

- Video stream
- Audio stream
- Text
- Images

Adding a representation to content at a given time results in a ***document****.*

Web pages in particular have prompted the distinction between *content* and *document.* Web pages are often documents built dynamically from content pieces, which need to be managed separately.

3.2. Electronic Archives

An archive is used for long-term storage and control of passive (or static) documents, files or records. The archived data is unchangeable (depending on the storage media and/or security definitions) and is usually only directly accessible and retrievable (no sophisticated search functionality).

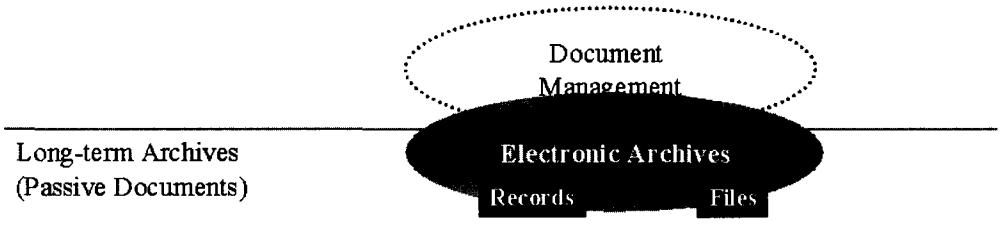


Figure 3: Storage of "Passive" Documents and Files in an Archive

An archive can be compared to the basement of an office building, where documents and files that are no longer being revised are stored.

Electronic Archive = Long-term Storage of Documents and Files

3.3. Document Management

Document Management Systems (DMS) evolved to manage and control active (or live) documents. Early electronic documents were unstructured pieces of plain text, meaning they were content only.

DMS permit a description (metadata) for content to be defined, and searching to be done on the basis of this description. The description also enables efficient management of content (without touching the content itself). A DMS can add more than one representation to content, generating more than one document from content.

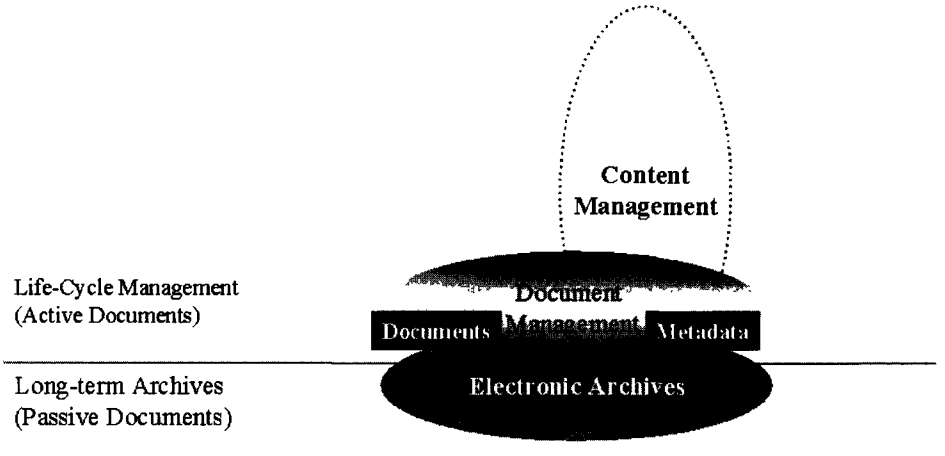


Figure 4: Document Management System for "Active" Documents

DMSs handle "live" documents, i.e. documents that are continuously manipulated or, at minimum, are searched by and presented to the user.

Metadata is used to find, describe and distinguish various content or to link it to an author, location or other content. Metadata can be:

- added manually by the user (indexing), or
- automatically derived from content.

To derive or regenerate metadata from content directly, it is necessary that metadata itself is a (redundant) part of content.

Examples of metadata:

- Name of content
- Index number of content
- Size of content
- Author of content
- Location of content

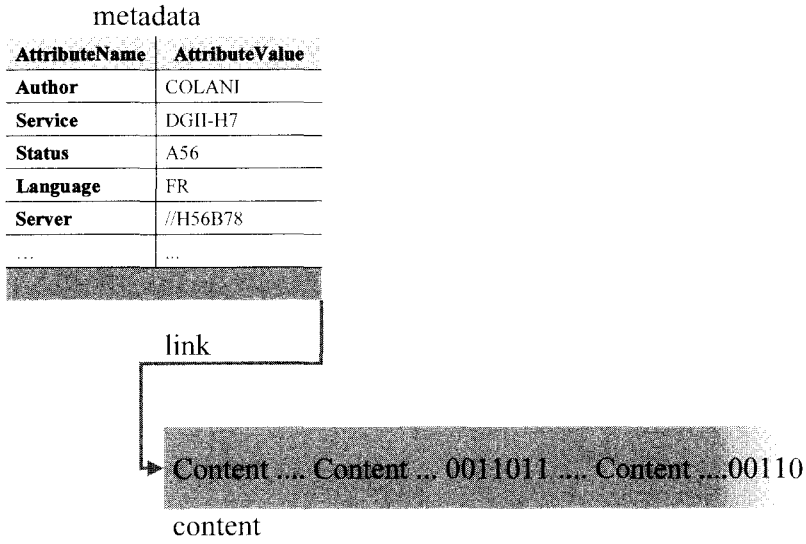


Figure 5: Formatted Metadata and Binary Content Stream

*A **Document Management System (DMS)** handles content and descriptive information (metadata) and adds one or more representations to content.*

A DMS performs the following functions:

- Creation/deletion
- Storage/retrieval
- Retention management
- Import/export (bulk data)
- Versioning (via check-in/check-out)
- Auditing
- Security/protection
- Publishing/rendering

A DMS additionally performs the following functions to metadata only (the content is not used):

- Locking (may also be performed on the content itself)
- Indexing (database index or full-text) [cataloguing and referencing/compound documents/document files is done via indexing].
- Searching

The usage of metadata facilitates and optimises the implementation of all these functions.

Adding metadata to content provides for DMS functionality.

DMS = Content + Metadata + Content Representation

Additionally, **user management** is necessary to

- grant **rights** for reading, changing or deleting content or metadata
- control and track content changes (**versioning**)

3.4. Workflow Management

Managing and publishing content is a business process. Workflow management is key in automating and controlling this process.

*A **Workflow Management System (WMS)** coordinates and automates work, and ensures that users perform and complete the tasks assigned to them.*

The figure below shows how a Workflow Management System (WMS) assigns appropriate process steps to users and tasks:

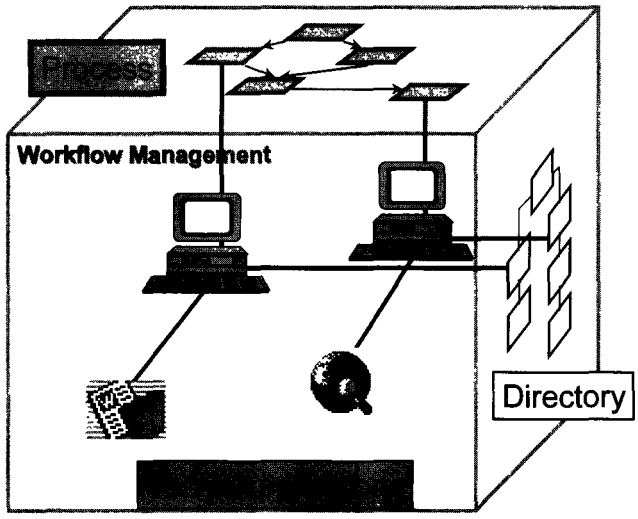


Figure 6: Workflow Management Assigns Process Steps to Administrative Units and Tasks

For every step in the process (top side of the cube) the WMS assigns the appropriate administrative unit (or even a person; cf. right side of the cube) to a defined task (write a letter using Word, access the Internet, or even do something manually; front side of the cube).

A WMS solves the problem of providing the right information at the right place at the right time in a universal and easy manner. A WMS coordinates the work and automates its performance. It provides the information required for each task and ensures that the work is done.

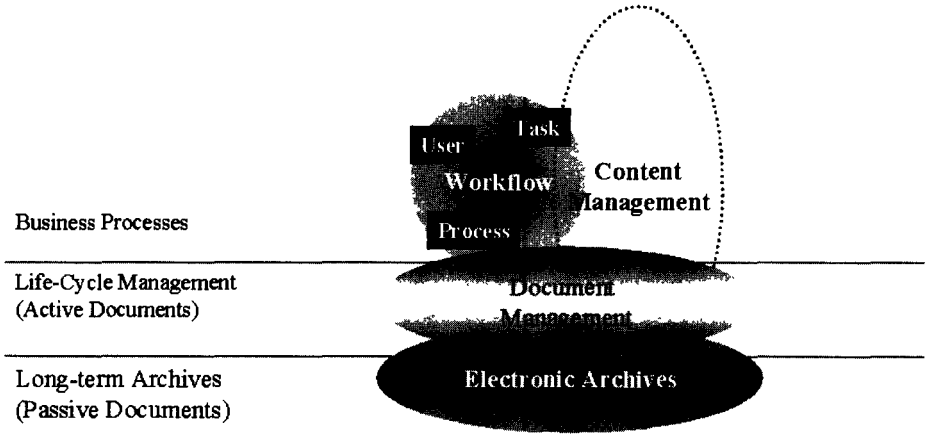


Figure 7: Workflow Management for Implementing Business Processes

Apart from steering and control, a WMS guarantees that

- certain tasks are performed in any event (by using substitutes, by propagation etc.) (*reliability*), and
- everything which is done can be documented (*provability*).

This can only be ensured via transactional security (usually based on database transactions). There are two kinds of WMSs as distinguished by the technical infrastructure used:

- **Transactional Workflow**, with transactional security and more or less Collaborative and Administrative Functions, and
- **Non-Transactional Workflow**, based on Groupware Systems (Lotus Notes, Microsoft Exchange) with added routing functionality and no transactional security.

By contrast, WMSs are differentiated in the literature according to their *use* as follows (see DENISE I, pp. 18 for a detailed definition):

- *Production workflow*
  to automate high-volume, repetitive and sometimes complex work performed by different users
- *Collaborative workflow*
  where a well-defined process is given and has to be executed exactly as described (usually by law). The goal is not only increasing productivity, but also process provability.
- *Administrative workflow*
  to automate simple (high-volume) administrative processes
- *Ad-hoc workflow*
  to help a user decide where definitive rules have been omitted.

3.5. Content Management

A Content Management System (CMS) manages customised (pieces of) information (content) regardless of their publishing medium.

Different readers and editors may work on the content or add information to the content description in a sequence or even chronological order.

The management of content is a (business) process.

Adding workflow to full-featured DMSs (which handle any content) is a good definition of Content Management Systems (CMS).
CMS = DMS + WMS

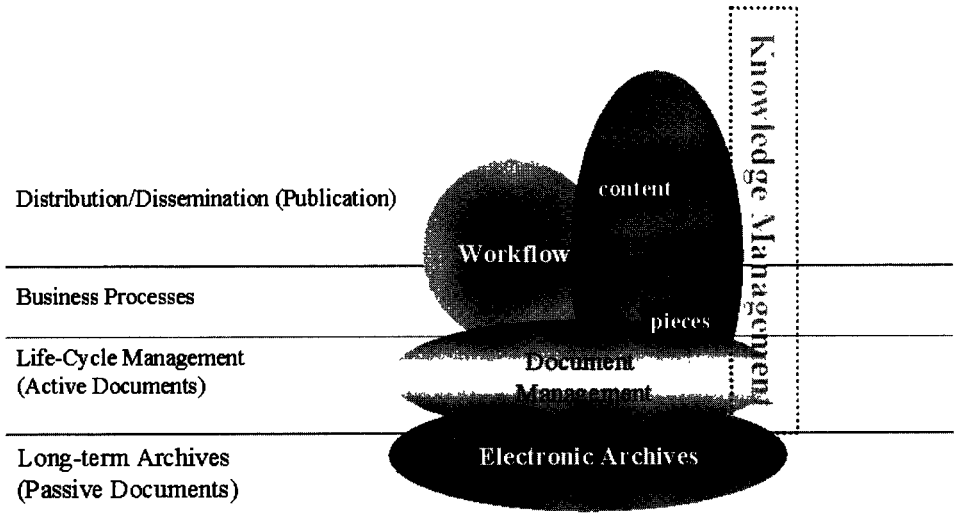


Figure 8: Content Management: Managing Content Pieces

CMSs serve as the technical basis for the other technologies discussed below.

3.6. Application Integration

As demonstrated in section 3.4., implementing business processes also requires the integration of existing legacy applications.

The user can concurrently access application data and associated documents via a portal (see 3.9.) or workflow integration. In some cases, application integration is transparent to the user: As an example, the output of a host application has to be stored in the CMS long-term archive as an unchangeable document without user interaction. This Document Warehouse concept is comparable to the Data Warehouse concept already in use at the EC.

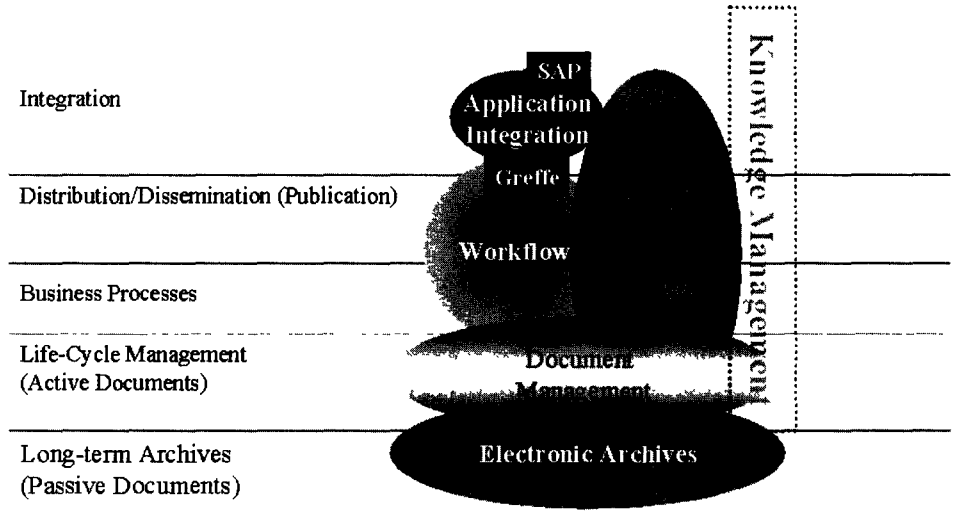


Figure 9: Application Integration with WMS and CMS

A document may be assigned to the data of a legacy application via a workflow step or via (additional and, hence, redundant) CMS metadata (see 4.3.1. for technical details).

3.7. Web Content Management (WCM)

Whereas CMSs/DMSs and WMSs universally offer usable functionality for many different application scenarios,

Web Content Management focuses on the problem of ***publishing information on a Website*** *(analogous to publishing information in a journal) and* ***managing the Website.***

Most WCMs use a CMS as the publishing infrastructure.

Web pages can be generated dynamically from content pieces. This is the main reason why content management evolved from document management.

Universal CMSs address a horizontal market (are usable for many different application scenarios), whereas a WCM is a vertical solution (implements a special application).

A specially designed vertical solution offers well-suited functionality for

- Web publishing
- Website management and
- Template creation and management.

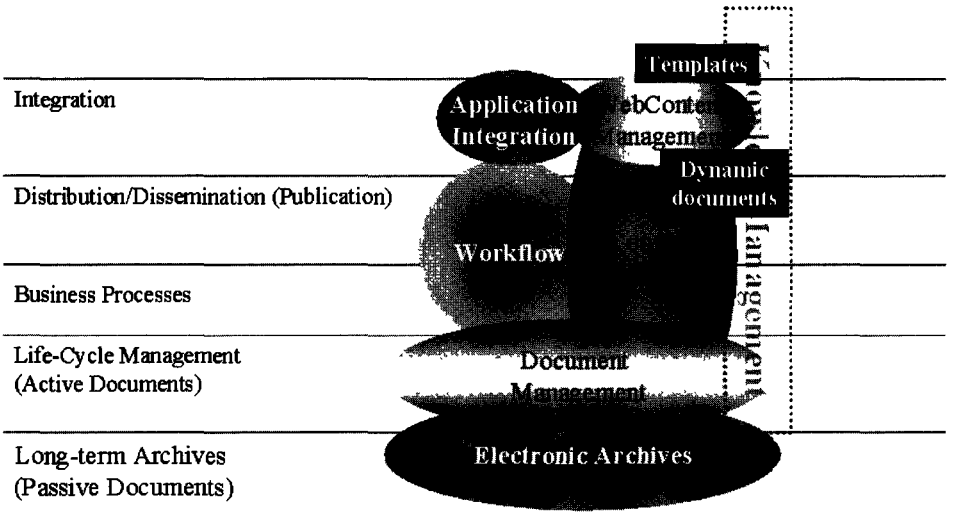


Figure 10: Web Content Management Systems: Website Management, Web Publishing and Templates

If a WCM is not already built on available CMS functionality, many DMS and WMS features have to be implemented.

3.7.1. Web Publishing

Whereas full-featured ECMs or CMSs support any kind of workflow, WCM systems concentrate on one special process of publishing new Web content. The only workflow flexibility is the configurability (or programming) of variants of this process. Graphical workflow design and EAI features are not useful and, hence, are not supported in this environment.

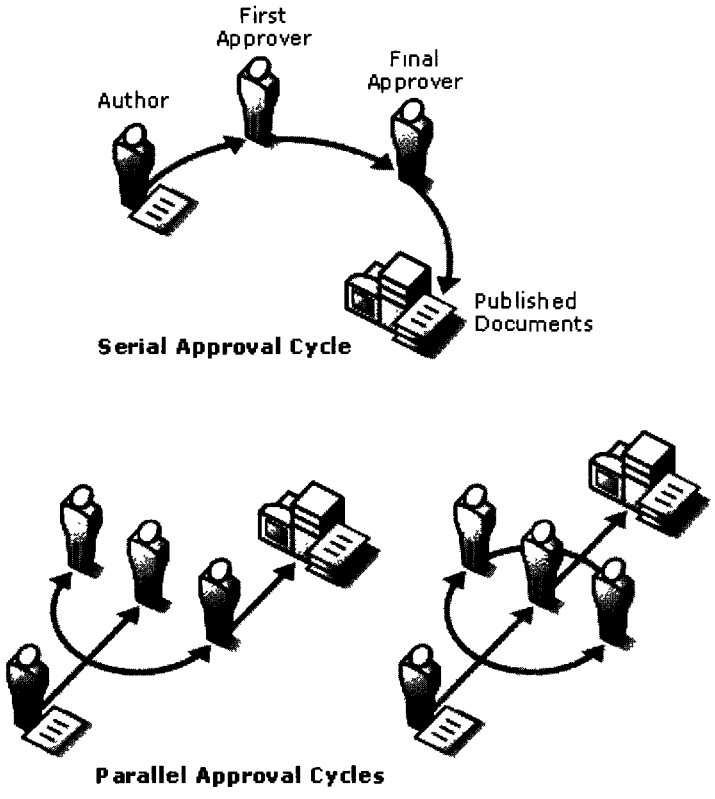


Figure 11: Simple Approval Workflows for Web Publishing

Specialisation enables the publishing process to be precision-tailored to the user's needs without the overhead of a universal workflow tool (e.g. unnecessary GUI components, user interaction, etc.).

3.7.2. Website Management and Link Consistency

When a user follows a link from one Web page to another, the target page should always be available. In a standard CMS, this link

consistency can be ensured via transactions of the underlying database system (here links are represented by metadata).

Automatic link checking is a very arduous and complex transaction, and deadlocks are possible. On the other hand, it may be very frustrating for a user not to be able to delete a document without having to reassign all the links to that document.

WCMs provide automatic link checking as an administrator task.

Link security becomes more complex if external links have to be checked as well (see 3.8.1.).

3.7.3. Templates

Templates are used to generate and control the visual style of documents or Web pages in administrative authorities.

As is discussed below, templates may consist of structural information and additional rendering information (XML,XSLT..see 4.1.2.3)

Many DMSs already featured the notion of templates (called *document types* or *basic documents*) before they came to be used for Web publishing.

3.8. Knowledge Management

Knowledge Management is a concept not a technology unto its own

The following KM functions are implemented on the basis of CMSs:

- Additional Content Sources: add external publications to the information pool
- Notifications: help the user to be well-informed about all the topics s/he is interested in
- Discussion forum: enables the users to interchange information asynchronously with many participants in a time- and space-efficient manner

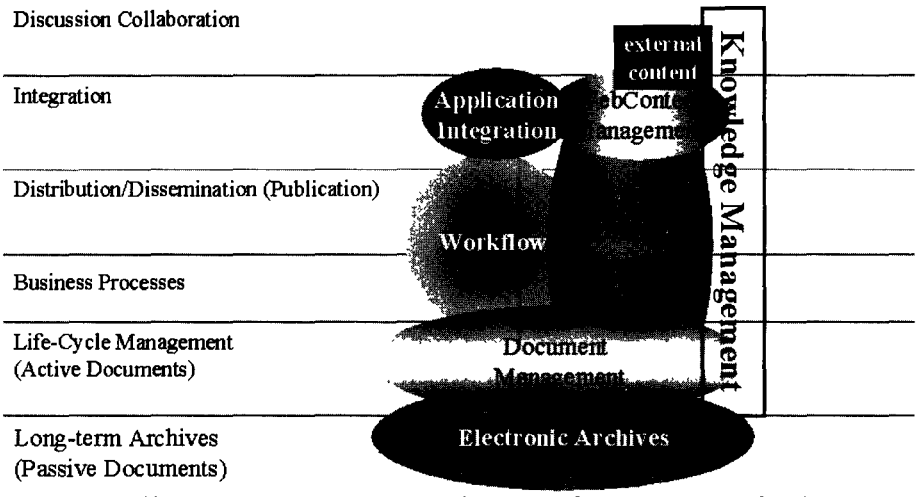
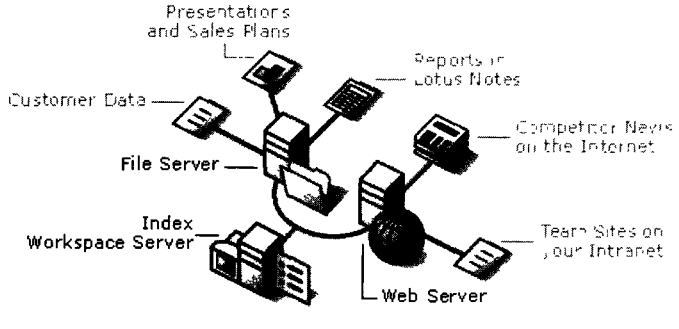


Figure 12: Knowledge Management as an Infrastructure for Discussion and Collaboration

3.8. Additional Content Sources

A Knowledge Management (KM) tool can incorporate information from the outside World (WWW) in its own information pool. The user can then transparently find all relevant information about a topic via a single request.



© Microsoft Corp.

Figure 13: Accessing External Content Using a Content Management System

Since most information collected and referenced in CMSs is based on links, it is technologically easy to extend the content store to the Web by also linking to information found outside the enterprise's intranet (see 3.7.2. concerning problems which may arise in this context).

Enhanced search features provide users with a single interface for searching multiple information sources, including other authenticated sites. An optimal implementation sends the user's query to the search engines on other sites and compiles the results into a single page. This approach enables users to leverage the search engines and indexes on other sites and conveniently provides a single interface for searching multiple information sources (see 4.1.2.4.).

3.8.2. Notifications

Modern KM Systems allow the user to register for a certain kind of information or service. The KM notifies the user about events pertaining to the topics for which he has registered, and the portal software (see 3.9.) or even an e-mail client visualises this for the user. Examples of topics:

- A new document has been moved to a folder (basic feature; used to implement most other notifications)
- A certain value has exceeded a limit (finance, shares)
- A special user has logged in (is currently on line).

KM doesn't help the user to actively check information sources but rather just to find out that no new relevant information has arrived.

3.8.3. Discussion Forum

One CMS application is a discussion forum, where news and problems may be published and commented by other users. Standard CMS features are used (indexing, linking, categorisation and templates). Result:

An ECM serves as an infrastructure for KM approaches.

3.9. Portals

Portals are used to integrate different information sources concurrently and visualise them on the user's desktop.

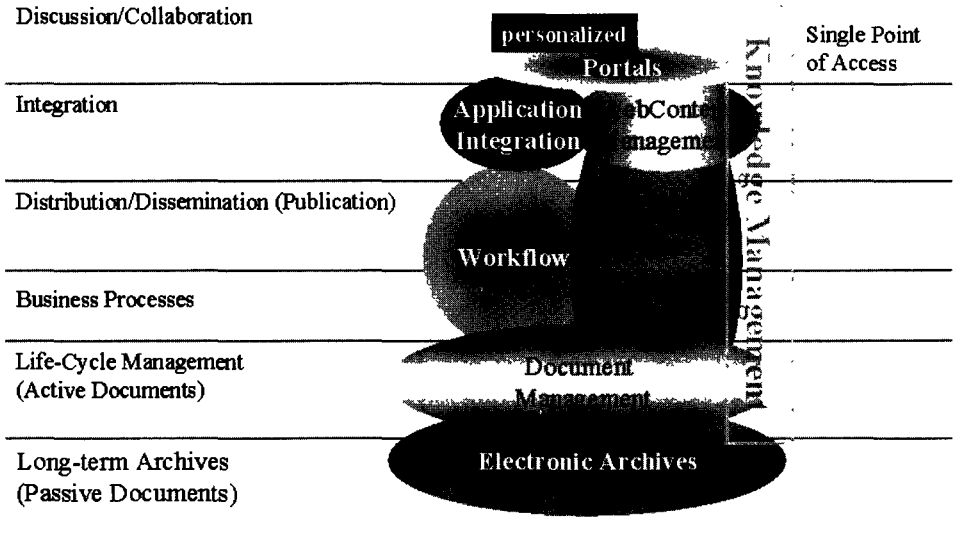


Figure 14: Logical Structure of Portals

A **portal** offers a single point of access for finding and managing information.

The notion of personalised portals for users is currently a growing area.

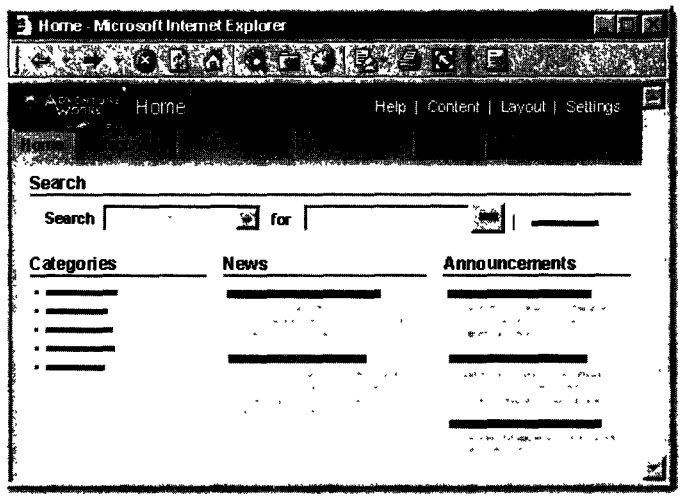


Figure 15: A Portal Page

From the personalised portal, all ECM tasks may be performed and external information sources can be additionally accessed.

For example, the portal of the Corporate Finance Group enables concurrent access to the user's private calendar and mailbox, to financial documents (bills etc.), as well as to a financial application (SAP R/3 etc.).

Content Managers can tailor content according to predefined user profiles-llowing organisations to filter and categorise information in relation to corporate structure, occupation and many other criteria. Each view can be altered to meet the demands of different job functions such as sales, development, or management. Physical location, situation and other relevant parameters can also be used to define the view and its predefined content. Once created, the profile draws information from a variety of sources and filters pertinent information (3.8.1.)

Personalisation can be individual or at the group level: Users can add, edit and delete information sources from their portal.

In a "portal inside a portal" approach portal bridges provide access to a certain portal's content and services directly within other portal frameworks.

State-of-the-art technologies enable the interaction of different applications inside the user's portal: the window parts of the portal desktop interact. Example: a number written in a window of the text application may be transferred automatically to a financial application running in another window on the portal desktop (see 4.4.2. for details).

3.10. Security Aspects and User Management

For security reasons, not all functions and content data of ECMs are to be available to all users. In addition, all users need to be known to the system in order to track and log their actions.

System access is controlled implicitly, if portal access is controlled and limited.

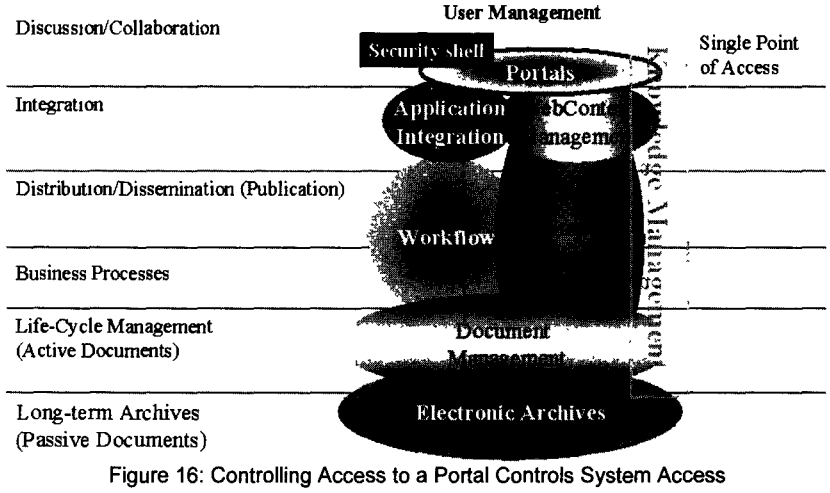


Figure 16: Controlling Access to a Portal Controls System Access

3.10.1. Control, Versioning and Protocols

By default, content or its metadata may be read, changed or written by any identified user. Authorisation limits user functions.

The ECM protects confidential information by

- Controlling **user access**
- Generating new **versions** of content (to protect the current version)
- Providing a **history** in order to verify any changes in content.

A user or group of users (see 3.1.2) can have a privilege or a combination of privileges to

- read (visualise)
- create
- change
- write
- delete

content or metadata. It should be noted that specific combinations (change & write) are necessary in order to be a useful access right, and that there are impractical combinations (delete without read). The access rights defined for metadata may differ from those defined for the associated content.

It should also be noted that metadata is used to implement links in a WCM. Links are invisible when a user has no read permission for the linked content.
Additional attributes equivalent to privileges are:

- Create version
- Protocol all changes
- Authenticate

3.10.2. Personnel Directory

All users need to be identified (and authenticated; see 3.10.3) before accessing the ECM. Many users log in to computer systems via a PC, consequently their user account can be used directly to avoid duplicate logins.

Access rights (and optional versioning and logging) can be defined at the user or group level. Adding a user to a certain group causes the privileges of that group to be assigned to the user. This solution is used by most ECMs. Drawbacks:

- If the number of groups grows substantially, the knowledge of a certain user's access rights is not easily verifiable.
- If the personnel directory of a large administration or enterprise already exists this results in duplicate work.

An ideal solution directly integrates an administration's personnel directory.

See 4.5.1.for technical details.

3.10.3 Authentication

Authentication is the process of determining whether someone or something (i.e. an application) is, in fact, who or what he/it claims to be.

Authentication is usually done in a "single sign-on" by entering a user-specific password in addition to the user's name. Other technologies can be employed, (chip cards, scanning of biometric features, ...), however they require additional hardware. Access to hardware features is usually not supported by Web browsers. Technologies currently being developed employ *client authentication* (see 4.5.2)

If client software (running on a PC) is used to access the ECM, the login procedure of the PC (NT login) usually suffices, and a second login to access an ECM should be omitted.

The encryption and signing process depends strongly on user management, and on user authentication in particular.

3.10.4. Encryption

Encoding is a well-known, publicly available transformation of data.

Encryption is the encoding of data using complex and confidential information. The resulting data is not (easily) accessible by unauthorised individuals. User-specific information (i.e. the user's name, password,

biometric data etc.) is used as a parameter by the encoding computation. This specific private information is referred to as an *encryption key.*

Encryption protects content against unauthorised access.

Decryption is the process of converting encrypted data back into its original form, so it can be understood.

The content can only be decrypted using a *decryption key*, which forms a pair with the encryption key.

Any content (even internal ECM logs) may be encrypted.

3.10.5. Digital Signature

Content is considered authentic if it can be ensured that no one other than the publisher has written or changed it.

In order to ensure the authenticity of content it is encrypted using a private key and stored or sent together with the original (readable, not encrypted) version. A reader or recipient decrypts the content. The content is verified by the recipient/reader as being authentic if the original and decrypted versions are identical.

Biometrically signing content is done by generating a non-ambiguous data representation of the biometric characteristics of the user and using this information as an encryption key (analogous to a password).

4. Technical Backgrounder

As already described above, ECM is the integration of and built on technologies for archiving/DMS/CMS, workflow and portals. The combination and interaction of all these modules form the technical structure of an ECM

The goal is to extrapolate the possibilities offered by ECM technologies onto the systems currently in place at the Commission. The following discussion details the functional objectives and benefits of the technical concepts on which the infrastructure of the proposed solutions would be based.

The question is this: Is it possible to integrate these technologies in the current environments, and, if so, what would this cost? Technical aspects are key in answering this question.

The following are crucial in this connection:

- Architecture
- Protocols
- Standards

Below follows a product-independent description (and distinction) of the technical structures

4.1. Modular Structure of Enterprise Content Management Systems (ECM)

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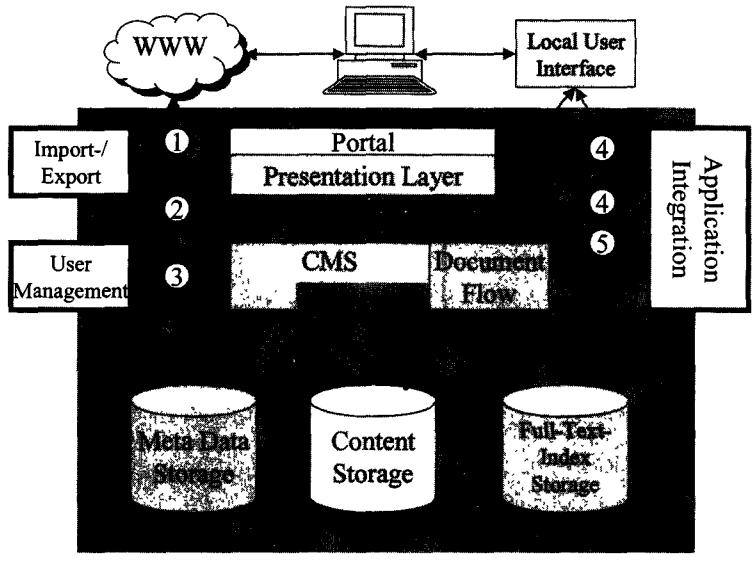


Figure 17: Enterprise Content Management System Modules

The background block of the figure 17 denotes the entire ECM. The blocks whose borders are partly outside the background block are either modules of the ECM or at least interfaces provided by the ECM to the outside world.

The circled numbers denote the following interfaces:

① Web interface for rendering content (see 4.1.2.3)

② Bulk import/export interface (see 4.1.2.)

③ Interface to personnel directory (see 4.5.1.)

④ Application integration in user interface and portal (see 4.4.2.)

⑤ Application integration in workflow (see 4.3.1)

The interfaces without any numbers are only internally relevant.

4.1.1 Storage of Content, Metadata and Full-Text Indices

The content, metadata and full-text index are stored in different places. All complex tasks are performed on metadata or the full-text index: (direct) access to content remains as the last step after any complex operation.

4.1.1.1. Content

Content information may be substantial in size (i.e. video), consequently it is stored only once (meaning no redundancy) and transferred to the reader or editor on demand. Content is stored by either using the operating system's file system or as binary large objects (BLOBs) in specialised storage systems or databases.

File System

Using a general-purpose OS file system, i.e. one suited to all kinds of applications, poses the following drawbacks:

- The number of possible content entries is dependent on the OS used.
- File size is limited to the operating system limits.
- Access to large files can be slow (a large file is represented by many directory entries) depending on sector size.
- Small content pieces result in directory overhead.
- Non-ECM user access via OS routines has to be effectively limited.

Specialised Storage Systems

When OS file storage capabilities are dispensed with, BLOBs can be located inside a very large file controlled by the ECM or on a private partition of the hard disk. If the ECM implements BLOB usage itself, it has to do nearly the same job as the OS.

The administrator can help the ECM to find an optimal strategy for configuring the BLOB space (this is not available for OS file systems), resulting in

- Improved garbage collection
- Less unused space
- Faster access (the database may hold pointers directly to the disk sector)

The above is enabled if the size and number of records (or files) to be stored are given to the ECM in advance. Added benefit: the storage format is independent of the OS (though dependent on the ECM used).

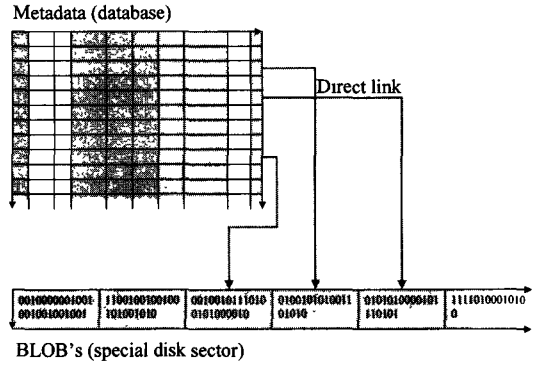


Fig 18: Direct Access to BLOBs

Implementing a "file system" in the BLOB space and being better than the OS file system, is a complex task. This is why most ECMs rely on the OS file system.

These ECMs leverage the following benefits offered by the OS:

- Easy and fast usage via OS access routines

- Usage of OS tools for maintenance (backup, checks etc.)
- No need for a separate implementation (or maintenance of complex software)

Possible solution: a configurable BLOB management system implementing a file system (directory structure) via a database system.

Oracle's Internet File System (IFS) uses Oracle DB; Microsoft's Web Storage System (Exchange 2000, SharePoint Portal Server) uses an enhanced version of the Microsoft Jet Engine and, hence, goes in this direction.

4.1.1.2. Metadata

The descriptive content information (or "content directory") consists of fixed-sized formatted data like

- Strings of text (names, addresses, description)
- Numbers (usually identifiers, i.e. no values like sums, etc.)
- Value sets (e.g. colours, categories), which are usually represented internally as (small) numbers (set enumerators).
- Dates (should be represented in Universal Time Code (UTC)).
- Keys or pointers identifying content or other metadata (Universal Resource Locators (URLs), General Universal Identifiers (GUIDs), ..)

The descriptive content information is stored using a database system so as to have search and access operations directly available.

Searching, indexing, set operations and categorisation are performed at the metadata level only.

Metadata stored together with the content record (i.e. not in a separate database) is used to structure content for facilitating rendering but not for searching and categorisation.

The content itself is accessed in the very last step to read or visualise it.
Storing and maintaining metadata separately of content would be a key objective in the Commission's context. Example: searching of content might be executed in different languages.

4.1.1.3. Full-Text Retrieval

If the content is text, not only the metadata may be searchable but any part of the text as well. In order to use the entire text as search criteria, full-text retrieval systems employ a special structure for searching. Apart from a number of tricks to reduce the number of searchable words, a data structure called *inverted lists* is used for efficient search operations. Inverted lists may also be considered to be metadata. Key words (or search criteria) are compiled by building a sorted list of all the documents containing these words (a thesaurus and a list of unimportant words {stop words} is used to reduce the number of words).

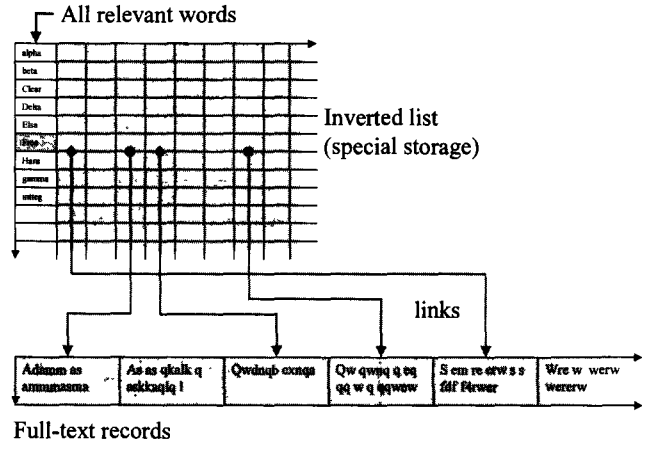


Figure 19: Inverted Lists for Full-text Retrieval

Today's relational database management systems (RDBMSs) handle inverted lists very inefficiently with respect to space and time. That is why inverted lists are stored in proprietary data structures by specialised full-text retrieval engines in most cases. It is important to keep in mind that metadata for full-text retrieval is redundant data. This data can easily be recomputed from a document's original text content. Hence, transactional security is less important and full-text data less critical.

The difference between metadata and content is clear-cut in the context of web search engines: They normally use metadata and a full-text index to compute a URL, which is a pointer to a certain Web page.
This URL can then be used to navigate to the URL's Web page.

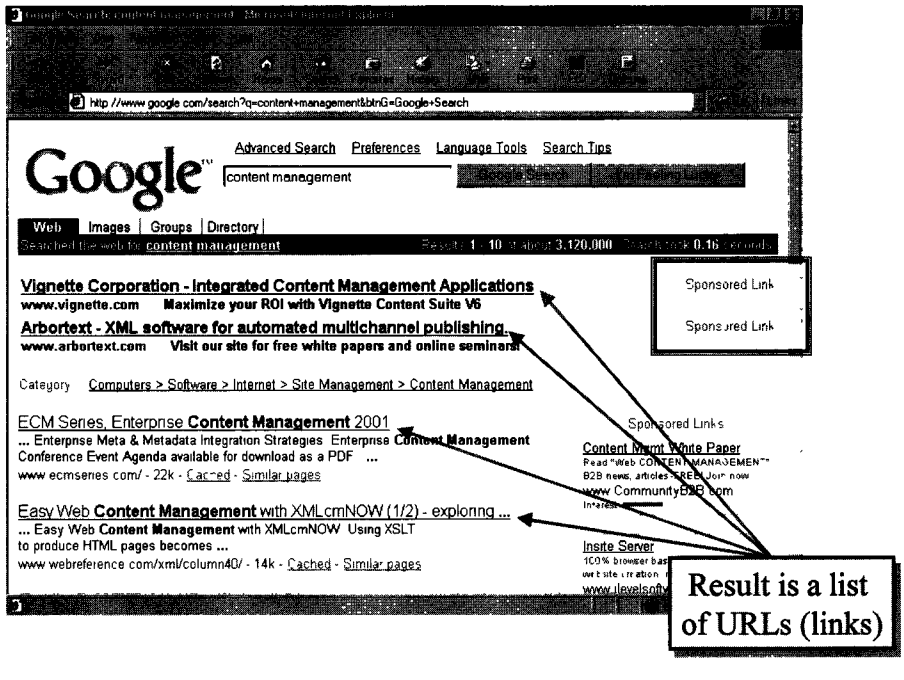


Figure 20: Search Results in a List of Links

4.1.1.4. Consistency

The pointer to the content (even if it is a URL) is not part of the content itself and, thus, cannot be reproduced from it. Storing content and its metadata (containing the content address) may not be interrupted so as to prevent open links (content of a selected description which cannot be found). (Transaction: Store either both the metadata and content, or do nothing).

4.1.2. Interfaces

After discussing the storage infrastructure supporting the various tasks of an ECM, we now turn to interface technology. Here XML will play a key role in near future (for an explanation of XML, see 0 below). The discussion of XML-based technologies is motivated by the architectural benefits offered by using XML.

XML-based technologies are supported by the entire IT industry (Microsoft and the Unix/Linux block (SUN, IBM, HP, ORACLE)). XML has been standardised by W3C (http://www.w3.org), an independent consortium in which all relevant software vendors are represented.

4.1.2.1. Architectural Benefits

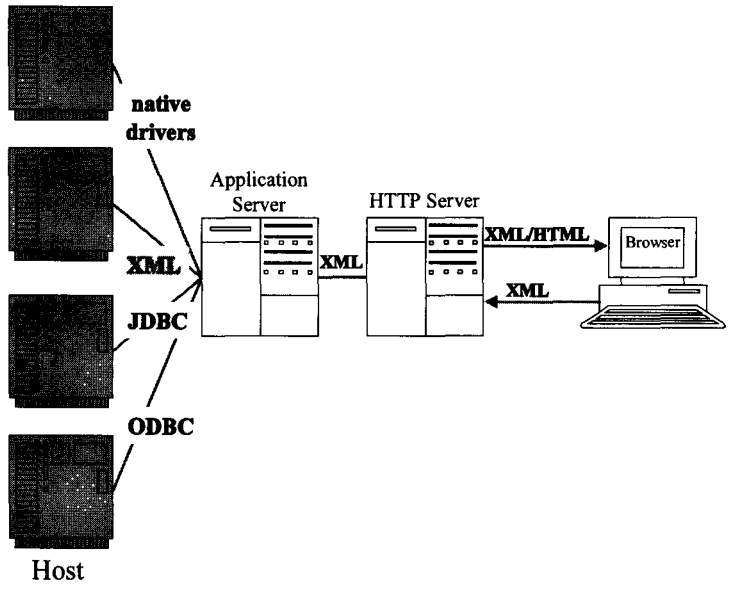


Figure 21: XML-Based n-Tier Architecture

The key benefit of using XML in Web applications is that it provides for a ***homogeneous framework for implementing n-tier Web applications.***

This is done as follows:

- XML data definition
- XML vocabularies/semantics via the XML schema
- XSLT-based data transformation for the user- and device-specific representation of data
- XML-based communication (Simple Object Access Protocol or SOAP)

In contrast to HTML, XML enables more "intelligence" to be transported to the client (browser), thus dramatically reducing server workload and network usage.

4.1.2.2. What is XML?

XML stands for eXtensible Markup Language. It is the ***universal format for structured content and data*** *on the Web.*

XML is a simple, highly flexible text format derived from SGML (ISO 8879). Originally designed to meet the challenges of large-scale electronic publishing, XML is also playing an increasingly important role in the exchange of a wide variety of data on the Web.

The XML syntax uses matching start and end tags, such as <name> and </name>, to mark up information. A piece of information marked by the presence of tags is called an *element*; elements may be further enriched by attaching name-value pairs called *attributes*. Its simple syntax is easy to process by machine, and has the attraction of remaining understandable to humans. XML is based on SGML, and is familiar in its look and feel to those accustomed to HTML.

Advantages offered by XML:

- XML enables internationalised media-independent electronic publishing.
- It allows industries to define platform-independent protocols for the exchange of data, especially e-commerce data.
- It delivers information to user agents in a form that allows automatic processing upon receipt.
- It facilitates the development of software to handle specialised information distributed over the Web.
- It makes it easy for people to process data using inexpensive software.
- It allows people to publish information the way they want it, under style sheet control.

- It makes it easier to provide metadata — data *about* information — that will help people find information, and help information producers and consumers find each other.

A considerable amount of other standardisation work based on the XML standard has been done, part of which is worth mentioning in this context. One central XML "application", *XML schemas*, have been defined. XML schemas express shared vocabularies. They provide a means for defining the structure, content and semantics of XML documents. As an example, an XML schema is used to define the semantics of data types like integers, text, dates etc.

4.1.2.3. Rendering/Formatting

For input/output reasons (rendering/formatting; see interface ① in Figure 17), XSL is defined together with XML as a language for expressing stylesheets. XSL defines the look & feel of an XML document when presented to the user. It consists of three parts: *XSL transformations* (XSLT): a language for transforming XML documents, the *XML path language* (XPath), an expression language used by XSLT to access or refer to parts of an XML document. The third part is *XSL formatting objects*, an XML vocabulary for specifying formatting semantics. An XSL stylesheet specifies the presentation of a class of XML documents by describing how an instance of the class is transformed into an XML document using the formatting vocabulary. In a nutshell:

XML, together with XSL, can be used to describe content for being interchanged and presented to the user.

And the good message is: XML/XSL is standardised by the W3C Consortium.

Any information marked up as an XML document may be rendered via a special XSLT stylesheet for viewing with any device (browser, printer, WAP handy, etc.).

An XML-based definition of forms called XForms has been published at W3C (but not yet standardised) for capturing formatted data in applications via Web browsers (cf index values of a document, news in a news forum etc.).

4.1.2.4. Information and Content Exchange

Information and Content Exchange (ICE) is an XML-based standard protocol for electronic business-to-business asset management. ICE defines architecture and a common language that can be used as a means of automating Web content syndication (information sharing and reuse between Websites) for publishing and *e*-commerce uses.

ICE enables the automation of data supplying, exchanging, updating, and controlling without requiring the supplier to manually package content, or to maintain knowledge about the structure of recipient Websites. Using the ICE protocol enables data sharing between servers, so that, for example, syndicated portions of a Web page can be automatically updated when the source is updated, or new content can be automatically entered and integrated with existing content on a Web page. This feature is especially useful for implementing notification (see 4.4.4.). Each protocol message between servers consists of a valid (conforming to namespace criteria) XML document. XML tags are used to format data to be processed by the servers involved in the transaction.

Using the protocol allows information service providers to specify content, customise it for specific recipients, schedule its delivery, and maintain it. Nevertheless, the success of content syndication is still reliant on the development of a standard metadata vocabulary (in XML), considered to be another essential element. The Publishing Requirements for Industry Standard Metadata (PRISM) working group (an organisation made up of content providers and vendors) is collaborating to develop such a standard.

Unfortunately, most ECMs do currently not yet support ICE.

4.1.2.5. Data Transport via SOAP

The initial focus of SOAP is to provide:

- A framework for XML-based messaging systems
- An envelope to encapsulate XML data for transfer in an interoperable manner that provides for distributed extensibility, evolvability, as well as intermediaries like proxies, caches, and gateways

- An operating system-neutral convention for the content of the envelope when used for RPC (Remote Procedure Call) applications
- A mechanism to serialise data based on XML schema data types
- A non-exclusive mechanism layered on HTTP transport (in cooperation with the IETF)

The last principle in particular results in the ability of SOAP to interconnect applications (via RPC) across firewalls. SOAP (Simple Object Access Protocol, current version 1.2) is a lightweight protocol for exchanging information in a decentralised, distributed environment.

Data transport (interfaces ② & ⑤, see Figure 17) and display in a networked, decentralised, and distributed environment is just as important to ECM as data storage. Following the adoption of XML for data processing, the challenge is for both sides of a session to agree on an application-layer transfer protocol ⑤, whether between software programs, between machines, or between organisations.

4.1.2.6. Security Aspects

As with any distributed protocol, a critical part of a successful SOAP application is getting the security right. The SOAP standard does not specify any security mechanisms; it delegates security handling to the transport layer. SOAP running on HTTP(S) is basically just a Web application like any other. Authentication, authorisation, and encryption for SOAP use the same mechanisms as Web applications do.

4.2. WebDAV

WebDAV stands for Web-based Distributed Authoring and Versioning. It is a set of extensions to the HTTP protocol, which allow users to collaboratively edit and manage files on remote Web servers.

WebDAV is completing the original vision of the Web as a writable, collaborative medium.

WebDAV is an extension of the HTTP/1.1 protocol for manipulating the contents of a document management system via the Web. It supports virtual enterprises, being the primary protocol supporting a wide range of collaborative applications.

WebDAV client APIs are lightweight, and hence do not add a significant development burden. The applications in Office 2000/XP are the first non-collaborative applications to be WebDAV-enabled, and others will surely follow.

Microsoft provides a feature called *Web folders*, which makes a collection on a WebDAV server *appear* to be a directory in Windows.

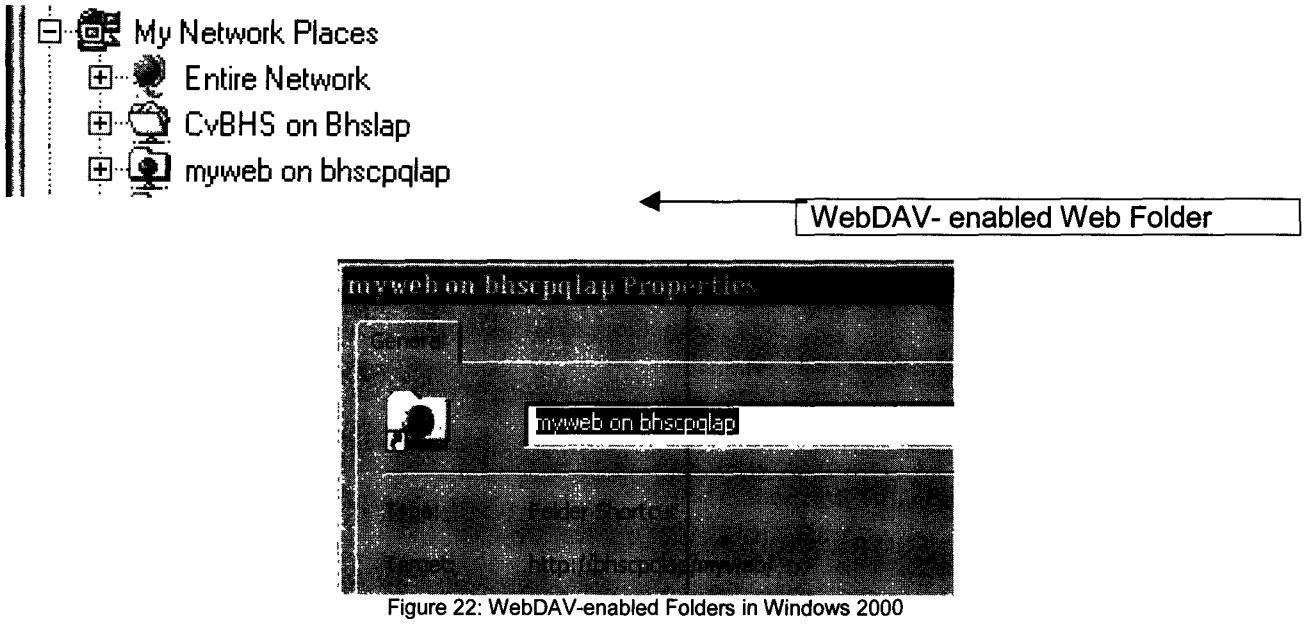


Figure 22: WebDAV-enabled Folders in Windows 2000

WebDAV provides a network protocol for creating interoperable, collaborative applications. Major features include:

- **Locking** (concurrency control): long-duration exclusive and shared write locks prevent the overwrite problem, where two or more collaborators write to the same resource without first merging changes. To achieve robust Internet-scale collaboration, as network connections may be disconnected arbitrarily, and for scalability, since each open connection consumes server resources, the duration of WebDAV locks is independent of any individual network connection.

- **Properties**: XML properties provide storage for arbitrary metadata, such as a list of authors on Web resources. These properties can be efficiently set, deleted, and retrieved using the WebDAV protocol. DASL, the DAV Searching and Locating protocol, provides searches based on property values to locate Web resources.

- **Namespace manipulation**: WebDAV supports copy and move operations, since resources may need to be copied, or moved as a Website evolves. Collections, similar to file system directories, may be created and listed.

Several extensions to the base WebDAV protocol are under development in the IETF:

- **Advanced collections**: this adds support for ordered collections, where the server maintains a single persistent ordering of the URLs in a collection. It also supports referential resources, i.e. resources, which act like symbolic links in file systems, allowing a client to remotely create a redirect to another resource.

- **Versioning and configuration management**: (especially for software developers) versioning support, similar to that provided by configuration management tools like RCS or SCCS, is the entry level of functionality. The versioning level will support operations such as check-out, check-in, and retrieval of the history list. The ability to directly retrieve a previous version of a resource (allowing links directly to previous revisions) will also be supported. Built on top of the versioning layer is the configuration management layer, which provides support for workspaces and configurations, allowing versioned collections of versioned resources to be worked on. Both layers support parallel development.

- **Access control**: the ability to set and clear access control lists. This functionality is crucial for allowing collaborators to remotely add and remove people from the list of collaborators on a single resource. At its most general, this activity becomes access control not just for WebDAV, but for the entire Web.

WebDAV servers are provided by many vendors (even as freeware).

4.3. Enterprise Application Integration (EAI)

Usually, applications are used to process formatted data (non-document-based applications)

Any use of an ECM has to be possible without adapting (all) applications to the ECM's needs.

Application integration is necessary to enable application data parameters to be transferred into documents and vice versa (e.g. transferring an address or a value from the application to the document). Data integration is necessary in order to link content to application data (the content's metadata). This can be done in two ways:

- Storing a pointer (URL) to the content together with the application data within the application database. In order to achieve this, the application needs to be configured in each individual case. However, search operations on the ECM's metadata (stored in the ECM's database) will never find content in this construction.

- Copying application data and redundantly using it to generate ECM metadata. This can be achieved without changing anything within the application. However, the copied application data and the original application data have to be kept consistent by synchronising them.

Consequently, application processing and content processing have to be combined into a single transaction.

4.3.1. Workflow

A universal combination of application and content can be achieved via a workflow step. Hence, universal, tight and transactionally secure application integration is a workflow function. The ECM interfaces with other applications via its workflow part.

If an application is already transaction-enabled under a certain transaction monitor (i.e. Tuxedo), transactional security can be achieved without changing the application only by integrating a workflow step and the application under the same transaction monitor. An additional "begin-of-transaction" is added when the workflow step is initiated and an "end-of-transaction" after all the tasks of the workflow step have been executed. If many interactive tasks have to be performed, the user must execute **all** tasks of the step in order to avoid a "roll-back" of the compromising transaction and the entire workflow step. Hence, this kind of transaction is only useful for non-interactive applications together with a maximum of one interactive task.

However, procedural security without a transaction monitor can be universally achieved by the workflow system, forcing non-interactive application tasks to be unconditionally executed together with a maximum of one user task in a single workflow step. In this environment, data remains consistent, except when system crashes occur.

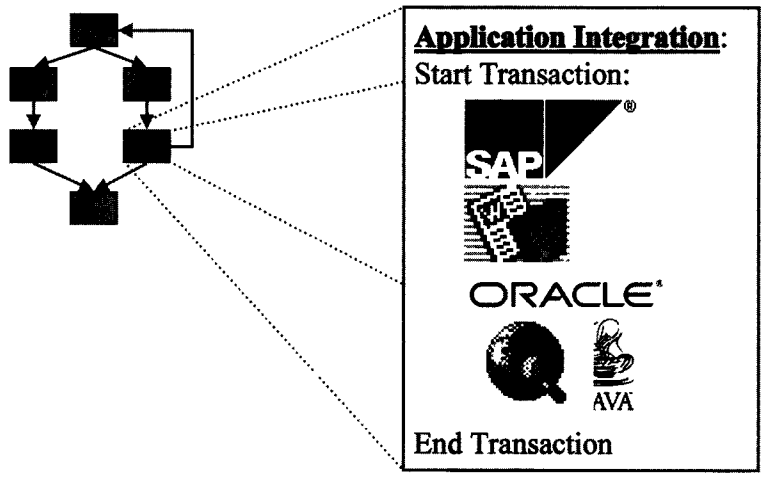


Figure 23: Application Integration via a Workflow Step

Since application integration capabilities at this level require a universal mechanism for integrating objects, there are only two major, broadly supported standardised mechanisms to choose from.

4.3.2. J2EE versus .NET

Up to now, the discussion of technical concepts has excluded the notion of market arguments.

However, when it comes to application integration, operating system platforms and (more importantly) application development tools (and their underlying concepts) play a crucial role.

4.3.2.1. Microsoft

The central application integration technology for client-side application integration is Microsoft's OLE-COM-DCOM-COM+ development chain. The latest .NET strategy extends this chain in a compatible way, allowing existing applications to be integrated in Web applications or to even be used via Web browsers. This results in a homogenous framework of development tools for existing runtime environments (Windows 2000/XP, Internet Information Server, Exchange, SQL Server, etc.).

The .NET initiative for implementing Web applications requires Microsoft products on the

server side, and ***explicitly does not support Java.***

The integration of applications is supported by the .NET line of application development tools (Visual.NET), if the applications are already implemented as COM servers or ActiveX elements (on the client side). The .NET environment enables the development of multi-tier Web applications:

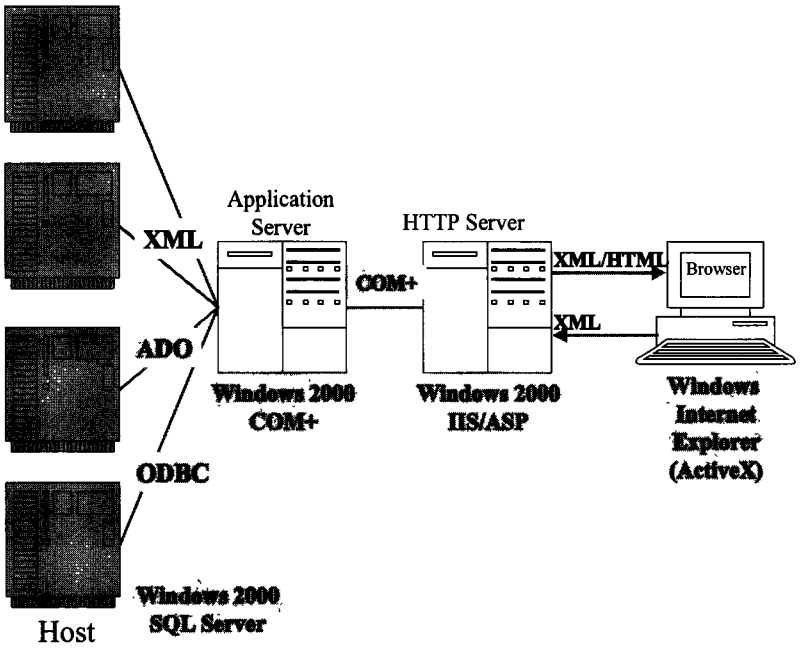


Figure 24: Microsoft's .NET n-tier Model (Microsoft Technology marked)

- Tier 1: Client, visualization: Microsoft Internet Explorer using HTML/DHTML and/or ActiveX components
- Tier 2: Server, input/output and control flow using Microsoft Active Server Pages (ASPs) with Visual Basic or C++ calls (.DLLs).
- Tier 3: Server, application using executables (COM+) running in a Windows environment.
- Tier 4: Server: persistent data objects (ADO/ODBC and Microsoft SQL Server)

As part of the Visual.NET development tools, connectors to many XML-based technologies (XML Parsers & DOM[2], SOAP, UDDI[3] etc.) are supplied as libraries for free, allowing the .NET developer to use XML-based Web services (note that Microsoft is an active member of W3C, the XML initiative, the UDDI initiative etc.)

4.3.2.2. Java

Today's main market divider is Java. Java runs on any platform (UNIX and Windows) and is developed by a community under the leadership of SUN Microsystems. All major software vendors (except Microsoft) and hardware vendors are pressing ahead with development efforts in this area. Typical Web companies develop their software in Java or compatible (Apache Software Foundation: Web Server, Tomcat Application Server) and key players at the enterprise market level like IBM, HP/DEC/Compaq, ORACLE and SAP are committed to Java. It is because of these multi-vendor standardisation and development efforts that Java (and Linux) got its entry into enterprise solutions. Today's "server" runs UNIX or Linux, ORACLE or DB2, Apache as the Web server and Java

.

2 DOM (Document Object Model), a programming interface specification being developed by W3C, lets a programmer create and modify HTML pages and XML documents as full-fledged program objects.

3 UDDI (Universal Description, Discovery, and Integration) is an XML-based registry for businesses worldwide to list themselves on the Internet. Its ultimate goal is to streamline online transactions by enabling companies to find one another on the Web and make their systems interoperable for *e*-commerce. UDDI is often compared to a telephone book's white, yellow, and green pages. The project allows businesses to list themselves by name, product, location, or the Web services they offer.

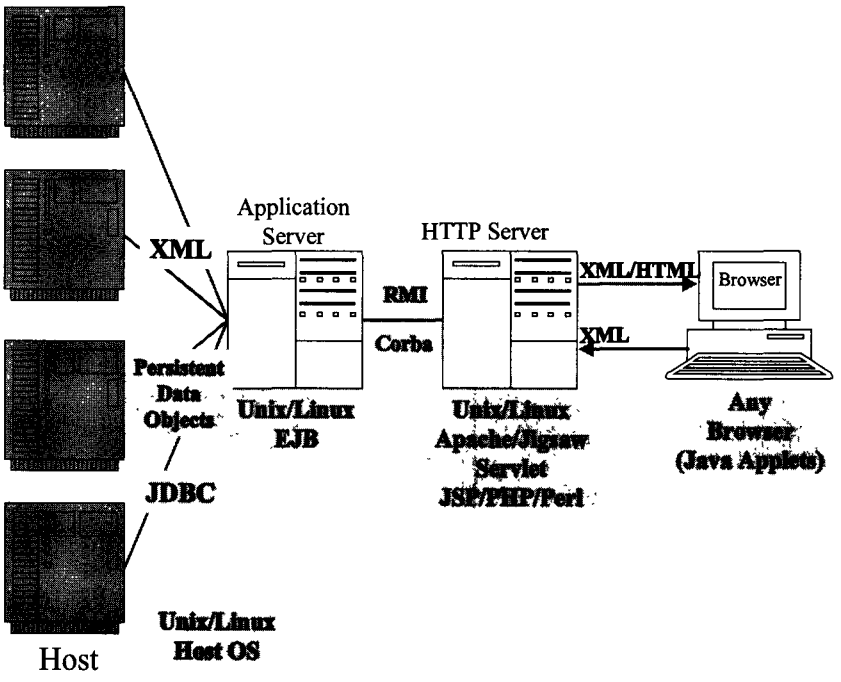


Figure 25: J2EE n-tier Model

In parallel to Microsoft's .NET initiative, the Java community launched the Java Development Kit Version 1.3 (JDK) together with the Java 2 Enterprise Edition (J2EE) Platform. J2EE provides for the easy implementation of multi-tier applications:

- Tier 1: Client, visualization: Any browser using HTML and/or Java Applets
- Tier 2: Server, input/output and control flow using Java Servlets, Java Server Pages (JSPs)
- Tier 3: Server, application using Enterprise Java Beans (EJB)
- Tier 4: Server: persistent data objects (JDBC/database)

The Java community is active in XML standardisation, too, the result being that there are tools available for all key XML-based technologies (JAXP for SOAP, Sax or Xerxes from Apache for XML Parsing, etc.) and also implementations for UDDI, ebXML[4] etc. exist.

The library interfaces and functionality is well-defined and standardised in the J2EE development process. Hence, a key feature of J2EE-based application development is the ability to interchange plug-compatible components of different manufacturers without having to change a line of code.

4.3.2.3. Platform Implies Server Environment

Client computers usually run Microsoft Windows, with most of them using Internet Explorer as well. Result: the client side is Microsoft-oriented. Since the ECM is an application based on centralised data (metadata should be stored in one central place to be searchable efficiently) it is usually a server application. Consequently the decision as to which technology should be used for the ECM determines the future server environment. Web technology is used to access a server directly. If the server platform is UNIX-based (HP/UX, AIX, Solaris, SINIX, Linux, etc.), the Web server used cannot be Internet Information Server (IIS) from Microsoft, meaning ASP and COM+ won't run and .NET won't be available.

If an out-of-the-box system is not used and application integration is still needed, the ECM platform determines the server environment:

- *J2EE implies a UNIX or Windows server*
- *.NET implies a Windows server*

[4] ebXML (Electronic Business XML) is a project using XML to standardise the secure exchange of business data. Among other purposes, ebXML would encompass and perhaps replace Electronic Data Interchange (EDI), a familiar standard.

There are software modules, which break this rule and run non-homogenous solutions: XML / SOAP is an option. Some specialised software manufacturers (Software AG, Orbix, IONA etc.) offer bridges between EJB (Corba) and COM+, which more or less enable integration.

4.4. ECM on the Web

If a Web browser is used for user interaction with the ECM, a number of things need to be taken into account, because a Web application cannot easily push data to the user.

Below follows a discussion of the technology used to implement ECM functionality on the Web. The following items are discussed:

- Workflow
- Portals
- Discussion/news forum
- Notification

4.4.1. Workflow on the Web

Workflow on the Web is fundamentally different from workflow using client software, since the user cannot be forced to execute tasks assigned to him as he can in a client environment, where special desktop software (or the standard desktop of a groupware system like Outlook or Lotus Notes) is used.

Even if the user continuously has a Web page open showing his workload, changes in this view of his tasks are not updated automatically. A user-initiated request/refresh is needed. The push mechanisms developed for user notification, etc. require stream channels to the user's browser and, thus, a live TCP connection (a lightweight protocol no longer suffices).

One solution to this problem is using a mail system to notify the user that something has changed and needs to be looked into. In this case, a URL is often sent, and the user gets a refreshed view when he follows the URL. Unfortunately, the "stupid" email stays in the user's mailbox and needs to be deleted manually (if no extension to the mail software is installed on the client side). See 4.4.4.

All in all, a production workflow system is not appropriate for use on the Web. For Web publishing, ***document flow*** *suffices.*

In a publishing environment, the reaction time to a new task is not critical. A refresh of the user's task list suffices whenever the user performs any action himself (which gives the Web workflow system the opportunity to send a refreshed task list).

A good solution is a combination of concepts: If a user does not interact with the system (and, thus, provides no opportunity for his task list to be refreshed) for a certain configurable time segment, the system sends a notification to him (containing the URL).

4.4.2. Portal Technology

Portals visualise the EAI features of ECM on the user's side. Since the Web page representing the user's current view of the portal needs to be assembled before transferring it to the user's browser, application data integration needs to run on the server side in advance. Via interface ④ (Fig.17) the application data is transferred to a system, which collects all output to the user's browser and visualises this output in an appropriate manner.

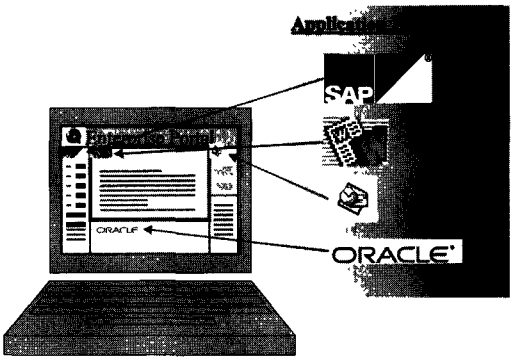


Figure 26: Application Integration via Portal Technology

It is obvious that the application to be integrated on the portal side needs to be responsible for rendering its own information.

The portal tells the application how much space is reserved within the portal page, and the application renders its information via a non-public and as yet non-standardised technology. There are various concepts from different vendors (Oracle: Portlets, SAP Portals: Unifiers, Microsoft: WebParts in Digital Dashboard) for plugging an application into a portal, however most of them are XML/XSLT-based. All vendors provide their own Software Development Kits (SDKs) to write the applications or application interfaces to be plugged into their portals.

Extending these concepts, an application within the portal can communicate directly with another application within the portal (dragging & dropping). As far as we know today, only SAP Portals (once TopTier) can achieve this. This may be the reason why this product received the highest rating by the Gartner Group in its Magic Quadrant

4.4.3. Discussion Forums and News

A discussion or news forum is usually implemented using ECM features. The dialog form for entering news is a special form. Usually this is a template, which can be used as an example for generating a customer-specific variant of news (customer look & feel). In some cases there is a universal mechanism - a forms generator built on XML/XSLT - to generate application forms for any publishing use.

In all these cases, the simple publishing of data with keywords and categories is supported. This data may be searched and viewed or even changed by standard ECM functions.

4.4.4. Notification

Notification is a key ECM function. Although the Web is passive (when used with the HTTP protocol only), the user can be notified of data or value changes using this function. An indicator in the user's portal page is set (example: see Outlook Web Access indicating the number of new items), or the user is notified via email, or both.

Two tasks have to be executed by the ECM system to this end:

- Monitoring
- Notification

For notification, any messaging application, which can be connected via interface ② (see Figure 17) should work. A universal message transfer agent (MTA) can use any mechanism (email, SMS or even fax) for notifying the user. The XML-based message format can be rendered via XSLT in the appropriate target format.

Monitoring is an easy task, if an event within the ECM is to be monitored:

- A new message or news has arrived.
- New content has been inserted in or deleted from a folder.
- Content or metadata has been updated (if versioning is switched on).
- A user has logged in or out.

Events from outside the ECM anywhere on the Web can usually not be monitored directly. A Web crawler (actively looking for new information on a certain topic on the Web) indicates to the monitoring module of the ECM that something has changed (by automatically adding this news at a predefined place). Then the ECM monitor can alert the notification process, which in turn causes the user to be notified. A new approach to support notification tasks is the ICE initiative (see 4.1.2.4.).

4.5. Security Aspects and User Management

Sophisticated user management is necessary to accomplish all the above objectives. In order to avoid duplicate data and duplicate administration, an ECM should have an interface (interface ③, see Figure 17) integrating external data. Usually a customer already uses a user management system (at least NT network users or ADS/NDS or even an X.500-based directory), which has to be integrated via LDAP.

4.5.1. X.500/LDAP

X.500 is the OSI Directory Standard defined by ISO (www.iso.ch) and the ITU (www.itu.ch).

*The X.500 standard allows sophisticated structures to be built on a personnel directory (on virtually any directory structure). X.500 enables **hierarchical** as well as **matrix organisations** to be modelled.*

Each entity of the directory (user or organisational unit in our case) can have its own unlimited number of attribute-name pairs. Some of these attributes have to exist and have a predefined name and meaning.

Another technical complexity is mentioned here, although it is not important in this context: The X.500 directory may be transparently distributed and managed across many locations, while the resulting directory looks to the user as if it were in one place (replication).

Very few implementations of the full X.500 standard exist owing to its extreme structural sophistication and technical complexity. The LDAP protocol was designed and is standardised for accessing an X.500 directory. This protocol enables only a part of the full X.500 functionality to be accessed. Today's directory implementations (ADS, NDS) specifically support this part, omitting the overly complex functionality of X.500.

Since LDAP is not only standardised but is also available as a de-facto standard from many vendors, it would be advisable to implement interface ③ (see Figure 17) using LDAP. Many vendors of ECMs and workflow systems in particular already use directories, which are X.500- or at least LDAP-compliant.

4.5.2. Authentication

Usually password authentication is used: A user authenticates his identity via a password. Users not only tend to use very simple (and short) passwords, they write them down on paper and never change them. The lack of security is an organisational issue.

Biometric procedures or chip cards can be viewed as generators of unique, ultra-long passwords using dedicated hardware. A long password enables the secure encryption of data. Access to local hardware via a Web browser is dependent on operating systems and hardware. It is a complex task (downloading applets or ActiveX components, etc.) and, hence, not used on the Web.

A certification authority (third party) certifies that identification (of a user or server) and password (or encryption key) are known and correct.

In order to establish an SSL connection (Secure Socket Layer) using HTTPS, the server needs to authenticate itself via a certificate so that the client side can be sure that it is connected to the right server. By the same token, the client can use a certificate to ensure client-side authentication via HTTPS to the server. To do this, the client also needs a certificate issued by a certification authority.

Although SSL Client Authentication is defined in the SSL protocol, this is not supported by today's browsers (which would need to store the client certificate), however it will be a key technology of the future.

4.5.3. Authorization

After a user is (identified and) authenticated, his authorisation to execute certain functions on the content needs to be managed. This problem is solved in a standardised manner (Posix 1003.1e / 1003.2c Draft Standard 17) (however using different implementations) by all major OS vendors using Access Control Lists (ACLs).

An ACL is a table that tells a computer operating system or an application (i.e. the ECM) which access rights a user or group of users has to a particular system object or content.

Each object has a security attribute that identifies its access control list. The list has an entry for each system user (or group) with their access privileges. See 3.10.1. for a list of possible privileges.

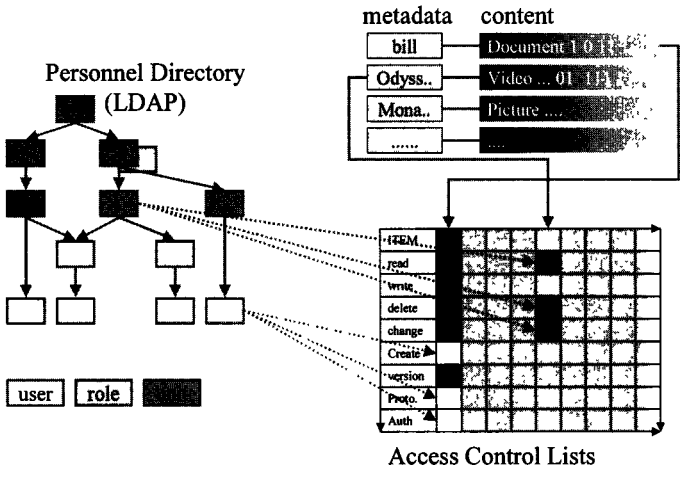


Figure 27: Data Protection via Access Control Lists

As an example, in Windows NT/2000, an access control list (ACL) is associated with each system object. Each ACL has one or more access control entries (ACEs) consisting of the name of a user or group of users. The user can also be a role name, such as "programmer" or "tester." For each of these users, groups, or roles, the access privileges are stated in a string of bits called an *access mask*. Generally, the system administrator or the object owner creates the access control list for an object. An ECM should implement or use something similar to ACLs employing a user directory accessible via LDAP.

4.5.4. Encryption/Decryption

Denotes the process used to **conceal confidential data** from a third party during transfer from a sender to a recipient. The sender encrypts the information to be transferred by converting it into a non-readable form. The recipient decrypts the information by transforming it back into a readable form. There are currently two encryption/decryption processes.

Symmetric encryption/decryption uses the same *secret key* for both operations, with the secret key being known by the two parties involved. The symmetric process is fast because it uses simple algorithms only and is hence suitable for encrypting/decrypting large items. The general problem posed by this method is that both parties need the same key and that this key has to be concealed from everybody else.

Asymmetric encryption/decryption uses a complementary key pair (generated by the recipient). The one key of the pair — the *private key* - is put into safekeeping and kept confidential. The other key - or *public key* - can be known to anybody. In addition, a well-known and trusted organization (Certificate Authority or CA) can certify that a certain public key belongs specifically to the party who issued it.

When applying the asymmetric procedure, the sender uses the **recipient's public key to encrypt** the data, with **the recipient using his private key to decrypt** the data. The advantage of this method is that the private key never needs to leave its owner. The disadvantage is that algorithms for encryption/decryption are very complex and, hence, suitable for transferring small items only.

The two methods can be combined: During an initial step, an asymmetric method is used for transferring a secret key from one party to the other one in a secure manner, the secret key then being used for transferring large content items via symmetric encryption/decryption. For example, SSL employs these scenarios, with the initial exchange of a secret key and complementary information being referred to as "handshaking".

4.5.5. Signing/Verification

Denotes the process used to ensure that **data is not tampered with** during transfer from a sender to a recipient. In addition, this process also attests to the originality of the data transferred by enabling the sender to be identified in a secure manner.

This process is basically the digital counterpart to someone signing a paper document with a pen and showing proof of his identity. Normally, this process is combined with encryption/decryption of the data in question so that originality is ensured and information is concealed from third parties. Nevertheless, the goal of signing is ensuring originality, whereas the goal of encryption is concealing information. For example, Java classes are often signed when they are sent across a network but they are rarely encrypted, because the user only wants to make sure that he is not executing malicious code on his machine.

Signing is normally performed by calculating a "fingerprint" called a *one-way cryptographic hash*, which is a checksum of the data being signed. Cryptographic hashes change immediately, reflecting even the most minute changes to data and thus showing whether any tampering has taken place. In the second step, the secure hash of the data is processed by applying an asymmetric method using the **sender's private key**. This process is called *signing*, which in fact involves signing the secure hash in lieu of the data itself.

During the next step, the data (possibly encrypted), the signed encrypted hash, and, if desired, the sender's public key along with the associated certificate are transferred to the recipient.

The recipient can now check the originality by **re-calculating the secure hash** for the document received and **checking the identity**

of the calculated hash against the hash transferred, encrypted and signed by the sender. In so doing, the recipient checks the certificate of the sender's public key and then uses this public key to **"decrypt" or restore the secure hash transferred** prior to performing the identity check. This process is called *verification*.

5. Summary

Effective document management is key, even mission-critical.

Most importantly, for users the ECM would be a universal, easy-to-understand and simple-to-use environment for handling documents and knowledge assets.

An ECM offers the functionality to manage the EC's documents and all types of digital content, regardless of the publishing media. All information is made available on a uniform platform. In addition to integrating the technologies currently deployed within the Commission, ECM systems would offer a new range of advanced process-centric functionality. Consequently, ECM would serve as an integrative middleware integrating or replacing classical host or client-/server applications with content-based applications.

In the technical discussion it was pointed out that the cross-platform compatibility offered by ECM substantially facilitates application integration and software development throughout the enterprise. It is here that the architecture of these solutions plays a key role.

An integrative full-featured ECM is preferable in order to minimise customisation costs and integration effort. Some customisation to the EC's needs will be necessary, however implementation of new functionality should not be required.

In order to safeguard the investment and make it future-proof, the ECM must optimally integrate and use the existing infrastructure while remaining independent of the infrastructure itself: Oracle (server side) and Microsoft Office (client side) have to be integrated or used, with WebDAV serving as the connecting element. The ECM itself is to be based on XML technologies and be open for J2EE.

H. - G. KOHL
DI / STB

La page qualité

Amélioration de la Qualité des projets : Project Reporting à La DI

Suite à la décision prise au Conseil de direction du 19 juillet 2002, un système de gestion de projet consolidé est mis en place.

Solution envisagée :

Une solution simple qui puisse être rapidement mise en œuvre a été adoptée. Le système reporting, mis en place par le projet, est basé sur les possibilités de la bureautique existante: un ensemble de fichiers reliés entre eux par des hyperliens. Un interface d'accès via l'intranet sera ultérieurement développé.

Fonctionnalités souhaitées :

- Respecter le principe selon lequel toute activité de la Commission doit être auditable.
- Disposer à tout moment de la liste des projets (en cours) afin d'être en mesure de cerner l'activité globale de la DI.
- Disposer à tout moment de la liste des projets (en cours) afin de permettre aux intervenants d'identifier d'éventuelles synergies entre les projets.
- Permettre aux différents niveaux hiérarchiques de la DI d'obtenir les caractéristiques principales d'un projet particulier de leur responsabilité.
- Permettre aux différents niveaux hiérarchiques de la DI d'identifier aisément les projets de leur responsabilité subissant des dérives par rapport à leur situation de lancement. Ces dérives peuvent concerner les ressources financières, les ressources humaines, les délais de fourniture des dérivables, le périmètre.

Eléments de la solution :

- les "Project Sheets" décrivant les projets (une fiche par projet)
- les "Project Report" périodiques pour chaque projet
- Un répertoire sur un disque partagé accessible en lecture à tous les membres de la Direction informatique. Dans cette structure, chaque unité dispose de son répertoire dont l'accès sera sous son contrôle exclusif.

Principaux milestones du projet :

- Accord du Conseil de Direction le 19/07/2002
- Diffusion aux unités de la spécification détaillée du système (juillet 2002)
- Les unités créent les fiches pour leurs projets (jusque fin septembre 2002)
- Système opérationnel (début 4ème trimestre 2002)

J. ALVES LAVADO
DI / CET

Mise en œuvre du Règlement concernant le domaine de premier niveau «.eu» Etat d'avancement

Le Règlement du Parlement européen et du Conseil concernant la mise en oeuvre du domaine de premier niveau (TLD) .eu a été adopté le 22 avril 2002. Il a été publié au JO du 30 avril 2002[1] et est entré en vigueur le même jour.

La première étape de la mise en oeuvre du TLD .eu prévue par le Règlement est maintenant franchie : la Commission, assistée par le Comité ONP, composé de représentants des Etats membres, a en effet arrêté les critères de sélection et la procédure pour la désignation du Registre qui sera chargé de la gestion et de l'administration du TLD .eu.

Entre-temps le Comité ONP a cédé la place au Comité des Communications (Cocom) pour assister la Commission dans sa tâche de désignation du Registre.

Les critères de sélection ainsi qu'un projet de contrat à conclure entre la Commission et le Registre qui sera chargé de la gestion et de l'administration du TLD .eu ont été publiés dans le Journal Officiel des Communautés européennes le 3 septembre dernier sous forme d'un appel à manifestation d'intérêt[2].

La date limite pour la présentation des dossiers de manifestation d'intérêt a été fixée au 25 octobre 2002. Cet appel à manifestation d'intérêt permettra de sélectionner le Registre .eu.

Les candidatures éligibles seront ensuite soumises à une évaluation par des experts indépendants chargés d'assister la Commission pour la sélection du Registre « .eu » durant la semaine du 25 novembre prochain.

Par ailleurs, conformément à l'article 5.2 du Règlement, les Etats membres avaient 3 mois à partir de l'entrée en vigueur du Règlement pour notifier à la Commission une liste de noms géographiques et/ou géopolitiques ayant une incidence sur leur organisation politique ou territoriale. La procédure est clôturée depuis fin juillet 2002 et certains Etats membres se sont abstenus de toute notification.

A partir de la date de publication de ces listes, la Commission et les Etats membres auront 30 jours pour soulever toute objection à l'encontre de l'un ou l'autre de ces noms géographiques et/ou géopolitiques. Cette publication aura lieu en même temps que la notification au Registre .eu.

Les enregistrements effectifs de noms de domaine sous le « .eu » seront acceptés lorsque le Registre qui aura été désigné par une décision de la Commission et qui aura signé un contrat avec la Commission, aura lui-même adopté la politique d'enregistrement pour le TLD .eu tout en respectant les règles de politique d'intérêt général qui seront adoptées par la Commission et sur lesquelles le Registre sera consulté. Il est envisagé que le contrat entre la Commission et le Registre soit signé au cours du mois de mars ou d'avril 2003.

Isabelle VAN BEERS
DG INFSO

[1] JO L 113 du 30.4.2002, p. 1

[2] JO C 208 du 03.09.2002, p. 6

Current situation of **Web Tools** within the Commission

The explosive growth in the use of Web Tools over recent years means that the Commission must select its tools from amongst a very dynamic market.

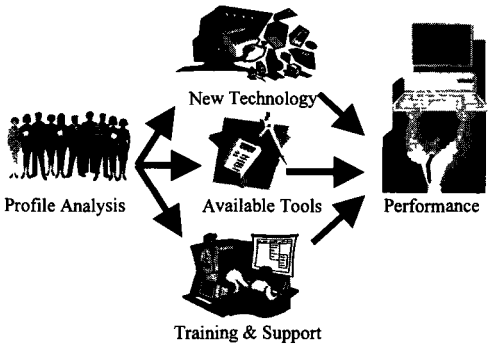
We it would be wise to contemplate the current state of affairs and gather information in order to distinguish the needs of actors from a variety of scenarios and so identify the webs tools that we now use and those needed in the future. We should seek to homogenise these tools and to meet the needs of most of the actors from all scenarios, whilst maintaining coherence and consistency in the management of related products and services (support, training, technical monitoring, etc.).

Our objective is to analyse our present assets and future needs as well as reflecting on ways to harmonise the use of the Commission's present stand-alone Web Tools. This would permit us to pool resources, training, support, ... and would boost the productivity of our standalone Web Tools.

Web Tools ever becoming ever more prevalent, not only within Europa / IntraComm but also within DG and Services' Intranets. We are inexorably moving towards the "**Desktop Web**".

To better understanding what the actors participating in a Commission Web sites needs from Web Tools, we have made a brief overview structured thus:

- Characteristics of Web sites to be found within the Commission.
- The actors involved in the life cycle of these sites.
- The categories of Web tools needed by these actors in order to carry out their tasks. Categories that are either already available in family 3 PM or which do not currently exist but could do so if there were a real necessity
- A cross – reference is made with the previous analyses and an attempt to assign the appropriate category of Web Tool to enable an actor to carry out a specific task within the web site's scenario



This article is a summary of the analysis, more information is available on the Forum site:

http://www.cc.cec/di/sif/forum/index.htm

within the section: *Présentations des séminaires antérieurs*
---> séminaire du 12 septembre 2002 : *Personal Webbing*

Commission Web Site Scenarios

In the 21st Century, the Information Century, the European Commission has at its disposal many Web sites with which to not only provide information to Europe's citizens but also conduct its own internal business. These Web sites could be grouped vary according to their size, purpose, target population, etc. into these three scenarios:

- **Europa:** Europa is the European Commission's Internet Web site. The Commission can only publish information to the Internet via the Europa Site. The Commission's image to the World depends on the quality of the Websites published by its services, therefore, it is very important to portray a coherent image to the outside World.

- **IntraComm**: IntraComm is the European Commission's Intranet. IntraComm is above all a work and information tool for Commission personnel. Because of this, the Web service is internal and exclusively available to members of staff.

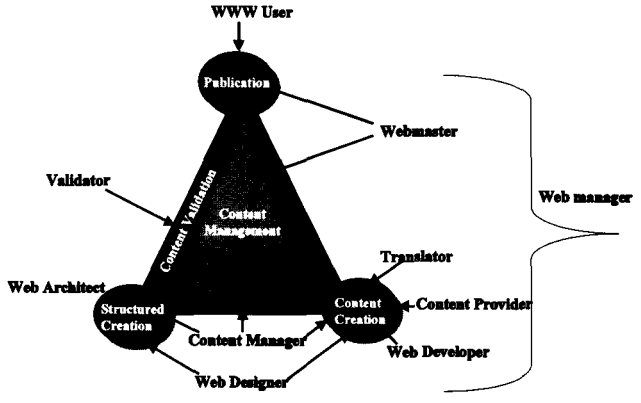
- **DGs or Services:** The aim of an Intranet within a DG or Service is to offer its employees coherent and stable information about its work environment independently of the Commission's administrative structure.

The following table summarises the characteristics of each scenario.

Characteristics	Scenarios		
	Local DG or Service Intranet	**Commission IntraComm Intranet**	**Internet Commission Europa**
Purpose	Internal business	Exchange of information	The Commission's image, publicity.
Accessibility	Members of the DG or Service	Commission Personnel	The whole World
Behaviour	More individualism	More «regionalism»	More federal
Multilingual	No	2/3 languages (EN/FR/D)	All the official languages of the member States.
What can we obtain?	#applications >> #information	#applications = #information	#applications << #information
Metadata	??	IPG Guide IntraComm	Taxonomy, Metadata, IPG Guide Europa
Content Validation	No	Validation of information at regional level	Editorial Committee, Unit Heads and subordinates. Highly structured validation circuit.
Coherence of pages	The WWW designer is free to decide. There are no Standards. They vary from one DG to another	IPG Guide IntraComm Uniformity Standard to be followed →medium	IPG Guide Europa Uniformity Standard to be followed →strong
Site Structure	The structure as with the layout can change more quickly to meet the needs of local " business-flow "	The structure as with the layout changes less frequently but to a greater degree than in the Europa scenario.	Very static Structure y layout. Greater degree of structural and aesthetic coherence
Latest Technologies	Compatible with Commission standards	Compatible with Commission standards	No, in order to reach a wider audience
WWW users Browser	Commission standards	Commission standards	Any type of Browser (IE, Netscape, etc)
Bandwidth (possibility of multimedia)	100 MG Network	100 MG Network	Modem 34000Kb
Target population	Around 500-1000 people	Around 25000 people	Millions of people

Actors Of A Web Site

Having identified the three scenarios to which an EC Web site can belong we shall now look at the different actors participating in the Web site life cycle:



Nowadays this distinction is not made yet applied into EC, however, we will make reference to this nomenclature because those actors represent the functionality needed to maintain a Web site.

Figure 1 Actors involved in the Web site Life Cycle

New definitions and specialities have subdivided the less technical side of the old "Webmaster"'s role (Web manager, Web Architect, Content Manager, Web Designer, Web Developer, Webmaster). Clearly in a smaller organisation, a Webmaster typically "does it all", whereas in a larger and more complex web site (such as Europa and IntraComm) the individual actors are present. Also the rapid evolving Internet Technology implies the continual acquisition of new skills or modification to existing skills.

The following table summarises the Actors involved in the Web site Life Cycle.

Phases	Actor	Description	Skills	Persons [1]
All	**Web Manager**	He/she manages the Web Site and the Web team	Vision of Web site's goals	100
Structured Creation	**Web Architect**	He/she designs the structure of the Web site.	Know Internet Technology Know the Web standards	100
	Content Manager	Content manager manages content. Anything to do with words on a web page is part of the content manager's remit: commissioning, editing, and adjusting style and format.	Editing skills aimed at fostering new styles Know the Web standards	100
	Web Designer	A person who designs pages, images, animations, etc for the World Wide Web.	Creativity. Computer graphic design, HTML and multimedia	100
Content Creation	**Web Developer**	Web Developer creates Web applications for the site.	Technical ability to create Web applications (analyse, programme, test, etc)	200
	Content Provider	Most of the Commission's staff could create content a Web site	Text Editor	25000
	Translator	The person who translates web pages	Languages Text Editor	200
Content Management	**Validator**	The person who checks the content to be published on the Web site	Thorough knowledge of the services relevant to the content being checked	1000
Publication	**Webmaster**	Responsible for the HW/SW of the Web Server.	Web Server Technology Management Web site Network Technology	100

[1] Approximately

	WWW User	This is the person who views the content of the Web site	Basics Internet skills	millions

Web Tools Family 3 PM

We will, in part, examine Product Management family 3[2] and will include some new categories also and highlight the actions to be taken in each category.

Existing Categories	**Description**	**Actions**
Web Browsers	A Web browser is an application used to locate and display Web sites	IE 6.0 in the next reference configuration (eTP). Declassify Netscape 4.7
Plug-ins	Software for the browser that enable it to display different types of audio or video	Abandon Obsolete plugins (Netscape 4.7 plugins)
HTML Converters	Tools to convert any document to HTML format	Decide what to do: 1)Evolving EL/WEB 2)Adopting market product 3)Designing and implementing a new conversion approach
HTML Editors	Functions like a Word Processor, this permits the simultaneous insertion of text, images and hyperlinks(WYSIWYG), in order to avoid the need to write in HTML	Frontpage 2002 in the eTP Consider Eurolook x FrontPage with the same purpose as EurolookWord
PDF Converters	Tools to convert any document to PDF format	
OCR / Scanning	Tools to translate into a digital form.	Replace obsolete products
Web Analysis Tools	Stat apps like Web Trends on the number and type of users that visit your site, link analysis tools like linkbot find broken links within your site	Give priority to the use of DC services within Europa and IntraComm In the DG intranet scenario, make better use of WCM entry level products

New Categories

	Description	***Actions***
Entry-level Web Content Management	Creation of dynamic web pages ,Web site management, Web pages publication	Decide on the reference products for this class to be chosen
Graphics Tools	Tools includes any application that allows you to view, create, manipulate and optimise images	Conduct a Market Study and needs of our actors to decide which product from this category would be the most appropriate
Multimedia tools	Is the way to create rich Internet content and applications with a better return on investment	Conduct a Market Study and needs of our actors
Web Upload Applications	Facilitate the management of Web sites by uploading, downloading, and mirroring Web documents and files using the File Transfer Protocol	Conduct a Market Study and needs of our actors to decide which product from this category would be the most appropriate

[2] Web Tools see table showing PM family 3 in this BI

Actors-Tasks-Tools-Scenarios

The table below summarises the actors/ tasks and Web Tools categories

Web Tools Categories

Actors	Tasks	Browser&Plugins	HTML Converter	HTML Editor	PDF Tools	Graphics Editor	Multimedia Tools	OCR and Scanning tools	Web Analysis Tools	Web Development Tools	Entry-level WCM
Web Manager	Manage Web site and Web Team	■									■
Web Architect	Structuring of the site, directories: creation of the tree										■
	Create method of user navigation										■
	Support WAI, repair barriers to accessibility								■		
Content Manager	Establish taxonomy, metadata								■		
	Checking consistency and coherence information	■		■							
	Create, implement and manage corporate style plans and content plans.			■							
	Co-ordination and updating of external links	■							■		■
Web Designer	Create templates			■							■
	Create / modify images, icons, etc			■		■					
	Scanning images							■			
	Create/modify multimedia						■				
Web Developer	Programming scripts, applets, database applications			■						■	■
Content Provider	Create/modify HTML content		■	■							
	Convert documents PDF				■						
	OCR and Scanning							■			
Webmaster	Web site management										■
	Verify the site integrity and consistency								■		■
	Site statistics								■		■
WWW User	Surfing	■									

The End

This is by no means the "end". The efforts made so far are only the beginning. As required by the Product Management, we will continue to investigate the needs and the contexts and we will find the tools needed to satisfy these needs. But we need a network, (a "*web*", even*)* of contacts, with people really involved in this field, to understand *which* technology and *how* and tools can help them. We would welcome any feedback or suggestions you may have on these matters.

"That's all, folks!"

Rosa ORDIÑANA
DI / STB / BIC

Web page versioning and language control using Oracle RDBMS

Summary

Our knowledge-based economy demands that organisations provide information content (internally in the organisation as well as to the outside world) in time and in the appropriate format for the reader: this includes keeping track of different versions and taking into account the language diversity of the users.
A solution for this, based on an implementation of Oracle tables, has been foreseen for the *e*Europe portal, a thematic portal on Information Society issues, running on the Europa server.

The problem

The world wide web (WWW) has been initiated less then 10 years ago. Still the technology behind the WWW has become common and is now used for information dissemination and application deployment throughout many organisations.
However, content provision (authoring, editing, approving, translating, updating,...) is still a labour intensive task, to a great extent facilitated by information technology tools. Content provided for the net (Intranet or Internet) is not fixed forever nor static, but alive and dynamic; therefore versioning is necessary, while the multilingual environment we are working in and providing content for, asks for different language versions of the same content.

Web Content Management system

Information technology tools which support the management of content for the web (WCM = Web Content Management) have been on the market since a number of years. Recently, the Informatics Directorate of the European Commission has launched a Call for Tender for acquiring a WCM system whereby versioning and language control will play an important role.
The "*e*Europe: Information Society for All" portal, currently under development at DG INFSO, has been pioneering a WCM system, developed internally. Content versioning and language control have been put high on the agenda and will be an integral part of the final system. The idea is the following: a page or document can exist in a number of major versions, each of them can exist in a number of languages, and each language version can have several minor versions. Major versions are used each time there is a change altering the substance of the page's content, minor versions are used for small changes or corrections.

The solution

In the past, individual pages and documents have been considered traditionally as independent entities. This is not correct! Different editorial versions (during the life time) of a page or document and different language versions are all interdependent and should be considered as instances of one single web object.
This new way of thinking really creates the necessary degree of coherence between different related entities, hitherto too much considered as independent. Therefore, we started using and implementing this concept for all content (pages and documents) of the portal.

Oracle tables

The WCM system is using an Oracle RDBMS as database for storing the content. Some of the most important database tables for dealing with versioning and language control have been included here:

PageVersionMajor table: *this table holds major version records of web objects*

Column_name	Type	Description
Page_id	Numeric	Associating with a unique page/document
PVMajor_id	Numeric	Uniquely identifies a Major Version page record
VersionNumverMajor	Numeric	Major Version
Last_mod_date	Date	Last date of modification, of a major version.

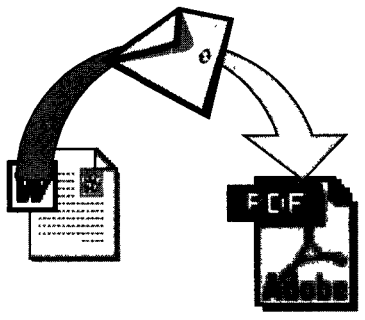
PageLangVersionMinor table: *this table holds minor version records of web objects, including all metadata information for the submitted pages/documents as well as the HTML document it self.*

Column_name	Type	Description
PVMajor_id	Numeric	Associates with a unique major page version
PCMinor_id	Numeric	Unique identifier for page language version minor
Language_id	Numeric	Identifies the language of the page
VersionNumberMinor	Numeric	Minor version number of page
Content	String	Actual content in HTML
Metadata	String	Corresponding metadata attributes
Last_mod_date	Date	The date that the values of this record were last modified
Status_id	Numeric	The status of this content.
User_id	Numeric	The user id, specifying the user which created this record.

Conclusion

The "*e*Europe: Information Society for All" portal, currently close to its implementation, is going to work out in detail these concepts. In the near future, the content providers (authors, editors, chief editors) for the *e*Europe portal will be able to benefit from this approach and improve their way of working...

Paul MAEBE
"*e*Europe: Information Society for All"



Le Service PDF CoDe

Conversion PDF aisée et efficace pour tous !

La DI proposera dans quelques mois un service de conversion PDF centralisé appelé **PDF CoDe** qui est actuellement en cours de réalisation. Nous vous proposons de le découvrir en primeur.

Fort de son expérience dans le monde de la publication professionnelle, Adobe a mis au point le format PDF (« Portable Document Format »). En quelques années, ce format est devenu un standard mondial pour la transmission de documents par voie électronique (Web, Mail, etc).

De son côté la Commission est une très grande productrice de documents à destination interne, institutionnelle ou du public en général. Les besoins de conversion au format PDF sont donc de plus en plus importants et diversifiés

CONTEXTE ET BESOINS

A l'heure actuelle, les solutions de conversion au format PDF dont nous disposons sont relativement lourdes, peu distribuées (300 utilisateurs seulement pour toute la CE) et très coûteuses. Chaque poste de travail doit disposer d'une installation locale et d'une licence.

D'autre part les demandes et les besoins sont croissants. On peut synthétiser les attentes de la manière suivante :

Point de vue des utilisateurs:

- Potentiellement tout le personnel peut avoir besoin de ce service à un moment ou l'autre
- Résultat fiable et de qualité
- Simplicité d'utilisation, courbe d'apprentissage minimale
- Rapidité de conversion, disponibilité du service

Point de vue des DGs

- Déploiement et support aisés
- Maîtrise des coûts
- Satisfaction des utilisateurs
- Besoins spécifiques pour certains services

Point de vue de la Commission

- Qualité des résultats dans toutes les situations et pour des utilisations très diverses (documents dans différentes langues, différents formats, pour différentes destinations)
- Maîtrise des résultats. Caractéristiques du résultat toujours identiques pour une même destination (Web, Intranet, papier, CD-ROM, impression en Print-Shop, ...)
- Maîtrise des coûts (par poste, par conversion, administration et gestion informatique, déploiement, formation)
- Pérennité et évolutivité de la solution (viabilité dans le temps, adaptations ultérieures aux besoins spécifiques)

Les besoins sont manifestes, mais la configuration actuelle ne peut raisonnablement pas être étendue à l'ensemble du personnel, à la fois pour des questions de coûts, de déploiement et de maîtrise des résultats. *// faut donc passer à la vitesse supérieure !*

C'est pour tenter de répondre à ces exigences que nous avons lancé le projet **PDF CoDe**.

COMMENT CELA FONCTIONNERA-T-IL?

Le système **PDF CoDe** (**PDF C**onversion **o**n-**D**emand for the **e**-Commission) est un projet actuellement en cours de développement et initié par la DI.

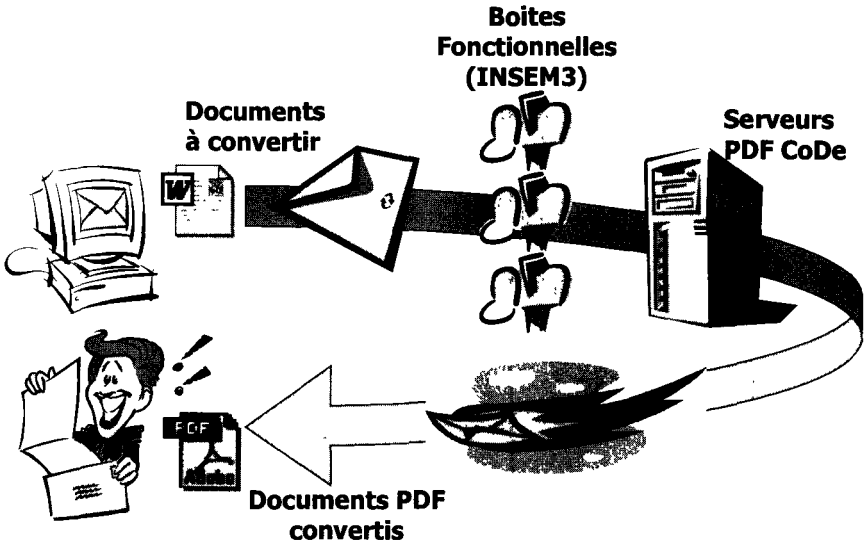
D'un point de vue pratique, **PDF CoDe** se présentera sous la forme d'un serveur de conversion centralisé, hébergé par le Data Centre et accessible par l'ensemble des services de la Commission.

L'utilisateur y accèdera en envoyant un mail (avec les documents à convertir attachés) vers une des boites aux lettres fonctionnelles disponibles, chacune correspondant à un profil de conversion différent. Les résultats seront automatiquement renvoyés par mail au requérant après conversion.

Chaque profil de conversion consiste en un ensemble cohérent d'options de conversion définies centralement et correspondant à un type de résultat souhaité (Web, papier, impression professionnelle, etc).

En effet, l'obtention d'un certain type de résultat demande la sélection précise d'un ensemble d'options pour effectuer la conversion. Le système des profils de conversion permet à l'utilisateur d'arriver directement au résultat voulu sans se soucier aucunement des détails techniques. Le moteur de conversion utilisé est le convertisseur natif, Adobe Acrobat Distiller.

L'ensemble sera intégré de façon à constituer un réel service central, avec maintenance et support utilisateurs.



ET D'UN POINT DE VUE TECHNIQUE?

Le système **PDF CoDe** est entièrement modulaire et réutilise autant que possible des modules déjà développés et ayant fait leurs preuves dans d'autres solutions (développements DI et sous-traitant). La réalisation de ce projet consiste donc en un mélange de développements nouveaux et d'intégration.

PDF CoDe offre deux interfaces différentes : la première prend en charge les *demandes de conversion « interactives »*, par mail, en provenance des utilisateurs. Les mails sont envoyés via INSEM3 (réseau MS Exchange) et le serveur de conversion fait un *polling* des différentes boites aux lettres fonctionnelles.

La seconde interface traite les *demandes « batch »*, en provenance d'applicatifs ou d'utilisateurs spécifiques. Les fichiers à traiter sont déposés dans un répertoire d'entrée, chacun correspondant à un profil de conversion.

Les deux interfaces effectuent un filtrage à l'entrée afin d'éliminer les documents hors-normes.

On passe ensuite au *« Processing Pipeline »* qui effectue une série de traitements et transformations sur les *jobs* (plusieurs étapes de *pre-processing*, conversion PostScript, conversion PDF). Chaque module du *« pipeline »* effectue un traitement sur des *jobs* pris dans une queue d'entrée et dépose le résultat après traitement dans la queue d'entrée du processus suivant.

En fin de parcours, un dernier module va se charger renvoyer le résultat (fichier PDF converti ou notification d'erreur) vers l'utilisateur ou l'applicatif qui a soumis le *job*.

Tous les processus sont orchestrés par un service système, qui a la possibilité d'arrêter toute exécution bloquée. Une console d'administration est prévue (visualisation de l'état du système), ainsi qu'un système d'alerte vers l'opérateur en cas de problème.

Dès le départ, le système sera capable de faire du *Load Balancing*. Plusieurs serveurs de conversion peuvent être installés en parallèle. Ils se répartiont alors la charge de travail.

La privauté des conversions est assurée *de facto* par l'utilisation de l'infrastructure INSEM3. Grâce aux échanges de mails point à point dans les deux sens, les utilisateurs ne mettent jamais leurs documents dans des répertoires publics.

APPORTS ET AVANTAGES

Le projet **PDF CoDe** est un système complet qui a été conçu spécifiquement pour répondre aux besoins de la Commission.

Il est conçu de manière à offrir la meilleure qualité de conversion disponible. La simplicité d'utilisation est maximale grâce à l'utilisation du mail et des profils de conversion. Il faut toutefois garder à l'esprit que les besoins extrêmement pointus nécessiteront toujours le recours à la suite Acrobat complète.

Toutefois avec **PDF CoDe**, les caractéristiques des résultats PDF sont entièrement contrôlées et uniformisées pour toute la Commission.

Le système est centralisé et sera immédiatement disponible pour toutes les DGs sans aucun déploiement local. Il permet également des conversions batch et peut être accédé par d'autres applicatifs centraux. La grande modularité permet les évolutions futures.

Un soin tout particulier a été apporté aux problématiques d'administration, de gestion opérationnelle, de déploiement, d'aisance d'utilisation, de capacité, de qualité des conversions, de couverture des besoins et d'évolutivité.

Lorsqu'il sera disponible, PDF CoDe deviendra l'outil de référence dans l'immense majorité des cas, au regard des avantages énoncés ci-dessus.

PLANNING

Le projet est bien en route et a déjà évolué au travers de plusieurs étapes. Après la définition des besoins, une étude de marché a été réalisée et un sous-traitant a été sélectionné (DIaLOGIKa, Allemagne).

Nous avons ensuite précisé l'architecture de la solution qui est à présent en cours de développement. Selon le planning, ***le service devrait être à votre disposition à la fin du premier trimestre 2003***.

Nous espérons que ce nouveau service vous sera utile et répondra aux attentes !

E. GENETTE
DI / STB / BIC

Office XP SP-2 Dinstall Beta

"What's new?" and "Results of Dinstall α Survey"

It's autumn again. Leaves are falling down; it's cold and rainy outside. Summer holidays are history, pictures developed (or those lucky of you who have digital cameras: *printed*).

So, now it is a perfect time to search that old Microsoft Select Office XP CD from your cabinet and put it into your dusty CD/DVD-ROM drive and start installing an Administrative Installation Point (AIP) for *Office XP SP-2 Dinstall β.*

Oh yes, and don't forget to clean your existing AIP(s) before trying to create the new one(s).

1. What's new for *Office XP SP-2 Dinstall β*

Based on what we have learned after *Dinstall α* was released, we have now ready to provide you with Office XP SP-2 *Dinstall β.* It contains many changes, from which some of them are based on your feedback from the survey (more about the survey later on).

The main change compared to *Dinstall α* is, naturately, that this configuration is based on Service Pack 2 for Office XP.

Also the proofing tools support for the new member country candidates have been added on the list.

Summary of the major changes:

- Delivered with Service Pack 2
- Possibility to install Access 2002
- Proofing tools for new member country candidates

Other changes[1]:

- Language Auto detection for current and new languages
- Correct Font mapping (Font substitution table)
- FrontPage 2002 shortcut is initially hidden from the users.
- In order to improve Outlook performance, we disabled MSN Messenger support in Outlook.
- Removal of Front Page 2002 shortcut by default. To retain this shortcut, this feature can be disabled in the installation script.

2. Office XP Survey – "I know what (most of) you didn't do last summer..."

Regrettably the beta testing of RC 5.0 happened to take place during the best holiday season. So only few of you had really time to test the configuration – and still not all the aspects of it. But that's fine, you gave us your feedback and the next survey will take place later on, when *Dinstall β* is deployed together with RC 5.0 Release Candidate. Hopefully then everyone has enough time to test the configuration.

We got only 9 replies from you. Nevertheless, you had many valuable comments and we would like to thank very much those of you, who had time to test and submit your answers to us. Even if you didn't have time to test everything, your feedback gave us valuable information, some good hints what to change.

[1] Other than the **Service Pack 1 Post-Hotfixes,** which are included in **SP2.**

3. Results of the Survey

3.1. Problems and Remarks

3.1.1 AIP Creation

There were some problems starting the creation of the AIP. Please don't forget that you have to copy the *Make_Adm* tools from the RC 5.0 installation CD to the hard disk – the CD-ROM drive must be free for the select CDs.

Some of you had problems finding the correct MSDN CD for installation of Office or Proofing Tools AIP. Please note that *Dinstall β* requires the following Select CDs

- Microsoft® Office XP Professional with FrontPage® Win32 English Disk Kit CD MVL Suite Plus B68-00671 English Microsoft® Enterprise English Comprehensive Kit Microsoft Volume License CD F74-00017, X08-19735 – April 2001.

- Microsoft® Proofing Tools 2002 Win32 English VLA CD MVL 053-00743 English Microsoft® Enterprise English Comprehensive Kit Microsoft Volume License CD F74-00017 – June 2001.

3.1.2. Outlook 2002

Performance
Almost everyone was complaining (with a good reason, of course) that Outlook 2002 is much slower than Outlook 2000.

It started very slowly and retrieving new mail sometimes took much longer than previously. Disabling MSN Messenger should solve the problem most of the time.

Some of you also had problems with importing the profile. We identified one problem in the creation of the profile and got a workaround for that.

Distribution lists
Didn't function in the same manner like in Outlook 2000.

Default Mail Format
There was a question, whether we should adopt HTML instead of RTF as a default mail format. This was widely rejected, only one DG would rather see HTML as a replacement of RTF, stating that HTML is becoming generally more and more common everywhere else.

3.1.3. Compatibility

VBA Applications
There were a couple issues with old Excel and Word Macros. *PDF Maker* and *Eurolook Web* launcher (ElWeb.dot) didn't work correctly. These have been already addressed and new versions of *Eurolook Web* and *PDF Maker* should be fully compliant with Office XP.

Recent *Excel VBA* and *Office XP VBA* Studies[2] have shed light on some of the potential problems a developer could face when upgrading their VBA applications to Office XP.

File formats
There were no problems of the compatibility at the file format level, since we have defined "Office 97" as a save format for all the Office XP applications. We know there are some drawbacks related to this: reduced functionality (especially in PowerPoint), which may be frustratingly reducing some user creativity.

The real test will be later on during the mini pilot and pilot of the eTP-project (not to forget the migration itself...), when people are working with real life documents. We trust Microsoft support, but we can't guarantee that everything will work perfectly. However, based on our long term experiences with complex Word documents and Excel sheets, we don't anticipate many problems with file formats.

Your customisation
None of you had made changes to the default configuration. Probably it is only lack of time or then we have succeeded with the default configuration well enough.

4. Office XP and VBA

Those of you, who participated on the VBA Workshop in Brussels on 8 October 2002, are in a good position starting preparations to migrate the old VBA applications.

If you didn't attend the workshop, please see the slides on Softline.

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[2] Please see the Softline links in the end of this article.

The introduction of VBA Excel study (introduced by Mr Wolfgang Keber from Dialogika) gave some good remarks of potential real life problems in VBA code, which could cause problems in the new environment.

5. Training

There are already two courses available for support people:

- Mastering New Features of Office XP (EN+FR)
- Deploying and Administering Office XP (EN)

Preparations for special courses for "Advanced users" are ongoing. Courses for "End users" will be available next year.

As eTP-project is concerned,

Please check regularly Syslog Web Formation Web-site to see the most current status of different courses.

6. Summary

Office XP Dinstall Beta is ready to ship with the RC 5.0 release candidate. We have done our best to take into account your general needs. We hope that you'll have time to test it more carefully this time and to let us know, what should be changed for the final release.

Important: you should start testing your old VBA applications under Office XP now. Please see for the additional information:

Migrating Office applications to Office XP

http://www.cc.cec/softline/u/services/workshops/index.htm#excelxpmig

Office XP/VBA Migration: Eurolook 4.1 XP1 as a case study

http://www.cc.cec/softline/u/services/studies/officexp/officexp_vba_migration.pdf

We wish you all the best for testing *Office XP SP-2 Dinstall β.* As always, please don't hesitate to contact us in case of problems. Be also open to suggests us even the wildest changes, you would like to see in the configuration.

Jari PEKKI
DI / STB / BIC

DIRECTION INFORMATIQUE

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- Chef de secteur "Qualité"	J. ALVES LAVADO
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ORGANISATIONS LOCALES

DG	*IRM Information Ressources Manager*	*Position de l'informatique dans l'organigramme*	*SA System Administration*	*SU Support Utilisateurs*	*DV Développement*	*ISO Informatics Security Officer*
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SJ	E. MÜLLER	Dans Unité horizontale	L. ACKERMANS F. WOUTERS	B. VANOPDENBOSCH	P. GINESTE / F. WOUTERS	J. GRUNWALD
PRESS	J. TORCATO	Dans unité	L. GEORGES	L. GEORGES		
ECFIN	P. HIRN	Unité dans Direction horizontale	M. REMMES / R. DRUINE / P. KERRACHER / W. KERSCHENBAUER	A. MAMMIS F. HOLLMANN	P. HIRN F. HOLLMANN	P. HIRN M. JONCKERS
ENTR	W. BEURMS		F. RAHMI	F. RAHMI	B. LOGNONE	L. DEFRENNE
COMP	J. PUIG SAQUES	Unité rattachée au Directeur général	M. LENART	D. RILLO MILLAN	J.-L. OLIVIER	L. CREEMERS
EMPL	Ph. DEWAEL		O. DUFOUR	K. VAN IN	E. DERRUINE	H. DROULEZ
AGRI	G. VLAHOPOULOS	Unité dans direction horizontale	P. BAGUET	P. BAGUET	G. POENSGEN / M. SALVI	G. VLAHOPOULOS
TREN	A. MAMBOURG	Dans Unité horizontale	O. TOURNOIS	J. REIS	M. PEREZ ESPIN	A. MAMBOURG
TREN - AAE	J. MOTA					J. MOTA
TREN - OCS	N. DAVIES		T. LIMBACH	N. DAVIES	H.-G. WAGNER	H.-G. WAGNER
ENV	T. CUNNINGHAM	Unité dans Direction horizontale	E. VANDERLINDEN	P. FOULART	E. PHILIPPAERTS	T. CUNNINGHAM
RTD	D. GOULD	Unité rattachée directement au Directeur	C. SACK	C. SACK	M. BURES	A. DE BACKER
JRC	R. ROSS	Unité rattachée au Directeur général	S. MOTA / P. SOLER	S. MOTA	P. SOLER	R. SOUSA
INFSO	B. DE BRUIJN	Unité dans direction horizontale	H. DE SADELEER	H. DE SADELEER	D. COSTENS	H. DE SADELEER M. SERVAIS
FISH	F. DOM	Unité rattachée au Directeur général	K. DE PAUW	C. VANHOVE	F. DOM	L. BOERAEVE
MARKT	S. VAZQUEZ SOUTO	Service dans unité	P. VAN DE STEEN	G. KNIPPENBERG	P. DE BEIR	S. VASQUEZ SOUTO
REGIO	M. BOTMAN	Unité dans Direction horizontale		A. VERBIST		
TAXUD	I. DASCALU	Unité dans Direction horizontale	A. RAW	A. PENING	G. ROSSIGNOL G. DE JAEGHER	A. PENING
EAC	S. SMITH	Unité dans Direction horizontale	T. GIJSELINCK	S. SMITH	R. JANSEN	R. JANSEN
SANCO Bxl **SANCO Lux.**	F. CENTURIONE		F. VAN-OOST S. DEHENNAULT	M. RUIZ J.-F. WIOLAND	J. HARTIKKA	M. SACRE
JAI	L. WAGNER	Dans unité rattachée au Directeur général	L. ANDRIAENSEN P. D'ANELLO	G. GIAMBARRESI	F. VAN WYNSBERGHE	L. WAGNER

ORGANISATIONS LOCALES

DG	*IRM Information Ressources Manager*	*Position de l'informatique dans l'organigramme*	*SA System Administration*	*SU Support Utilisateurs*	*DV Développement*	*ISO Informatics Security Officer*
RELEX	M. KEYMOLEN	Unité dans Direction horizontale		R. AGUDO VIVAS	F. VILA APARICIO	
TRADE	P. RUYS	Unité dans Direction horizontale	V. GIULIANA	T. BOUCHEZ	M. VANDEYAR	P. RUYS
DEV	B. LAVOREL	Dans unité rattachée à un Directeur	P. ENGELHARDT	B. LAVOREL	C. DEFAAZ	P. ENGELHARDT
ELARG	J. LOCQUET	Dans unité rattachée au Directeur général	E. TILBURGH	E. TILBURGH	B. SCHELFAUT	B. SCHELFAUT
AIDCO	J. HAÏK	Unité rattachée au Directeur	J. VRIJENS	I. JOWETT	R. BORSELLI	I. JOWETT
ECHO	Evelyne SOETEWEY	Dans unité horizontale	J. TEMMERMAN / Maria HINOJAL CAPDEVILA	J. TEMMERMAN / Maria HINOJAL CAPDEVILA	S. ZARKALI	Evelyne SOETEWEY (f.f.)
ESTAT	G. PONGAS (f.f.)	Unité dans Direction horizontale	N. ZILLIOX / D. BONAERT	N. ZILLIOX / E. OLSEN	G. PONGAS	P. CONSTANT
ADMIN	H. VANTILBORGH					
BUDG	C. NAHON	Unité rattachée au Directeur général	C. HEYMANS / F. DE MEES	G. VANDERMEULEN	J.-J. CAVEZ	A. VAN GEEL
FC	P. KERSTENS	Dans unité rattachée au Directeur général	D. VAN ROMPAEY	A. DI VITA	H. KARMAN	A. CABALLERO
IAS	D. MC CANN	Unité rattachée au Directeur	Y. DUBOCQUET			
OLAF	H. SONNBERGER	Unité dans direction opérationnelle	I. MARCIAS SANCHEZ	I. MARCIAS SANCHEZ	F. NOËL / K. DRYLLERAKIS	I. WALTON-GEORGE
SCIC	A. D'HOEKERS		G. VAN DEN EEDE	R. ALABRESE	H. LAAKSONEN	C. ELIAS
SDT-Bxl **SDT-Lux**	J.L. COBBAERT	Unité rattachée au Directeur général	A. STYLINANIDIS	---------- M. BIRCHEN	---------- - J.-M. LEICK	C. BASTIEN
OPOCE	DÖLL F.	Unité rattachée au Directeur général	F. DEBART	C. SCHMIT	P. SCHMITZ	Manita LOGAN

AUTRES RESPONSABLES POUR L'INFORMATIQUE DANS LES D.G.

	Responsable
ADMIN / G04	L. VOORHAM / G. BREMAUD
ADMIN / D04	P. MARCELLI
ADMIN / D05 Infrastructure et support Bxl	G. CUCE
ADMIN / D05 Infrastructure et support Lux	J. CRELOT
ENTR	M. FINNETI
PRESS	L. LIESENS
SANCO / FVO (Dublin)	F. Mc GOVERN
ISPRA JRC	S. MOTA
SG	D. KOENIG

AUTRES RESPONSABLES POUR L'INFORMATIQUE DANS LES AGENCES

Agence	Ville	Responsable	E-mail
Office de l'Harmonisation dans le Marché intérieur	ALICANTE	M. VANAEKEN	Marc.vanaeken@OAMI.eu.int
Fondation européenne pour l'amélioration des conditions de vie et de travail	DUBLIN	T. SHEEHAN	cts@eurofound.ie
Centre européen pour le développement de la formation professionnelle	THESSALONIKI	L. TOSSOUNIDIS	lt@cedefop.GR
Agence européenne pour l'environnement	COPENHAGUE	H. SAARENMAA	Hannu.Saarenmaa@eea.eu.int
Agence européenne pour l'évaluation des médicaments	LONDRES	M. ZOURIDAKIS	michael.zouridakis@emea.eudra.org
Fondation européenne pour la formation	TURIN	I. CUMMING	ian.cumming@etf.eu.int
Observatoire européen des drogues et toxicomanies	LISBONNE	M. CARVALHOSA	Manuel.Cavalhosa@emcdda.org
Centre de traduction des organes de l'Union Européenne	LUXEMBOURG	B. HAWES	Bernard.Hawes@cdt.eu.int
Agence européenne pour la sécurité et la santé au travail	BILBAO	R. FRESNENA	fresnena@osha.eu.int
Office communautaire des variétés végétales	ANGERS	J.L. CURNIER P. LECOQ	curnier@cpvo.eu.int lecoq@cpvo.eu.int

Budget Informatique 2002 sur A-707, A-242 et A-4302

(en €)

DG	A-707	A-242	A-4302	TOTAL
SG + GOPA	4.490.000			4.490.000
SJ	241.000			241.000
PRESS	404.000			404.000
ECFIN	356.000			356.000
ENTR	567.000			567.000
COMP	612.000			612.000
EMPL	295.000			295.000
AGRI	702.000			702.000
TREN	400.000			400.000
TREN-AAE				0
ENV	192.000			192.000
RTD				0
INFSO	155.000			155.000
FISH	66.000			66.000
MARKT	21.000			21.000
REGIO	133.000			133.000
TAXUD	168.000			168.000
EAC	346.000			346.000
SANCO	387.000			387.000
JAI	149.000			149.000
RELEX	552.000			552.000
TRADE	410.000			410.000
DEV	120.000			120.000
ELARG	138.000			138.000
AIDCO	800.000			800.000
ECHO	340.000			340.000
ESTAT	1.258.000			1.258.000
ADMIN	6.394.000	60.150.000	1.400.000	67.944.000
BUDG	2.233.000			2.233.000
FC	160.000			160.000
IAS	122.000			122.000
SDT	1.641.000			1.641.000
Non attribué[1]	712.000			712.000
TOTAL	**24.564.000**	**60.150.000**	**1.400.000**	**86.114.000**

(1) 600.000€ pour la Convention

DG	Ressources humaines informatiques dans les DG, Octobre 2002 *									
	Equipe IRM					Autre Equipe Informatique				Total Général
	Management informatique	Entretien et Dévelop. des Systèmes d'information	Assistance aux utilisateurs	Entretien et Dévelop. de l'infrastructure opérationnelle	Total	Management informatique	Entretien et Dévelop. des Systèmes d'information	Assistance aux utilisateurs	Total	
SG + GOPA	4,00	8,00	2,50	4,50	19,00	2,00	2,00		4,00	23,00
SJ	1,25	2,75	2,00	1,50	7,50				0	7,50
PRESS	2,00	2,00	0,50	1,50	6,00				0	6,00
ECFIN	4,00	7,50	3,00	4,50	19,00			2,00	2,00	21,00
ENTR	7,00	8,00	5,00	9,00	29,00	2,00	3,00		5,00	34,00
COMP	2,00	6,00	3,00	4,00	15,00				0	15,00
EMPL	3,00	5,00	4,00	3,00	15,00				0	15,00
AGRI	11,30	8,50	10,70	4,50	35,00	2,00	3,00	4,00	9,00	44,00
TREN	4,50	6,50	2,50	11,50	25,00				0	25,00
TREN-AAE	0,25	0,10	0,20	0,60	1,15				0	1,15
ENV	2,00	4,50	5,00	2,50	14,00			1,00	1,00	15,00
RTD	2,00	10,00	4,00	8,00	24,00			10,00	10,00	34,00
INFSO	7,15	7,95	7,85	9,05	32,00	9,00	3,10	2,90	15,00	47,00
FISH	3,00	5,00	2,25	1,75	12,00		2,00	2,00	4,00	16,00
MARKT	2,00	2,00	5,00	2,00	11,00				0	11,00
REGIO	5,00	5,00	4,00	1,00	15,00		2,00		2,00	17,00
TAXUD	6,50	24,00	1,00	2,00	33,50				0	33,50
EAC	5,00	5,50	3,50	3,00	17,00				0	17,00
SANCO	5,00	5,00	3,00	1,00	14,00				0	14,00
JAI	2,00	1,00	2,00	2,00	7,00	2,00	3,00	1,00	6,00	13,00
RELEX	4,00	1,00	2,00	3,00	10,00		3,00		3,00	13,00
TRADE	2,00	2,00	3,00	5,00	12,00				0	12,00
DEV	2,00	2,00	2,00	2,00	8,00				0	8,00
ELARG	1,00	1,00	1,00	1,00	4,00				0	4,00
AIDCO	4,60	11,00	5,40	4,00	25,00				0	25,00
ECHO	1,00	3,00	1,00	2,00	7,00				0	7,00
ESTAT	6,00	14,00	7,00	9,00	36,00	2,75	45,00		47,75	83,75
ADMIN	8,00	30,00	10,00	14,00	62,00				0	62,00
BUDG	3,00		6,00	5,00	14,00	4,00	10,00		14,00	28,00
FC	1,00	2,00	1,00	1,00	5,00				0	5,00
IAS	0,50	0,50	0,50	0,50	2,00				0	2,00
OLAF	4,00	3,00	2,00	3,00	12,00	2,00	4,00		6,00	18,00
SCIC	1,50	5,50	3,00	3,00	13,00				0	13,00
SDT	2,00	13,00	22,00	12,00	49,00	1,00		3,00	4,00	53,00
TOTAL	119,55	212,30	136,90	141,40	610,15	26,75	80,10	25,90	132,75	742,90

* Personnel statutaire tel que renseigné par les DG: Nombre de postes permanents et temporaires, occupés ou vacants, sans l'OPOCE et la Direction Informatique

Projets d'Infrastructure

(situation au 22/06/2001)

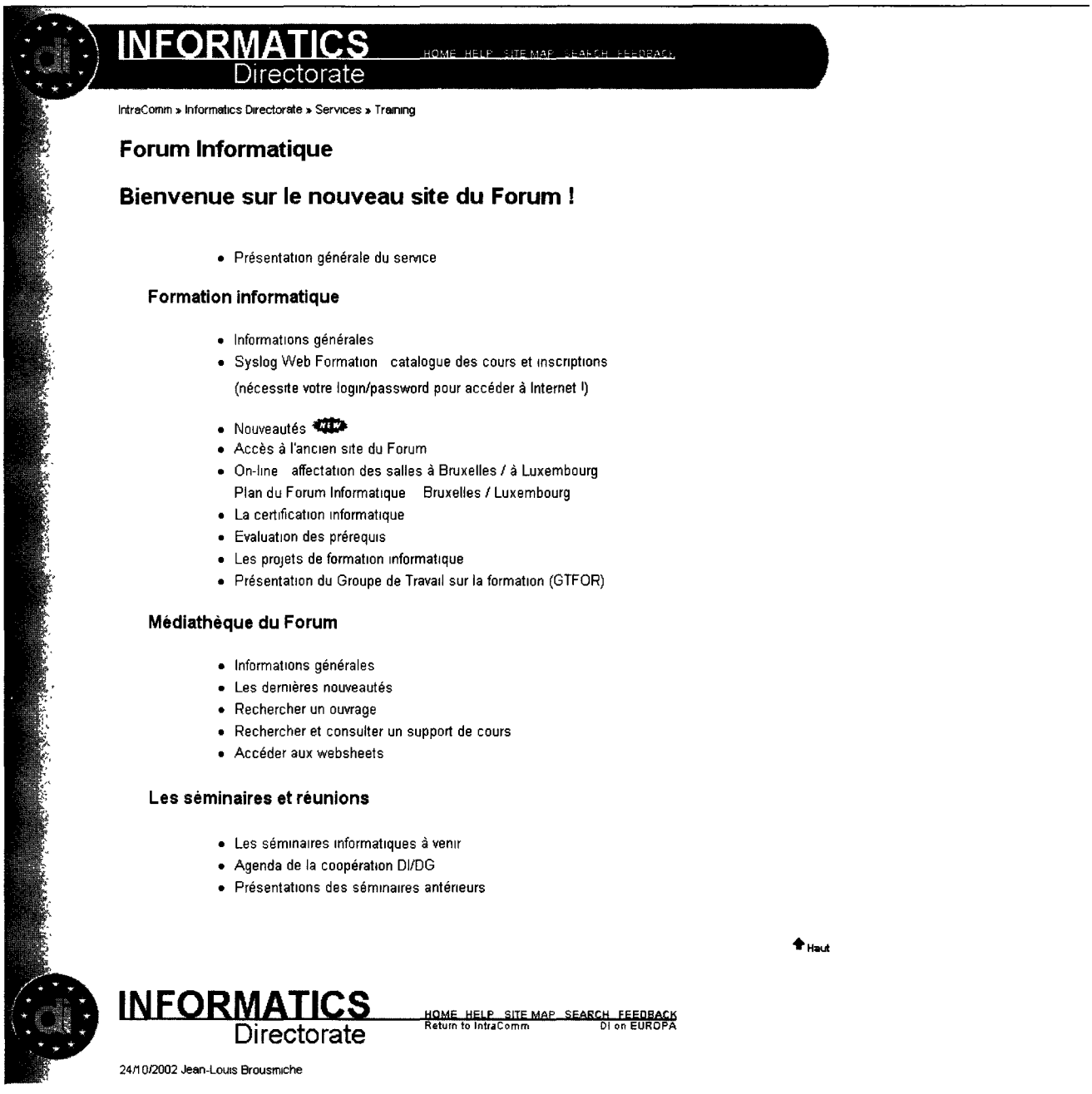
(1)	Projets				Planification		
	Nom	Objet	Chef de projet	Programme/ Responsable	Phase active (2)	Fin de la phase active	Mise en service (3)
	INSEM2	INTERINSTITUTIONAL ELECTRONIC MAIL-2	G. TEKOLSTE	DI	PO	6/01	
	INSEM3	INTERINSTITUTIONAL ELECTRONIC MAIL-3	G TEKOLSTE	DI	OP		1/2001
*		OPTIMAIL (Best e-mail usage)	G. TEKOLSTE	DI	CO	12/2001	
*		SECEM (Secure e-mail)	G. TEKOLSTE	DI	CO	12/2001	
	EUROPA	DIFFUSION DE L'INFORMATION	P. DE CONINCK	DI	OP		1996
*	**EUROPA 2**	ARCHITECTURE DE DIFFUSION	P. DE CONINCK	DI	CO	10/2001	
		WEB CONTENT MANAGEMENT			FS	2002	
	ADONIS	ADMINISTRATION DES DOCUMENTS	R. RINKENS	DI	OP		06/2001
*		ADONIS V5.0.9					
		ADONIS-Web V1.2					
	LEGISWRITE	PREPARATION DES DOCUMENTS LEGISLATIFS	R. RINKENS	DI			
		Version 4.5			OP		1999
		Codification/Refonte					
	SIC	Gestion des Personnes, Congés, Missions	J. CARRASCOSA				
*		Version 6.6.1			OP		05/2001
		e-HRMS			DEV		06/2001
*	**SYSLOG - Formation**	Gestion de la Formation	A. TOSETTI		OP		
	SICMOB	GESTION DES BIENS MOBILIERS V/1,11A	A. TOSETTI	DI	OP		1997
*	**ELS**	GESTION DES BIENS ET HELPDESK V/2,12 T			OP		1997
		V/2,12T2			OP		1997
		INVENTAIRE FINANCIER (ELS V220)			OP		1998
	DIR	DIRECTORIES	C FRASER	DI / IDA			
		Annuaire interinstitutionnel (X500)			OP		1997
		Annuaire Commission (LDAP)			CO		2000/2001
		Single sign-on			PA		2001/2002
		Meta-directory			PA		2001/2002
*	**SNET**	CARRIER NETWORK (SNET Optical infrastructure)	M. JORTAY	DI	RI	03/2002	2002
		INTERNET REMOTE ACCESS	M. JORTAY	DI	CO	06/2002	2002

Légendes:

(1) les modifications par rapport à la version précédente sont indiquées par un *.
(2) PA : préanalyse; FS/EF · étude de faisabilité; DEF : definition;CO : construction, RI . running-in; OP : opérationnel
(3) en cas de PA et de FS, la date de mise en service est donnée à titre indicatif ("E").

Avez-vous déjà visité le nouveau site du Forum Informatique?

http://www.cc.cec/di/slf/forum/index.htm



INFORMATICS Directorate

HOME HELP SITE MAP SEARCH FEEDBACK

IntraComm » Informatics Directorate » Services » Training

Forum Informatique

Bienvenue sur le nouveau site du Forum !

- Présentation générale du service

Formation informatique

- Informations générales
- Syslog Web Formation catalogue des cours et inscriptions (nécessite votre login/password pour accéder à Internet !)
- Nouveautés NEW
- Accès à l'ancien site du Forum
- On-line affectation des salles à Bruxelles / à Luxembourg
  Plan du Forum Informatique Bruxelles / Luxembourg
- La certification informatique
- Evaluation des prérequis
- Les projets de formation informatique
- Présentation du Groupe de Travail sur la formation (GTFOR)

Médiathèque du Forum

- Informations générales
- Les dernières nouveautés
- Rechercher un ouvrage
- Rechercher et consulter un support de cours
- Accéder aux websheets

Les séminaires et réunions

- Les séminaires informatiques à venir
- Agenda de la coopération DI/DG
- Présentations des séminaires antérieurs

Haut

INFORMATICS Directorate

HOME HELP SITE MAP SEARCH FEEDBACK
Return to IntraComm DI on EUROPA

24/10/2002 Jean-Louis Brousmiche

Depuis quelques semaines, le Forum a mis en production de nouvelles pages expliquant les services proposés et la structure mise à la disposition de ses utilisateurs. L'information disponible en ligne inclut des informations pratiques pour participer à une formation ou pour emprunter un livre. On y trouve les accès vers Syslog Web Formation, vers la page de recherche des ouvrages de la médiathèque, vers le répertoire des supports de cours. Il est même possible de connaître en temps réel les affectations des salles à Bruxelles et à Luxembourg, de découvrir les filières de cours MCSA ou SAS, de s'auto-évaluer pour participer à un cours FrontPage, de retrouver les séminaires à venir et les supports utilisés lors des présentations antérieures. Cette information est à votre disposition, faites-en bon usage!

Le Forum Informatique.

PLANIFICATION DES MARCHES

Rapporteur: Mme. GILLIERON **Situation au 29 juillet 2002**

La planification des marchés couvre uniquement les contrats communs les plus importants, les contrats spécifiques étant pris en charge par les DGs elles-mêmes(voir note D(97) 405 du 27/05/1997)
Les contrats terminés y figurent jusqu'au leur date de terminaison + 1 année

Notice explicative

1. Services techniques d'ADMIN DI - abréviations

1 - CET Conseil et Evaluation Technique
2 - SRC Services et Relations Clients
3 - STB Support Technique et Bureautique
4 - SSI Support des Systèmes d'Information
5 - TR Télécommunications et Réseaux
6 - DC Data Centre
7 - FCL IT Finances, Contrats et Logistique

2. Mentions sous "Action":

- Décision en mm/aaaa (en moyenne 8 mois avant la fin du contrat si appel d'offres - 4 mois si négociation)
- Appel d'offres ...
- Négociation ..

1 PRODUITS					
1.1 HARDWARE AND OPERATING SYSTEMS					
PC PORTABLES	DI/00854 SYSTEMAT	02/12/2001	- Interinstitutionnel (source EP) - Contrats signés suite à un appel d'offres - Lot 1 Portables traditionnels	échu	
	DI/01012 ECONOCOM	23/03/2002	- Interinstitutionnel (source EP) - Lot 2 Portables avec docking station	échu	
PC PORTABLE (LAPTOPS)	DI/02910 SYSTEMAT	07/04/2003 07/04/2009	- Contrat signé suite à AO ouvert n° 01113 - Interinstitutionnel	décision à prendre en 11/2002	STB (Gritsch)
EQUIPEMENT MOBILE PDA	DI/02990 INFO'PRODUCTS	28/05/2003 28/05/2009	- Contrat signé suite à AO ouvert n° 01114 - Interinstitutionnel - Contrat canal	décision à prendre en 01/2003	STB (Gritsch)
PC DESKTOP	DI/00765 GETRONICS	13/08/2002	- Interinstitutionnel - Contrat signé suite à un appel d'offres - acquisitions limitées jusqu'au 13/08/99	contrat terminé le 13/08/2002	STB (Gritsch)
PC DESKTOP	DI/01382 SIEMENS	13/12/2002 13/12/2004 13/12/2005 13/12/2006	- Contrat signé suite à un appel d'offres - acquisitions limitées jusqu'au 13/12/2002 - maintenance jusqu'au 13/12/2004 avec prolongation possible jusqu'au 13/12/2006	décision prolongation maintenance en 9/2004	STB (Gritsch)
PC DESKTOP				AO ouvert (AO 0207) en cours, contrat à conclure en novembre 2002	STB (Gritsch)
SERVEURS NT (DGs)	DI/00764 COMPAQ (ex DIGITAL)	10/08/2002	- Interinstitutionnel - Contrats signés suite à un appel d'offres - acquisitions limitées jusqu'au 10/08/99	date finale 10/08/2002	STB (Gritsch)
SERVEURS NT				AO ouvert à commencer ASAP, contrat à conclure en janvier 2003	STB (Gritsch)
SERVEURS NT (DGs)	DI/01282 SIEMENS S A	18/11/2002 18/11/2003	- Interinstitutionnel - Contrats signés suite à un appel d'offres - acquisitions peut être prolonger avec des term de 3 mois jusqu'au 18/11/2002 - maintenance peut être prolonger avec des term de 3 mois jusqu'au 18/11/2007	maintenance jusqu'au 17/11/2003	STB (Gritsch)
SERVEURS UNIX (DGs)	DI/00286 BULL	31/12/2003	- Contrats signés suite à un appel d'offres - Acquisitions limitées jusqu'au 31/12/1998, sauf SUN (Firewalles, Telerate DG II jusque fin 12/99)	remplacés par contrats DI/01362 etDI/01383 [suite au AO DI/9905 conjoint pour les DGs et le DC (Sincom2)] Prolongations approuvées par CCAM pour maintenance jusqu'au 31/12/2003, **sauf pour ICL**	STB (Gritsch)
	DI/00389 COMPAQ (ex DIGITAL)	31/12/2003			
	DI/00009 ICL	31/12/2000			
	DI/00069 NCR	31/12/2003			
	DI/00436 GETRONICS	31/12/2003			
	DI/00012 SIEMENS BUSINESS SERVICES	31/12/2003			
	DI/00678 SUN	31/12/2003			
SERVEURS UNIX - Mid-range (DGs)	DI/01362 SUN	18/01/2003 18/01/2004	- Interinstitutionnel (ESC, CdR,1Agence) - Contrat signé suite à AO DI/9905 Serveurs UNIX [AO conjoint pour les DGs et le DC (Sincom2)] - acquisitions limitées jusqu'au 18/01/2004 et maintenance etc, avec 3 extentions d'un an, limité jusqu'au 18/01/2007	à prolonger en 10/2002 jusqu'au 18/01/2004	STB (Gritsch) DC (Ellis)
SERVEURS UNIX - High-end (DGs + DC)	DI/01363 HEWLETT PACKARD Belgium	15/12/2002 15/12/2003	- Interinstitutionnel (ESC, CdR,1Agence) - Contrat signé suite à AO DI/9905 Serveurs UNIX [AO conjoint pour les DGs et le DC (Sincom2)] - acquisitions limitées jusqu'au 15/12/2003, et maintenance etc, avec 3 extentions d'un an, limité jusqu'au 15/12/2006	prolongation jusqu'au 15/12/2003 en cours	STB (Mann) DC (Deasy/Ellis)
SERVEURS UNIX (Data Centre)	DI/01034 SIEMENS NIXDORF	04/11/2002 04/11/2003	Contrat signé suite à un appel d'offres	à prolonger en 09/2002 jusqu'au 04/11/2003	DC (Deasy)
	DI/00698 AMDAHL	23/09/2001	Lot 2 Statistiques Lot 4 Bases Données Lot 5B Backup, archives	échu (remplacé par DI/02550)	
	DI/02550 AMDAHL	26/01/2004	E-10000 server	néant	
	DI/02493 BULL	30/09/2004	Location d'un serveur Bull Aix	néant	
SERVERS UNIX Multidomain/Department DG's orientated			Lot 1 high-end models Lot 2 mid-range models	AO ouvert (AO 0204 MDS) en cours, contrat à conclure en 12/2002	DC (Nosbusch)
SYSTEMES PROPRIETAIRES (Data Centre)	DI/00013 SIEMENS NIXDORF	26/04/2002	SYSPER, PAIE, applications locales	Contrat fini le 26/04/2000 C S jusqu'au 2002 (nouveau contrat DI/02170)	DC (Ellis)
	DI/02170 SIEMENS	30/06/2005	SYSPER, PAIE, applications locales	néant	DC (Ellis)
	DI/01242 AMDAHL	25/11/2002	EUROFARM, CARE, GARFIELD, SYSTRAN, TIC-TOC		DC (Deasy)
HOSTing MVS for SINCOM I				AO (DI/0202) - fiche d'information CCAM (dépôt 25/06/2002), contrat à conclure asap	DC (Nosbusch)

ROBOT BACKUP (Data Centre)	DI/00612 STORAGETEK	26/11/2002 26/05/2003	Contrat signé suite à un AO suivi d'une procédure négociée	maintenance à prolonger en 09/2002	DC (Nosbusch)
ROBOT BACKUP (Data Centre)	DI/02130 STORAGETEK	30/05/2004 30/05/2005 30/05/2006	Contrat signé suite à AO DI/0008 RBU prolongations for services, maintenance only	néant	DC (Nosbusch)
ESTO (Data storage)				AO ouvert DI/0117, contrat prévu en novembre 2002	DC (Nosbusch)
WEB CONTENT MANAGEMENT				AO ouvert DI/0115, dépôt CCAM prévu le 23/10/2002	DC (De Coninck)
Accounting/Monotoring				AO ouvertDI/0201, contrat prévu octobre 2002	DC (Le Goff)
IMPRIMANTES	DI/00434 SIEMENS NIXDORF	31/01/2002 pour acquisition et 31/12/2005 pour maintenance	Contrats signés suite à un appel d'offres Lot 1 Imprimantes individuelles N&B Lot 2 Imprimantes individuelles couleur Lot 5 Imprimantes portables	prolongé pour maintenance jusqu'au 31/01/2005 remplacé par DI/02715 Getronics (Lot 1) et DI/02716 Getronics (Lot 2)	STB (Gritsch)
IMPRIMANTES	DI/00427 GETRONICS	31/01/2002 pour acquisition et 31/01/2005 pour maintenance	Lot 3 Imprimantes réseau N&B	prolongé pour maintenance jusqu'au 31/01/2005	STB
IMPRIMANTES	DI/02715 (Lot 1) GETRONICS DI/02716 (lot 2) GETRONICS	04/02/2005 04/02/2006 04/02/2007	Contrats signés suite à AO ouvert 0103 Interinstitutionnel Lot 1 Imprimantes individuelles N&B Lot 2 Imprimantes individuelles couleur	néant	STB
SCANNERS	DI/00894 HEWLETT PACKARD	14/01/2001	Choix de HP suite à l'appel d'offres GED (solutions complètes hw + sw)	contrat échu, remplacé par DI/02717, DI/02718 et DI/02719 (en cours de signatures)	STB (Gritsch)
SCANNERS	DI/02230 HEWLETT PACKARD	30/09/2002 30/09/2003	Contrat signé suite à une procédure négociée	prolongation en cours	STB
SCANNERS	DI/02090 KODAK	22/05/2002 22/05/2003	Contrat signé suite à une procédure négociée	Maintenance de 3 Scanners pour la Caisse Maladie	
SCANNERS	DI/02717 Lot 1 - SIEMENS DI/02718 Lot 2 - CANON DI/02719 Lot 3 - SIEMENS		contrats à signer suite à un AO ouvert (0104) Interinstitutionnel Lot 1 personnel, Lot 2 document Lot 3 scan to e-mail	en cours de signature	STB
TELECOPIEURS (FAX)	DI/01383 CANON	31/12/2001 30/06/2001	- Contrat signé suite à une procédure négociée - le contrat est la suite du contrat DI/00488 - Signature des CS pour location des fax limitées jusqu'au 31/12/2001	remplacé par DI/02714 - Lanier	FCL (Allgayer)
TELECOPIEURS (FAX)	DI/02714 LANIER	20/01/2005 20/01/2006 20/01/2007	- Interinstitutionnel - contrat signé suite à AO ouvert 0102	néant	FCL (Allgayer)
PHOTOCOPIEURS Distribués	DI/00703 MINOLTA	02/02/2002	Contrats signés suite à un appel d'offres lot 1 B/W Table top (1er rang cascade) lot 9 Colour low production (1er rang cascade) lot 4 B/W Medium large (2ème rang cascade) lot 6 B/W High production 2ème rang cascade)	contrats remplacés par DI/02710, DI/02711 et DI/02712 LANIER	FCL (Allgayer)
PHOTOCOPIEURS Distribués	DI/00705 LANIER (ex AGFA)	03/02/2002	lot 2 B/W Small (1er rang cascade) lot 3 B/W Medium small (1er rang cascade) lot 5 B/W Large (2ème rang cascade) lot 9 Colour low production (2ème rang cascade)		FCL (Allgayer)
PHOTOCOPIEURS Distribués	DI/00706 CANON BENELUX	03/02/2002	lot 4 B/W Medium large (1er rang cascade) lot 5 B/W Large (1er rang cascade) lot 6 B/W High production (1er rang cascade) lot 10 Colour high production (1er rang cascade) lot 2 B/W Small (2ème rang cascade) lot 3 B/W Medium small (2ème rang cascade)		FCL (Allgayer)
PHOTOCOPIEURS	DI/02710 (lot 1) LANIER DI/02711 (lot 2) LANIER DI/02712 (lot 3)	20/01/2005 20/01/2006 20/01/2007	- Interinstitutionnel - contrat signé suite à l'AO ouvert 0101 - Lot 1 B/W table top - Lot 2 B/W main range - Lot 3 B/w top range	néant	FCL (Allgayer)
PRINTSHOPS, DGs et ADMIN	DI/00707 OCE	02/02/2002	lot 7 Mid-range printshop (1er rang cascade) lot 12 Multifunction (1er rang cascade)	échu	ADMIN/C,4 Atelier (Price)
	DI/00709 XEROX	30/06/2001 02/02/2002	lot 8 Large printshops (1er rang cascade) lot 10 Colour high production (2ème rang cascade) lot 12 Multifunctional (2ème rang cascade)	échu	ADMIN/C,4 Atelier (Price)
(Atelier production)	DI/02720 OCE	25/06/2005 25/06/2006 25/06/2007	contrat signé suite à l'AO ouvert HICOP DI/0105	néant	ADMIN/C,4 Atelier (Price)
	DI/02721 XEROX	09/06/2002 09/06/2006 09/06/2007	contrat signé suite à l'AO ouvert HICOP DI/0105	néant	FCL (Allgayer)
MICROFICHES (lecteurs/reproducteurs)	DI/00730 AARQUE-REGMA	29/04/2002	Contrat signé suite à un AO	échu	FCL (Allgayer)
MICROFICHES (lecteurs/reproducteurs)	DI/02970 AARQUE REGMA	04/04/2005 31/12/2006	Maintenance et déménagement des lecteurs-reproducteurs de microfiches en service à la Commission, acquis sur les contrats-cadres successifs DI/00379 et DI/00730)	néant	FCL (Allgayer)
SMARTCARDS (Hw + sw)	DI/00679 UTIMACO	21/05/2001	Contrats signés suite à un appel d'offres Lot 1 Smartcards, sécurité et sw Lot 2 Lecteurs/reproducteurs + sw Lot 3 Libraines/outils de développement	échu, remplacé par DI/02190	STB (Gritsch)
SMARTCARDS (Hw + sw)	DI/02190 UTIMACO	26/09/2002 26/09/2003	Contrat signé suite à une procédure négociée	décision prolongation asap	
1.2 NETWORK AND TELECOMMUNICATION PRODUCTS					
EQUIPEMENTS TELECOM canal distribution)	DI/00771 COMLIN	07/08/2002	Contrats signés suite à un appel d'offres Lot 1 Ethernet (1er rang cascade) Lot 2 ATM switching (1er rang cascade)	sera remplacé par DI/03130 (AO 0116 - DC-TEQ)	TR (Jortay)
EQUIPEMENTS TELECOM canal distribution)	DI/03130 DATA DIMENSION BELGIUM		Contrat à signer suite à un AO ouvert (AO 0116 - DC-TEQ)	en cours de signature	TR (Jortay)
	DI/00789 TELEPHONIE/ALCATEL	11/05/2002	Lot 1 Ethernet (2ème rang cascade) Lot 2 ATM switching (2ème rang cascade)	échu, plus de prolongation	TR (Jortay)
EQUIPMENT Simcards/handsets	DI/02530 CMD	30/11/2003 30/11 /2004 30/11/2005 30/11/2006	- contrat signé suite à un AO - Interinstitutionnel	néant	TR (Houde)

INSEM 3 (New E-Mail)	DI/01059 SIEMENS NIXDORF et INTRASOFT (CONNECTIV@)	13/04/2003 13/04/2004	Contrat signé suite à un appel d'offres	décision à prendre en 11/2002	DC (Deasy)
ESEM (Service et expertise liés à INSEM 3)			Contrats à signer suite à un appel d'offres ouvert (DI/0108) 2 lots	Avis CCAM favorable, contrat en cours de signature	DC (Te Kolste)
FIREWALL (Sw sécurité)	DI/00678 SUN	31/12/2003	- Contrat signé suite à un appel d'offres - Acquisitions limitées au 31/12/1999, (voir remarque sous "Servers UNIX") - Acquisition possible via COMLIN	Prolongé pour maintenance avec procédure CCAM [une analyse du marché concernant un logiciel complémentaire est effectuée]	TR (Jortay)
Aimit (software sécurité)	DI/01910 COMPUTER ASSOCIATES	15/03/2003 15/03/2004	Contrat signé suite à une procédure négociée	décision à prendre en 11/2002	STB
1.3 OFFICE AUTOMATION AND DOCUMENT MANAGEMENT					
SOFTWARE MICROSOFT (PC/serveurs)	DI/01118 et DI/01122 MICROSOFT IRELAND OPERATIONS Ltd	19/08/2002 19/08/2003	Contrats signés suite à une procédure négociée - Interinstitutionnel - DI/01118 " Microsoft Enterprice SELECT Agreement" - DI/01122 "Microsoft Select MASTER Agreement" - (DI/01116 Distribution via canal SIEMENS S A - voir sous "support logistic")	Prolongations en cours	STB (Marin)
	DI/01119 MICROSOFT BELGIUM	08/08/2002 08/08/2003	- Contrat de services - Contrat signé suite à une procédure négociée	Prolongation en cours	
SOFTWARE NETSCAPE (intranet/internet)	DI/01042 NETSCAPE	31/12/2001	- Contrats signés suite à une procédure négociée - Licence du sw via NETSCAPE - Distribution via COMSOL	échu continuation par DI/02650	DC (De Coninck)
	DI/01043 COMSOL	31/12/2001		échu	
	DI/02650 COMSOL	28/12/2002	- Contrat signé suite à une procédure négociée - Licence du sw via NETSCAPE - Distribution via COMSOL	décision à prendre asap	
SOFTWARE BEA	DI/02490 BEA SYSTEMS	11/10/2003 11/10/2004 11/10/2005	- Contrat signé suite à une procédure négociée	néant	STB
SOFTWARE Action Technologies Workflow	DI/02491 WORKMANAGEMENT EUROPE	11/11/2003 11/11/2004	- Contrat signé suite à une procédure négociée	néant	STB
SOFTWARE Filenet EDMS	DI/02492 FILENET IRELAND	30/09/2003 30/09/2004	- Contrat signé suite à une procédure négociée	néant	STB
1.4 INFORMATION SYSTEM INFRASTRUCTURE					
ORACLE	DI/01445 ORACLE	29/04/2004	- Contrat signé suite à une procédure négociée - Suite du contrat DI/00417 - Interinstitutionnel et complexe	Néant	STB (Ruiz de la Torre)
ADABAS (produits pour DBMS)	DI/00174 SOFTWARE-AG	31/12/2004 31/12/2005 31/12/2006	- Contrat signé suite à une procédure négociée	Néant	DC (Ellis)
SEARCH SERVER	DI/01486 HUMMINGBIRD FRANCE (ex-FULCRUM)	30/03/2003	- Contrat signé suite à une procédure négociée - Suite du contrat DI/00629 - Interinstitutionnel	Décision à prendre en 09/2002	STB (Ruiz de la Torre)
DORIS (sw migration CELEX)	DI/001056 EVER	29/12/2003	Contrat signé suite à une procédure négociée	Néant	DC (De Coninck)
DORIS (Data base management)	DI/01970 OFFIS	02/04/2004 02/04/2005 02/04/2006	- Contrat signé suite à l'appel d'offres DI/0010 - Utilisation au Data Centre	Néant	DC (De Coninck)
SER France (edms)	DI/00339 DOROTECH	14/06/2002	Contrat signé suite à un appel d'offres	contrat terminé	STB (Marin)
POWERBUILDER	DI/01568 SYBASE	24/06/2003	- Interinstitutionnel - Contrat signé suite à une procédure négociée	Néant	STB (Ruiz de la Torre)
SAS	DI/01069 SAS INSTITUTE	30/04/2002	Contrat signé suite à une procédure négociée	échu continuation par DI/03090	STB (Ruiz de la Torre)
SAS	DI/03090 SAS INSTITUTE	23/05/2005 23/05/2006 23/05/2007	- Contrat signé suite à une procédure négociée	néant	STB (Ruiz de la Torre)
FAME (Time series support in statistical domain)	DI/01610 - FAME INFORMATION SERVICE	31/12/2003 31/12/2004 31/12/2005	- Contrat signé suite à une procédure négociée - Renégocié en 2000 pour nouveau contrat	Néant	STB (Ruiz de la Torre)
ACUMEN (On-line analytical processing software)	DI/00433 KENAN	31/12/2001	- Contrat signé suite à un appel d'offres - Renégocié mi-98 - Utilisation au Data Centre et à l'OPOCE	Décision ASAP	STB (Ruiz de la Torre)
TROLL (Sw pour la modélisation numérique)	DI/00199 INTEX	31/12/2004	- Contrat signé suite à une procédure négociée - Licences du sw TROLL - Utilisation dans les DGs	Néant	STB (Ruiz de la Torre)
	DI/00646 HENDYPLAN	31/12/2004	Services associés au sw TROLL	Néant	
Operating system + SW + associated services pour AMDAHL au Data Centre	DI/00836 IBM	31/12/2002	Contrat/CS signé suite à une procédure négociée	Néant	DC (Deasy)
SW utilisés sur AMDAHL au Data Centre (AutoAction)	DI/00432 COMPUTER ASSOCIATES	31/12/2001	- Contrat signé suite à une procédure négociée - Division contrat suite à la décision du"DoJ" (U S.A) - Contrat DI/01527 avec Allen Systems	contrat terminé le 31/12/2001	DC (Deasy)
SW utilisés sur AMDAHL au Data Centre (AutoMedia, Autosys/zèke)	DI/01527 ALLEN SYSTEMS	31/12/2001	- Contrat signé suite au décision Court de justice - Reprise des produit du contrat DI/00432 avec Computer Associates	contrat terminé le 31/12/2001	DC (Deasy)
SW utilisé sur AMDAHL au Data Centre (BETA)	DI/00749 BETA SYSTEMS	31/12/2001	Contrat signé suite à une procédure négociée	échu le 31/12/2001, plus de prolongation	DC (Deasy)
SW utilisé sur AMDAHL au Data Centre (OMMEGAMON)	DI/00153 CANDLE BENELUX	30/11/2001	Contrat signé suite à une procédure négociée	échu le 31/12/2001, plus de prolongation	DC (Deasy)
BUSINESS OBJECTS (outil de requête SQL pour utilisateurs finaux)	DI/01015 BUSINESS OBJECT	24/02/2002	Contrat signé suite à une procédure négociée	échu	STB (Ruiz de la Torre)
BUSINESS OBJECTS (outil de requête SQL pour utilisateurs finaux)	DI/02850 BUSINESS OBJECT	19/02/2004 19/02/2005 19/02/2006 19/02/2007	Contrat signé suite à une procédure négociée	Néant	
ASSYST (Gestion des incidents Help Desk)	DI/01384 AXIOS	31/12/2001	- Contrat signé suite à une procédure négociée - continuation du contrat DI/00457	A entamer procédure négociée en attendant AO remplacement par ITSS	SCR
MULTILIS	DI/00341 DATA RESEARCH (exMULTILIS)	indéterminée	Contrat signé suite à un appel d'offres en 92	Fin de contrat à préciser AO à préparer	SRC
ARCVIEW (Système d'information géographique pour desktop DGIS)	DI/01021 EUROSENSE/ESRI	22/12/2001	Contrat signé suite à un appel d'offres	échu le 22/12/2001, plus de prolongation	STB (Ruiz de la Torre)
ARCINFO (Système d'information géographique pour stations UNIX)	DI/00369 EUROSENSE/ESRI	31/12/2001	Contrat signé suite à un appel d'offres	remplacé par DI/02310	STB (Ruiz de la Torre)
ARCINFO (Système d'information géographique pour stations UNIX)	DI/02310 ESRI	30/09/2004 30/09/2005	Contrat signé suite à une procédure négociée	Néant	STB (Ruiz de la Torre)

2. SOUS-TRAITANCE COMMUNE

DEVT ET MAINTENANCE SYSTEMES D'INFORMAT	DI/00773 AMBRASOFT	21/09/2001 21/09/2002	Contrats signés suite à un appel d'offres Lot 3 Dév/maint syst inf (4ème rang cascade)	échu le 21/09/2001, plus de prolongation remplacé par les contrats ESP	CET (Weidert, Leonard)
	DI/00774 BULL	21/09/2001 21/09/2002	Lot 5 Maint syst inf propriét (4ème rang cascade)		
	DI/00775 CSC	21/09/2001 21/09/2002	Lot 3 Dév/maint syst inf (3ème rang cascade)		
	DI/00776 LOGICA	21/09/2001 21/09/2002	Lot 5 Maint syst inf propriét (1er rang cascade)		
	DI/00777 ATOS (ex MARBEN)	21/09/2001 21/09/2002	Lot 1- Etudes (1er rang cascade) Lot 3 Dév/maint syst inf (1er rang cascade) Lot 6 Services syst inf (2ème rang cascade)		
	DI/00778 WANG (ex OLSY)	21/09/2001 21/09/2002	Lot 4 Dév/maint syst diffusion (2ème rang cascade)		
	DI/00779 SEMA GROUP	21/09/2001 21/09/2002	Lot 6 Services syst Inf (1er rang cascade) Lot 1 Etudes (2ème rang cascade) Lot 4 Dev/maint syst diffusion (3ème rang cascade)		
	DI/00780 SIEMENS NIXDORF	21/09/2001 21/09/2002	Lot 5 Maint syst inf propriét (3ème rang cascade)		
	DI/00781 SOPRA	21/09/2001 21/09/2002	Lot 2 Dév/maint petits syst inf (2ème rang cascade)		
	DI/00782 SYLIS	21/09/2001 21/09/2002	Lot 5 Maint syst inf propriét (2ème rang cascade)		
	DI/00783 TRASYS	21/09/2001 21/09/2002	Lot 2 Dév/maint. petits syst. inf (1er rang cascade) Lot 4 Dév/maint. syst diffusion (1er rang cascade) Lot 3 Dév/maint syst Inf (2ème rang cascade)		
EXTERNAL SERVICE PROVIDERS (ESP)	DI/02390 TIETO ENATOR	03/10/2002 03/10/2003 03/10/2004 03/10/2005 03/10/2006	Contrats signés suite à un appel d'offres Lot 1 Quality Assurance (1er contractant)	néant (reconduction tacite)	CET (Weidert, Leonard)
	DI/02410 UNISYS BELGIUM	03/10/2002 03/10/2003 03/10/2004 03/10/2005 03/10/2006	Contrats signés suite à un appel d'offres Lot 1 Quality Assurance (2ème contractant)		CET (Weidert, Leonard)
	DI/02411 TRASYS-CRONOS	15/10/2002 15/10/2003 15/10/2004 15/10/2005 15/10/2006	Contrats signés suite à un appel d'offres Lot 2 Specific studies (1er contractant)		CET (Weidert, Leonard)
	DI/02412 ARIANE II	15/10/2002 15/10/2003 15/10/2004 15/10/2005 15/10/2006	Contrats signés suite à un appel d'offres Lot 2 Specific studies (2ème contractant)		CET (Weidert, Leonard)
	DI/02413 ATOS	15/10/2002 15/10/2003 15/10/2004 15/10/2005 15/10/2006	Contrats signés suite à un appel d'offres Lot 2 Specific studies (3ème contractant)		CET (Weidert, Leonard)
	DI/02430 TRASYS-CRONOS	14/10/2002 14/10/2003 14/10/2004 14/10/2005 14/10/2006	Contrats signés suite à un appel d'offres Lot 3 Desktop applications (1er contractant)		CET (Weidert, Leonard)
	DI/02431 ARIANE II	14/10/2002 14/10/2003 14/10/2004 14/10/2005 14/10/2006	Contrats signés suite à un appel d'offres Lot 3 Desktop applications (2ème contractant)		CET (Weidert, Leonard)
	DI/02432 TRASYS-CRONOS	15/10/2002 15/10/2003 15/10/2004 15/10/2005 15/10/2006	Contrats signés suite à un appel d'offres Lot 4 Data/information management applications (1er contractant)		CET (Weidert, Leonard)
	DI/02433 ARIANE II	15/10/2002 15/10/2003 15/10/2004 15/10/2005 15/10/2006	Contrats signés suite à un appel d'offres Lot 4 Data/information management applications (2ème contractant)		CET (Weidert, Leonard)
	DI/02434 CONSORTIUM "INFOMANAGEMENT" (Intrasoft/Getronics/Softeco)	15/10/2002 15/10/2003 15/10/2004 15/10/2005 15/10/2006	Contrats signés suite à un appel d'offres Lot 4 Data/information management applications (3ème contractant)		CET (Weidert, Leonard)
	DI/02435 ATOS	15/10/2002 15/10/2003 15/10/2004 15/10/2005 15/10/2006	Contrats signés suite à un appel d'offres Lot 4 Data/information management applications (4ème contractant)		CET (Weidert, Leonard)
	DI/02436 CONSORTIUM "ESP 5" (European Dynamics/Datacep/Ins/Gruppo Reggiani/Tecsys)	04/11/2002 04/11/2003 04/11/2004 04/11/2005 04/11/2006	Contrats signés suite à un appel d'offres Lot 5 Web applications (1er contractant)		CET (Weidert, Leonard)
	DI/02437 TRASYS-CRONOS	04/11/2002 04/11/2003 04/11/2004 04/11/2005 04/11/2006	Contrats signés suite à un appel d'offres Lot 5 Web applications (2ème contractant)		CET (Weidert, Leonard)
	DI/02438 CONSORTIUM "WEBDEV" (Getronics/Intrasoft/Softeco/ IconMedialab)	04/11/2002 04/11/2003 04/11/2004 04/11/2005 04/11/2006	Contrats signés suite à un appel d'offres Lot 5 Web applications (3ème contractant)		CET (Weidert, Leonard)
	DI/02439 ARIANE II	04/11/2002 04/11/2003 04/11/2004 04/11/2005 04/11/2006	Contrats signés suite à un appel d'offres Lot 5 Web applications (4ème contractant)		CET (Weidert, Leonard)
	DI/02450 CONSORTIUM "EC-DOC" (Getronics/Ins/Logica/Gruppo Reggiani)	23/10/2002 23/10/2003 23/10/2004 23/10/2005 23/10/2006	Contrats signés suite à un appel d'offres Lot 6 Document management and workflow applications (1er contractant)		CET (Weidert, Leonard)
	DI/02452 TRASYS-CRONOS	23/10/2002 23/10/2003 23/10/2004 23/10/2005 23/10/2006	Contrats signés suite à un appel d'offres Lot 6 Document management and workflow applications (2ème contractant)		CET (Weidert, Leonard)
	DI/02453 ATOS	23/10/2002 23/10/2003 23/10/2004 23/10/2005 23/10/2006	Contrats signés suite à un appel d'offres Lot 6 Document management and workflow applications (3ème contractant)		CET (Weidert, Leonard)

	DI/02454 TRASYS-CRONOS	15/10/2002 15/10/2003 15/10/2004 15/10/2005 15/10/2006	Contrats signés suite à un appel d'offres Lot 7 Business intelligence and data warehouse applications (1er contractant)		CET (Weidert, Leonard)
	DI/02455 ARIANE II	15/10/2002 15/10/2003 15/10/2004 15/10/2005 15/10/2006	Contrats signés suite à un appel d'offres Lot 7 Business intelligence and data warehouse applications (2ème contractant)		CET (Weidert, Leonard)
	DI/02456 ATOS	15/10/2002 15/10/2003 15/10/2004 15/10/2005 15/10/2006	Contrats signés suite à un appel d'offres Lot 7 Business intelligence and data warehouse applications (3ème contractant)		CET (Weidert, Leonard)
	DI/02457 ARIANE II	15/10/2002 15/10/2003 15/10/2004 15/10/2005 15/10/2006	Contrats signés suite à un appel d'offres Lot 8 Propnetary systems applications (1er contractant)		CET (Weidert, Leonard)
	DI/02458 SYLIS	15/10/2002 15/10/2003 15/10/2004 15/10/2005 15/10/2006	Contrats signés suite à un appel d'offres Lot 8 Propnetary systems applications (2ème contractant)		CET (Weidert, Leonard)
	DI/02459 CONSORTIUM "ASSIST-IS" (Getronics/Intrasoft/Softeco/ Acoges)	23/10/2002 23/10/2003 23/10/2004 23/10/2005 23/10/2006	Contrats signés suite à un appel d'offres Lot 9 IS end user assistance (1er contractant)		CET (Weidert, Leonard)
	DI/02460 UNISYS	23/10/2002 23/10/2003 23/10/2004 23/10/2005 23/10/2006	Contrats signés suite à un appel d'offres Lot 9 IS end user assistance (2ème contractant)		CET (Weidert, Leonard)
	DI/02461 ATOS	23/10/2002 23/10/2003 23/10/2004 23/10/2005 23/10/2006	Contrats signés suite à un appel d'offres Lot 9 IS end user assistance (3ème contractant)		CET (Weidert, Leonard)
	DI/02462 SEMA	23/10/2002 23/10/2003 23/10/2004 23/10/2005 23/10/2006	Contrats signés suite à un appel d'offres Lot 9 IS end user assistance (4ème contractant)		CET (Weidert, Leonard)
LSA/DBA (Admin Serveurs et gestion syst Information)	DI/00767 SIEMENS NIXDORF	03/08/2002	Contrat signé suite à un appel d'offres	AO ITSS DI/0107 en cours	SRC
SUPPORT PC	DI/00768 SERCO (ex TECNODATA ITALIA)	03/08/2002	Contrat signé suite à un appel d'offres	AO ITSS DI/0107 en cours	SRC
FORMATION INFORMATIQUE (end users)	DI/00769 KSI (futur SYNAPS)	22/07/2002	- Contrats signés suite à un appel d'offres - Echéances à vérifier - KSI 1er rang cascade	fin contrat 22/07/2002	SRC
AO FORMUSER				AO ouvert (AO 0208) en cours, contrat à conclure en 12/2002	
FORMATION MS ou similaire (techniciens)	DI/02350 Vision Informatique	22/10/2003 22/10/2005 22/10/2006	Contrat signé suite à l'AO 0013 T-STD	néant	STB (Gritsch
IT SUPPORT				Avis CCAM fav AO ITSS DI/0107, signature des contrats en cours	SRC
3 SERVICE MIS à DISPOSITION PAR LES SERVICES TECHNIQUES					
3.1 ASSURANCE DE LA QUALITE					
Detailed Research and Advisory Information service			Lot 1 - engineering level Lot 2 - management level	AO du Parlement européen en préparation	
	DI/01038 CSC COMPUTER SC	29/10/2003		Néant	CET (Alves Lavado)
3.2 TELECOMMUNICATION - Infrastructure					
CALL DISPATCH	DI/00761 GETRONICS (ex-WANG, ex OLSY)	12/08/2002	Contrats signés suite à un appel d'offres Lot 1 Call Dispatch pour les DGs (Bxles et Lux)	prolongé jusqu'au 12/08/2002 (sera remplacé par l'AO 0107 ITSS)	SRC
	DI/00763 BUREAU VAN DIJK	03/05/2003	Lot 2 Call Dipatch Help Desk Central Bxl	Comtrat terminé le 05/05/2003 (sera remplacé par l'AO 0107 ITSS)	SRC
Postes opérateurs au standard téléphonique	DI/01071 (ancien 97/04/IX C 1) SIEMENS ATEA	31/12/2002		Contrat terminé le 31/12/2002	SRC
Vidéoconférence - maintenar	DI/01074 (ancien 97/10/IX D 1) TELINDUS	29/09/2002		Contrat terminé le 29/09/2002, maintenance bon de commande	SRC
Vidéoconférence rénovation équipement maintenance Lots 1 et 7	DI/01075 (ancien 97/10/IX D 1) TELINDUS	26/11/2002 26/11/2003		Décision prolongation 09/2002 examiner situation maintenance Décision à prendre pour préparation d'un nouvel AO	SRC
Vidéoconférence rénovation équipement maintenance Lots 2 et 3	DI/01078 (ancien 97/10/IX D 1) BELGACOM	17/12/2003		Décision à prendre pour préparation d'un nouvel AO	SRC
Gestion des salles de téléconférences	DI/01076 (ancien 96/07/IX C 1) SIEMENS ATEA	28/02/2002		AO Teleconf 0110 dépôt CCAM prévu pour le 30/09/2002	SRC
EQUIPEMENTS AUDIOVISUELS				Préparation préinfo 06/02 AO DI/0009 (exDI/-9809) en préparation pour audiovisual equipment (contrat prevu	SRC (Brousmische)
AO TIO(Telephone and information operators)				AO ouvert 0206 en cours, contrat à signer en 12/2002	
3.3 COMMUNICATION - Autres					
Contrats press et informations	plusieurs	varié	Contrats signés suite aux procédures négociés		SRC (Swartenbroux)
3.3 SUPPORT BUREAUTIQUE					
SUPPORT/DEVELOPT INFRASTRUCTURE	DI/01039 ARIANE II	04/11/2002 04/11/2003	Contrats signés suite à un appel d'offres Lot 5 non attribué (support ingénierie sw) Lot 1 Support 2ème niveau et intégration serveurs PC	prolongation en cours	STB (Marin)
	DI/01036 DOKUMENTA	25/11/2002 25/11/2003	Lot 2 Dével /support 2ème niveau office autom sw	prolongation en cours	
	DI/01040 SEMA GROUP	17/11/2002 17/11/2003	Lot 3 Dével /support 2ème niveau systèmes distr sw	prolongation en cours	

3.4 SYSTEMES ADMINISTRATIFS					
SIC (Développt, maintenance et support)	DI/01029 SOPRA	09/09/2002	Contrats signés suite à un appel d'offres Lot 1 Maint , dével et support infrastructure générale	pas de prolongation	SSI (Blerot)
	DI/01030 ARIANE II	09/09/2002 09/09/2003	Lot 2 Maint et dével systèmes gestion Personnel Lot 3 Maint et dével systèmes gestion Finances	prolongation en cours	
	DI/01031 OFFIS	09/09/2002 09/09/2003	Lot 4 Maint et dével systèmes gestion Logistique Lot 5 Maint et dével systèmes gestion Documentaire Lot 7 Support systèmes gestion Logistique	prolongation en cours	
	DI/01027 BUREAU VAN DIJK	09/09/2002 09/09/2003	Lot 6 Support systèmes gestion Personnel/Finances	prolongation en cours	
	DI/01032 SEMA GROUP	09/09/2002 09/09/2003	Lot 8 Support systèmes gestion Documentaire	prolongation en cours	
IPM (Interactive policy making)	DI/02610 TRAYS	29/11/2004 29/11/2005 29/11/2006	contrat signé suite à l'appel d'offres DI/0111	néant	
	DI/02611 INTRASOFT	29/11/2004 29/11/2005 29/11/2006	contrat signé suite à l'appel d'offres DI/0111	néant	
3.5 TRANSMISSION DE DONNEES					
WAN (Wide Area Network)	DI/01051 BT Worldwide	03/02/2003 03/02/2004 03/02/2005 03/02/2006 03/02/2007	Contrats signés suite à un appel d'offres Lot 1 IP network services Lot 2 Remote access services	décision de prolongation en 10/2002	TR (Jortay)
	DI/01052 INNET/UUNET BELGIUM	12/04/2003 12/04/2004 12/04/2005 12/04/2006 12/04/2007	Lot 3 Liaison entre le réseau des institutions et Internet	décision de prolongation en 10/2002	TR (Jortay)
				Nouvel AO à préparer (VPN technique)	TR (Jortay)
SURE (Support réseaux)	DI/00691 INTRASOFT	06/10/2001	- Contrat signé suite à un appel d'offres - concerne DG IX et DI	remplacé par DI/02830	TR (Jortay)
Communication infrastructure and Services CISS (ancienOSS)	DI/02830 INTRASOFT INTERNATIONAL	07/05/2005 07/05/2006 07/05/2007	Contrat signé suite à un appel d'offres ouvert (AO 0003)	Néant	TR (Jortay)
SNET Gestion intégrée réseau	DI/01067 BELGACOM	17/02/2003 17/02/2004 17/02/2005	Contrat signé suite à un appel d'offres	décision de prolongation en 11/2002	TR (Jortay)
TELEPHONIE MOBILE (Lot 1)	DI/01547 MOBISTAR	04/07/2003 04/07/2004 04/07/2005	- Interinstitutionnel - Contrat signé suite à un appel d'offres DI/9903	En 09/2002, lettre à envoyer à la CCAM pour l'informer de la décision de ne pas mettre en concurrence)	TR (Jortay)
TELEPHONIE MOBILE (Lot 4 - Pagers)	DI/01567 EUROPARCOM	07/12/2002 07/12/2003 07/12/2004 07/12/2005	- Interinstitutionnel - Contrat signé suite à un appel d'offres DI/9903	à prolonger jusqu'au 07/12/2003	TR (Jortay)
TELEPHONIE MOBILE (Lot 5 - Calling cards)	DI/01693 EUROPARCOM	07/12/2002 07/12/2003 07/12/2004 07/12/2005	- Interinstitutionnel - Contrat signé suite à un appel d'offres DI/9903	à prolonger jusqu'au 07/12/2003	TR (Jortay)
TELEPHONIE VOCALE (Lot 2 - Outgoing nat calls in Belgium)	DI/01670 GLOBAL ONE	23/11/2003 23/11/2004 23/11/2005 23/11/2006/7/8	- Interinstitutionnel - Contrat signé suite à un appel d'offres DI/9901	Néant	TR (Jortay/Gordebeke)
TELEPHONIE VOCALE (Lot 3 - Outgoing internat calls Brussels)	DI/01671 BELGACOM	04/12/2003 04/12/2004 04/12/2005 04/12/2006/7/8	- Interinstitutionnel - Contrat signé suite à un appel d'offres DI/9901	Néant	TR (Jortay/Gordebeke)
TELEPHONIE VOCALE (Lot 4 - Outgoing nat calls in Luxembourg)	DI/01672 EPT	04/12/2003 04/12/2004 04/12/2005 04/12/2006/7/8	- Interinstitutionnel - Contrat signé suite à un appel d'offres DI/9901	Néant	TR (Jortay/Gordebeke)
TELEPHONIE VOCALE (Lot 5 - Outgoing internat calls Luxembourg)	DI/01690 EPT	04/12/2003 04/12/2004 04/12/2005 04/12/2006/7/8	- Interinstitutionnel - Contrat signé suite à un appel d'offres DI/9901	Néant	TR (Jortay/Gordebeke)
TELEPHONIE VOCALE (Lot 6 - Outgoing nat calls in France)	DI/01691 GLOBAL ONE	23/11/2003 23/11/2004 23/11/2005 23/11/2006/7/8	- Interinstitutionnel - Contrat signé suite à un appel d'offres DI/9901	Néant	TR (Jortay/Gordebeke)
CARRIER NETWORK SERVICE	DI/01850 BELGACOM	25/02/2005 25/02/2007 25/02/2009 25/02/2011	Contrat signé suite à un appel d'offre DI/0006 (ex-DI/9911)	Néant	TR (Jortay)
PABX Private Access Branch Exchange (Telephone insfrastructure)	DI/00416bis SIEMENS	05/12/2001	Service repris par la DI depuis le 01/01/1999	échu le 5/12/01	TR (Jortay)
Private Voice Telephony Infrastructure	DI/02270 SIEMENS ATEA	30/09/2003 30/09/2004 30/09/2005 30/09/2006	Contrat signé suite à une procédure négociée	Néant	
Câblage à Luxembourg	DI/1089 COMPAQ	14/12/2002	ancien contrat 97/06/IX C 1 Contrat signé suite à un appel d'offres	Contrat fini le 14/12/2002 remplacé par DI/03010, DI/03011 et DI/03012	TR (Jortay)
Câblage à Luxembourg Lot 2	DI/03010 SIMAC/DISTECABLE	07/05/2005 07/05/2006 07/05/2007	contrat signé suite à un appel d'offres ouvert préparé par l'ADMIN/C	Néant	TR (Houde)
	DI/03011 (Lot 2/2) SIEMENS ATEA	30/06/2005 30/06/2006 30/06/2007	contrat signé suite à un appel d'offres ouvert préparé par l'ADMIN/C	Néant	
	DI/03012 (Lot 2/3) CEGELEC	12/05/2005 12/05/2006 12/05/2007	contrat signé suite à un appel d'offres ouvert préparé par l'ADMIN/C	Néant	
3.6 DATA CENTRE					
MICROMATION	DI/00729 KODAK	06/08/2002	Contrats signés suite à un appel d'offres	Contrat termine le 06/08/2002	DC (Deasy)
	DI/01890 STOCOMEST	15/01/2003	Contrat signé suite à une procédure négociée , (à la suite du contrat DI/00721 Mr-DATA MANAGT)	Contrat fini le 15/01/2003 Demande d'extension de deux ans sera entamé en 09/2002	
QUALITY MANAGEMENT SOFTWARE	DI/00786 BMC SOFTWARE	19/10/2002	Contrat signé suite à un appel d'offres	AO Accounting/monitoring DI/0201- dépôt CCAM prévu en 11/2002	DC (Deasy)

AUTOSECURE	DI/00432 COMPUTER ASSOCIATES	31/12/2001	Contrat signé suite à une procédure négociée Logiciel de sécurité	Pas de prolongation pour ce produit	DC (Deasy)
SUPPORT TECHNIQUE (2)	DI/02110 INTRASOFT	24/06/2004 24/06/2005 24/06/2006	Contrat signé suite à l'AO DI/9918 WSM	Néant	DC (Deasy)
SUPPORT TECHNIQUE (2)	DI/02210 European Dynamics	17/06/2004 17/06/2005 17/06/2006	Contrat signé suite à l'AO DI/9918 WSM	Néant	DC (Deasy)
	DI/01970 OFFIS	02/04/2004 02/04/2005 02/04/2006	Contrat signature en cours suite à un appel d'offres AO DI/0010 DBM	Néant	DC (Deasy)
PRINTSHOP (Data Centre)	DI/01770 XEROX	19/02/2004 00/00/2005	Contrat signé suite à l'AO 0001)	Néant	DC (Deasy)
3.7 SUPPORT LOGISTIQUE					
LOGICIELS PC/SERVEURS (Canal distribution)	DI/01116 + DI/01117 SIEMENS S.A	11/08/2003 11/08/2004	- Interinstitutionnel - Contrat signé suite à un appel d'offres - DI/01116 = SW for MS products - DI/01117 = SW for other then MS products	néant	FCL (Peltgen/Gillieron)
GESTION DES STOCKS (Déménagements/gestion)	DI/01017 INTRASOFT	17/06/2003	Contrat signé suite à un appel d'offres	prolongé jusqu'au 17/6/2003 & période de transition, ensuite repris par ITSS	FCL (Peltgen)
REVUES INFORMATIQUES (Abonnements)	DI/01058 EBSCO	31/01/2003 31/01/2004	Contrat signé suite à un appel d'offres	décision pour prolongation en 10/2002	SCR(Brousmiche)
LIVRES INFORMATIQUES (Achats)	DI/01079 DAWSON FRANCE	01/06/2003 01/06/2004	Contrat signé suite à un appel d'offres	prolongation en cours	RI (Bertrand/ Brousmiche)
EVACUATION PC	DI/0040 OXFAM	31/12/2003 31/12/2004 31/12/2005	Contrat signé suite à un AO de DG ADMIN/D	Néant	FCL (Peltgen)
				AO Software distribution canal en préparation	FCL (Peltgen)

Les **classes** de produits et les **statuts** de produits

Le product management a pour objet la gestion complète du cycle de vie des produits informatiques (identifiés par le nom et le numéro de version): la sélection, la mise en œuvre et le retrait.

La sélection d'un produit se fait en tenant compte des besoins collectifs des utilisateurs, de l'intégration technique avec l'architecture informatique et la base installée, et dans le respect des procédures d'acquisitions tout en veillant à un rapport coût opportunité optimum.

La mise en œuvre d'un produit couvre la commande, l'installation, la formation et le support.

Le retrait couvre le déclassement du produit et une stratégie de migration des applications qui l'utilisent.

Les produits informatiques sont répartis en trois familles:

«**Hardware and Operating System**» pour l'infrastructure de base, et «**Office automation and document management**» et «**Information systems infrastructure**» pour l'infrastructure de gestion de l'information. Au-dessus de ces familles de produits se construisent les systèmes de gestion de l'information dans le cadre du project management.

Le contenu de ces trois familles de produits est publié régulièrement. A chaque produit correspond un statut et une classe.

Les statuts suivants correspondent aux différentes étapes de la vie d'un produit:

EV s'applique aux produits en évaluation (tests, phases pilote) avec un support ad hoc éventuel, et à éviter de mettre en œuvre dans des environnements opérationnels. Les tests sont pilotés ou autorisés par un product manager et un rapport doit être produit.

OP s'applique aux produits opérationnels; le support est déterminé par la classe du produit.

PO s'applique aux produits en fin de cycle de vie technologique «phased out» dont le retrait est proche. Le support de ces produits est maintenu comme des produits OP, mais avec une tendance à la baisse et il est déconseillé d'investir dans leur utilisation.

AD s'applique aux produits à déclasser dans le cadre des procédures de déclassement applicables.

Les classes suivantes sont appliquées aux produits de statut OP et PO:

La classe **A** désigne les protocoles, interfaces et formats dont la mise en œuvre est obligatoire pour des raisons d'architecture.

La classe **B** désigne les produits d'intérêt général couvrant les besoins communs aux directions générales. La liste des produits offre un éventail raisonnable de produits permettant d'offrir le support central demandé et de couvrir les besoins. Pour des raisons d'efficacité du support, l'objectif est de sélectionner un seul produit de classe B (OP) par type de besoin.

La classe **C** désigne les produits correspondant à des besoins spécifiques dont il a été justifié qu'ils sont non couverts par les produits de classes A et B. Ces produits ne bénéficient pas d'un support garanti. Toutefois, si leur utilisation se généralise, le passage en classe B doit être étudié.

Hardware and Operating Systems

Product family managers DI : M. Gritsch

Product family managers DG : P. Hirn

jeudi 17 octobre 2002

LOCAL OPERATING SYSTEMS

Product name	CPU Model	Operating systems	Class	Status	Comments
Windows NT Workstation 4.0			B	OP	Desktop PC
Windows NT Server 4.0			B	OP	Office automation servers
Windows NT Server 4.0			B	OP	Application and database servers
Unix divers (1)			B	OP	Application and database servers
Windows 2000 Professional			B	OP	Portables PC
Unix divers (1)			B	PO	Office automation servers
Windows 2000 Server & Advanced Server				EV	Office automation, application and d
Windows XP Professional				EV	Desktop and Portables PC

(1) Conformes au standard de jure ISO (POSIX 1003) compélté par les spécifications UNIX 95 de l Open Group

WORKSTATIONS AND CLIENT OPERATING SYSTEMS

Product name	CPU Model	Operating systems	Class	Status	Comments
Desktop PC					
SIEMENS Scenic L845, PM		Windows NT	B	OP(1)	Desktop
SIEMENS Scenic L815ep, PM		Windows NT	B	OP	Desktop
SIEMENS Scenic XL		Windows NT	B	OP	Desktop
SIEMENS Scenic 865		Windows NT	B	OP	Desktop
OLIVETTI M7000 MT		Windows NT	B	OP	Desktop
OLIVETTI M6000 MT		Windows NT	B	AD/PO	Desktop
OLIVETTI M2-233 MT,		Windows NT	B	AD	Desktop
Portable PC					
TOSHIBA Tecra 9100		Windows 2000 Professional	B	OP(1)	All-purpose portable
TOSHIBA Portégé 4010		Windows 2000 Professional	B	OP(1)	Ultra-light portable
TOSHIBA Tecra 9000		Windows 2000 Professional	B	OP	All-purpose portable
TOSHIBA Protégé 4000		Windows 2000 Professional	B	OP	Ultra-light portable
TOSHIBA Satellite Pro 4600		Windows 2000 Professional	B	OP	Portable
TOSHIBA Satellite Pro 4280, 4320, 4340		Windows 2000 Professional	B	OP	Portable
TOSHIBA Tecra 8000 DMT		Windows NT	B	OP	Portable
TOSHIBA Satellite Pro 4xx CDT		Windows NT	B	OP	Portable
COMPAQ M700		Windows 2000 Professional	B	OP	Portable + Docking Station
COMPAQ ARMADA 7400 6366		Windows NT	B	OP	Portable + Docking Station
COMPAQ ARMADA 7400 6300		Windows NT	B	AD/PO	Portable + Docking Station
COMPAQ ARMADA 7770		Windows NT	B	AD	Portable + Docking Station

(1) Equipement for new acquisitions

LOCAL SERVERS

Product name	CPU Model	Operating systems	Class	Status	Comments
WINDOWS					
SIEMENS Primergy H450/R450	Intel Pentium III Xeon	Windows NT	B	OP	
SIEMENS Primergy H400/N400/N800	Intel Pentium III Xeon	Windows NT	B	OP	
SIEMENS Primergy 870-40 / K400	Intel Pentium III Xeon	Windows NT	B	OP	
DIGITAL Server 7100	Intel PentiumPro	Windows NT / SCO OS 5	B	OP	
HP NetServer 6/xxx and 5/xxx	Intel PentiumPro	Windows NT	B	AD(1)	Projets GED
UNIX					
SUN Fire F3800/F4800/V880	UltraSparc III	SOLARIS 2.x/7/8	B	OP	
SUN Entreprise 280R	UltraSparc III	SOLARIS 2.x/7/8	B	OP	
SUN Blade 1000	UltraSparc III	SOLARIS 2.x/7/8	B	OP	
SUN Entreprise 220R/250/420R/450	UltraSparc II	SOLARIS 2.x/7/8	B	OP	
HP9000 (N4000 - CLASS)	PA-8500	HP-UX	C	OP	
ICL SuperServer Hxxxs/Kxxxs	Sparc	NX V7 Mplus	B	AD(1)	
NCR Entry Level Servers Sxx	Intel Pentium	Unix SRV4	B	AD(1)	
NCR WorldMark 4xxx	Intel Pentium	Unix SRV4	B	AD(1)	
OLIVETTI NetStrada 7000	Intel PentiumPro	Windows NT / SCO OS 5	B	AD(1)	
OLIVETTI SNX Systema 460RS	Intel Pentium	SCO ODT3/SCO OS5	B	AD(1)	
HP9000 Dxxx/Kxxx Entreprise Server	PA-7200, PA-8000	HP-UX	B	AD(1)	Projets GED
SIEMENS Primergy xxx	Intel Pentium	SCO OS 5	B	AD(1)	

(1) Seuls les serveurs acquis en 1998 ou avant sont classés AD (susceptibles de radiation de l'inventaire - sous réserve de bonne fin de la procédure de déclassement).

DATA CENTER SERVERS and OPERATING SYSTEMS

Product name	CPU Model	Operating systems	Class	Status	Comments
DIGITAL Prioris ZX 6200	PentiumPro	Windows NT	B	OP	DI-DC
DIGITAL Server 7100MP	PentiumPro	Windows NT	B	OP	DI-DC
HP 9000 (N4000)	PA-8600	HP-UX 11.I	B	OP	DI-DC
HP Superdome	PA-8600	HP-UX 11 I	B	OP	DI-DC
SNI Primergy 870-40	Intel Pentium III Xeon	Windows NT	B	OP	DI-DC
SNI RM 600-E80	Mips R12000	Reliant UNIX 5.45	B	OP	DI-DC
SNI RM 600-E60/E70	Mips R10000	Reliant UNIX 5 45	B	OP	DI-DC
SNI RM 300	Mips R10000	Reliant UNIX 5.45	B	OP	DI-DC
SUN Entreprise 220-250/420-450	UltraSparc II	Solaris 8	B	OP	DI-DC
SUN Entreprise 6000	UltraSparc	Solaris 2.6/Solaris 8	B	OP	DI-DC
SUN Entreprise 10000	UltraSparc	Solaris 2.6/Solaris 8	B	OP	DI-DC
SUN 3000	SuperSparc	Solaris 2.6/Solaris 8	B	OP	DI-DC
AMDAHL GS-732	IBM System 390	OS/390 2.6	B	PO	DI-DC
BULL Escala R404	PowerPC	AIX 4.3	B	PO	DI-DC
BULL Escala EPC/S400	PowerPC	AIX 4.3	B	PO	DI-DC
SIEMENS S-120		BS2000 - v10/OSD2/OSD3/OSD4	B	PO	DI-DC

PRINTERS

Product name	CPU Model	Operating systems	Class	Status	Comments
Interface, Protocol, Standard					
Adobe Postscript			A	OP	
HP-PCL 3, 4, 5 et 6			A	OP	
Portable printers					
HP DeskJet 350C, 350CBI		Windows NT	B	OP	Portable; N&B; HP-PCL3
HP DeskJet 340, 340CBI		Windows NT	B	AD/PO(2)	Portable; N&B; HP-PCL3
HP DeskJet 310, 320		Windows NT	B	AD	Portable; N&B, HP-PCL3
Personal Black&White printers					
HP LaserJet 1200/1220		Windows NT	B	OP(1)	Personal; N&B; HP-PCL6 et Postscr
HP LaserJet 2100/2100TN/2100M		Windows NT	B	OP	Personal; N&B, HP-PCL6 ou Postsc
HP LaserJet 1100		Windows NT	B	OP	Personnal; N&B; HP-PCL5
HP LaserJet 5L, 5P		Windows NT	B	AD/PO(2)	Personnal; N&B; HP-PCL5
HP DeskJet 1200		Windows NT	B	AD	Personnal, N&B; HP-PCL3
HP LaserJet 4L		Windows NT	B	AD	Personnal; N&B; HP-PCL5
HP LaserJet IIIP		Windows NT	B	AD	Personnal; N&B, HP-PCL5
HP DeskJet 510, 520, 540, 550, 600		Windows NT	B	AD	Personnal; N&B; HP-PCL3
Shared Black&White printers					
HP LaserJet 2200DN/2200DNT		Windows NT / Unix	B	OP(1)	Workgroup; N&B; HP-PCL6 et Post
HP LaserJet 4100N/4100TN/4100DTN		Windows NT / Unix	B	OP(1)	Workgroup enhanced; N&B; HP-PC
HP LaserJet 8150N/8150DN/8150HN		Windows NT / Unix	B	OP(1)	Workgroup high performance; N&B;
HP LaserJet 4000/4000T/4000N/4000TN		Windows NT / Unix	B	OP	Shared, N&B; HP-PCL6 et Postscri
HP LaserJet 8100/8100N/8100DN		Windows NT / Unix	B	OP	Shared; N&B; HP-PCL6 (A3) et Pos
HP LaserJet 8000/8000N/8000DN		Windows NT / Unix	B	OP	Shared, N&B; HP-PCL6 (A3) et Pos
HP LaserJet 4050/4050T/4050N/4050TN		Windows NT / Unix	B	OP	Shared; N&B, HP-PCL6 et Postscn
HP LaserJet 5000/5000N/5000GN		Windows NT / Unix	B	OP	Shared; N&B; HP-PCL6 (A3) et Pos
HP LaserJet 5, 5N, 5M		Windows NT / Unix	B	AD/PO(2)	Shared; N&B; HP-PCL6 ou Postscri
HP LaserJet 5Si/SiMX		Windows NT / Unix	B	AD/PO(2)	Shared; N&B; HP-PCL5 ou Postscn
HP LaserJet IIISi		Windows NT / Unix	B	AD	Shared; N&B; HP-PCL3
HP LaserJet 4, 4M, 4P Plus, 4M Plus		Windows NT / Unix	B	AD	Shared; N&B; HP-PCL5 ou Postscri
HP LaserJet 4Si/SiMX/V/MV		Windows NT / Unix	B	AD	Shared; N&B, HP-PCL5 ou Postscn
Personal color printers					
HP DeskJet 990 Cxi		Windows NT	B	OP(1)	Personal; color; HP-PCL3(high-end)
HP DeskJet 690C, 695C, 710C, 840C		Windows NT	B	OP	Personnal; Color, HP-PCL3 (low-en
HP DeskJet 890Cxi, 895Cxi, 970Cxi, 990Cxi		Windows NT	B	OP	Personnal; Color; HP-PCL3 (high-e
HP DeskJet 980Cxi		Windows NT	B	OP	Personnal; Color; HP-PCL3 (high-e
HP DeskJet 1100C, 1120C		Windows NT	B	OP	Personnal; Color; HP-PCL3 (A3)
HP DeskJet 1220Cxi, 1220c/ps		Windows NT	B	OP	Personnal; Color; HP-PCL3 (A3) ou
HP DeskJet 850C, 870Cxi		Windows NT	B	AD/PO(2)	Personnal; Color; HP-PCL3 (high-e
HP DeskJet 550C, 560C, 660C		Windows NT	B	AD	Personnal; Color; HP-PCL3 (low-en
Shared color printers					
HP Business Inkjet 2280TN		Windows NT / Unix	B	OP(1)	Shared; color; HP PCL 5c and Post
HP Business Inkjet 2250/2250TN		Windows NT / Unix	B	OP	Shared; color; HP PCL 5c and Post
HP Business Inkjet 2200xi		Windows NT / Unix	B	OP	Shared; Color; HP-PCL3
HP DeskJet 2500C/2500CM		Windows NT / Unix	B	OP	Shared; Color; HP-PCL5 et Postscri
HP DeskJet 2000C/2000CN		Windows NT / Unix	B	OP	Shared, Color; HP-PCL3
HP DeskJet 1200C, 1600C		Windows NT / Unix	B	AD/PO(2)	Shared; Color; HP-PCL3
Other printers					
MT 660/690		Unix	B	OP	Imprimante à chaine
OCE 66xx		Unix	B	OP	HP-PCL3 ou Postscript
TI(XL)PS 17/PS 35		Unix	B	OP	Postscript
OLIVETTI DM 624		Windows NT	C	OP	Multicopy forms printing
SNI 9014		Windows NT	B	OP	Multicopy forms printing

(1) Equipement for new acquisitions

(2) Seuls les imprimantes acquis en 1997 ou avant peuvent être classées AD(susceptibles de radiation de l'inventaire - sous réserve de bonne fin de la procédure de déclassement).

SCANNERS

Product name	CPU Model	Operating systems	Class	Status	Comments
hp scanjet 7400c		Windows NT	B	OP(1)	Desktop publishing scanner
Canon DR-3060		Windows NT	B	OP(1)	Document scanner
Canon DR-4580		Windows NT	B	OP(1)	Document scanner
Canon DR-5080C		Windows NT	B	OP(1)	Document scanner
hp digital sender 9100		Windows NT	B	OP(1)	Digital sender (PDF, TIFF, PCL)
HP SCANJET IIP, IIIP		Windows NT	B	OP	
HP SCANJET IIC, IICx, IIIC		Windows NT	B	OP	
HP SCANJET 5P		Windows NT	B	OP	
HP SCANJET 5100C, 6100C, 6200C, 6250C		Windows NT	B	OP	
HP SCANJET 6300C/6350C/6390C		Windows NT	B	OP	
Fujitsu M309x/M409x series		Windows NT / Unix	B	OP	Projets GED, ADONIS

(1) Equipement for new acquisitions

BAR CODE READER AND PRINTER

Product name	CPU Model	Operating systems	Class	Status	Comments
PSC 5310 HP (PSC)		Handheld laser scanner	B	OP(1)	ELS/SICMOB/SYSLOG
Easycoder 3400 (Intermec)		Bar code printer	B	OP(1)	ELS/SICMOB/SYSLOG
Sympbol SPT1800 (National Barcode)		Palm OS	B	OP(1)	ELS/SICMOB/SYSLOG
Handspring Visor Pro with Momentum II barcode sca		Palm OS	B	OP(1)	ELS/SICMOB/SYSLOG
Handspring Visor Edge with Momentum II barcode sc		Palm OS	B	OP	ELS/SICMOB/SYSLOG
Trakker 9440 (Intermec)		Handheld terminal	B	PO	ELS/SICMOB/SYSLOG
Janus 2010 (Intermec)		Handheld terminal	B	PO	ELS/SICMOB/SYSLOG

(1) Equipement for new acquisitions

OFFICE EQUIPMENTS (fax,photocopier, ...)

Product name	CPU Model	Operating systems	Class	Status	Comments
LANIER 4560/85			B	OP(1)	
LANIER 5813			B	OP(1)	0-5 Kcop/month / 13 ppm
LANIER 5470			B	OP(1)	20-50 Kcop/month / 70 pmm
LANIER 5645			B	OP(1)	5-20 Kcop/month / 45ppm
LANIER 5613			B	OP(1)	0-5 Kcop/month / 13 ppm
CITIZEN 440 DP			B	OP	
NASCO 2400			B	OP	
CANON CLC 1000			B	OP	5-50 Kcop/month; 31 A4/m
OCE 3165			B	OP	> 40 Kcop/month, 65 A4/m
RANK XEROX 5690			B	OP	> 500 Kcop/month 135 A4/m
OCE 2600			B	OP	100-500 Kcop/month 100 A4/m
MIROLTA CF 900			B	OP	< 5 Kcop/month 6 A4/m
RANK XEROX Docutech			B	OP	> 500 Kcop/month 135 A4/m
TRIUMPH-ADLER TA 400/TA 410			B	OP	
Assmann M800, M205, MC8			B	OP	
DICTAPHONE 270			B	OP	
CANON L500, L600, L800			B	PO	
CANON CLC 700			B	PO	4-8 Kcop/month; 5 A4/m
LANIER ScanRouter Lite		Scanning software	C	EV	Transfert to B class after testing
LANIER ScanRouter Professional		Scanning software	C	EV	Transfert to B class after testing

(1) Equipement for new acquisitions

LAN INTEGRATION PRODUCTS

Product name	CPU Model	Operating systems	Class	Status	Comments
NETBIOS			A	OP	
SMB			A	OP	
TCP/IP			A	OP	
WINSOCKETS			A	OP	
NFS		Unix, BS2000, MVS/ESA, VM/ESA	B	OP	
HUMMINGBIRD NFS Maestro		Windows NT Workstation	B	PO	
Diskshare Intergraph		Windows NT Server	B	PO	
Advanced Server for Unix (Bull, NCR, SNI, SCO)		Unix	C	PO	
VisionFS (SCO)		Unix	B	PO	

EMULATORS

Product name	CPU Model	Operating systems	Class	Status	Comments
3270		MS NT 4.x	A	OP	
9750			A	OP	
Telnet			A	OP	
VT 220			A	OP	
X 11.5 or higher			A	OP	
X WINDOWS			A	OP	
eXceed/W		Windows NT	B	OP	
LOG - WS (9750 emulator)		Windows NT	B	OP	
RUMBA 3270		Windows NT	B	OP	
TerWinal		Windows NT	B	OP	

SYSTEM MANAGEMENT PRODUCTS

Product name	CPU Model	Operating systems	Class	Status	Comments
SNMP			A	OP	
NetCon (Computer Associates)		Windows NT	B	PO	
Aim IT (Computer Associates)		Windows NT	B	OP	
Networker (Legato)		Unix Windows NT Server	B	OP	
Alexandria (Sterling Software / Computer Associates)		Pyramid Unix DCOSx, SCO	C	OP	
Diskeeper (Executive Software)		Windows NT Server	B	OP	
Quota manager (NTP Software)		Windows NT Server	B	PO	
Quota Advisor (Wquinn Associates)		Windows NT Server	B	OP	
O&O Defrag (O&O Software GmbH)		Windows NT Workstation	B	OP	
Remote Desktop (Network Associates)		Windows NT Workstation / Server	B	OP	
GHOST (Symantec)		Windows NT Workstation / Server	B	OP	
Operation Manager suite & Administration products (		Windows NT	B	OP	
Hyena (Adkins Resources)		Windows NT	C	OP	
SMS (Microsoft)		Windows NT Server	C	OP	Data Center (CSD) et DG BUDG
Patrol (BMC Software)		Unix	C	OP	Data Center (Monitoring and Alarm
MSCS (Microsoft cluster)		Windows NT Server	B	OP	
Unix cluster software (divers)		Unix	C	OP	
Double Take (Sterling Software/Computer Associate		Windows NT Server / Solaris	C	OP	

SECURITY

Product name	CPU Model	Operating systems	Class	Status	Comments
Identification / Authentification renforcée					
Carte à puce: SLE66CX160S (UTIMACO)		Windows 95 / Windows NT / Unix	B	OP	
Lecteur Carte à puce UTI MACO CardMan II Compac		Windows 95 / Windows NT	B	OP	
Lecteur Carte à puce UTI MACO CardMan Mobile(C		Windows 95 / Windows NT	B	OP	
DigiPass700		Windows 95 / Windows NT	C	OP	DI/TR
Carte à puces SLE44CR80S (UTIMACO)		Windows 95 / Windows NT / Unix		PO	Encore disponible
Network Monitoring Suite (LANWARE)		Windows NT		EV	Suite logicielle (CF. Projet LAURE).
PATROL (BMC Software)		Windows NT / Unix		EV	Possibilité d'ajout de "knowledge M
Journalisation, Monotoring, Alert					
INTRUDER ALERT (AXENT TECHN)		Windows NT / Unix		EV	Prend en compte un ensemble larg
Systemes d'Audit					
EVENT LOG MONITOR (TNT Softaware)		Windows 95 / Windows NT, (Unix pr		EV	Plus orienté Logging (CF. Projet LA
TIGER-COPS		Unix		PO	
TRIPWIRE		Unix / Windows NT	B	OP	Version commerciale
PC-UNIX-AUDIT		Windows NT (Audit Unix)	C	OP	Replace TIGER-COPS
KANE SECURITY ANALYST		Windows NT	C	OP	
SATAN		Unix / Windows NT		PO	
ISS-SCANNER (ISS)		Windows NT (Audit Unix, Windows N	C	OP	Usage sous contrôle de ADMIN/DS
REALSECURE (ISS)		Windows NT (FireWall, Audir Real Ti		EV	Par ADMIN/DI5/TR et ADMIN/DS
NETRECON (AXENT)		Windows NT (Audit Unix, Windows N	C	OP	Usages sous contrôle ADMIN/DS
Sécurité Physique (Antivol)					
SECUPLUS			C	OP	
LOCK-IT			C	OP	
Matériel					
CRYPTOFAX			C	OP	Domaine classifié
Matériel TEMPEST			C	OP	Domaine classifié
DEGAUSSER		Démagnétiseurs pour supports magn	C	EV	Usage sous contrôle de ADMIN/DS

PERSONAL DIGITAL ASSISTANTS (PDA)

Product name	CPU Model	Operating systems	Class	Status	Comments
Palm M 515		Palm OS	B	OP(1)	
Compaq iPAQ 3850		Microsoft Pocket PC 2002	B	OP(1)	

(1) Equipement for new acquisitions

Office Automation and Documents Management

Product family managers DI : C. D'ASCANIO

Product family managers DG : F. KODECK

jeudi 17 octobre 2002

ARCHITECTURAL SPECIFICATIONS

Product name	CPU Model	Operating systems	Class	Status	Comments
Adobe PDF 1.4		MS NT4 WS - Windows XP Professi	A	OP	Nouveau format introduit par Acrob
UNICODE			A	OP	
OLE 2.0			A	OP	
MS-Word97 file format		MS NT WS	A	OP	
MS-Excel97 file format		MS NT WS	A	OP	
MS-Powerpoint97 file format		MS NT WS	A	OP	
HTML 4.01		MS NT WS, Unix	A	OP	Europa/Europa+ Recommandation
CSS 1.0		MS NT WS, Unix	A	OP	Europa/Europa+ Recommandation
SGML		MS NT WS, Unix	A	OP	

WORD PROCESSING

Product name	CPU Model	Operating systems	Class	Status	Comments
Office 97 / Word 97		MS NT4 WS	B	OP	
Office 2000 / Word 2000 SR1		MS NT4 WS		EV	
Office XP / Word 2002		MS Windows XP Professional		EV	Package d'évaluation disponible da

SPREADSHEET

Product name	CPU Model	Operating systems	Class	Status	Comments
Office 97 / Excel 97		MS NT4 WS	B	OP	
Office XP / Excel 2002		MS Windows XP Professional		EV	Package d'évaluation disponible da

PRESENTATIONS

Product name	CPU Model	Operating systems	Class	Status	Comments
Office 97 / Powerpoint 97		MS NT4 WS	B	OP	
Office XP / Powerpoint 2002		MS Windows XP Professional		EV	Package d'évaluation disponible da

AGENDA

Product name	CPU Model	Operating systems	Class	Status	Comments
Outlook 2000		MS NT4 WS	B	OP	Projet INSEM 3 – Version SR1 disp
Office XP / Outlook 2002		MS Windows XP Professional		EV	Package d'évaluation disponible da

GRAPHICS TOOLS

Product name	CPU Model	Operating systems	Class	Status	Comments
Visio 2000		MS NT4 WS	B	OP	
Office XP / VISIO 2002		MS Windows XP Professional		EV	
Corel Draw 8		MS NT WS	C	OP	
Adobe Photoshop 7		MS NT WS		EV	
INTERLEAF		UNIX, MS DOS	C	OP	
QuikSilver		MS NT WS	C	OP	Produit remplaçant Interleaf dans l'e

DOCUMENT EXCHANGE TOOLS

Product name	CPU Model	Operating systems	Class	Status	Comments
Amyuni PRO 2.06		MS Windows XP or NT SP6a	C	OP	Produit non recommandé pour la pr
ACROBAT Reader V.5		MS Windows XP or NT4-SP6a WS	B	OP	Version qui permet l affichage du for
ACROBAT V.4 (Authoring suite)		MS NT4 WS	B	PO	
ACROBAT V.5 (Authoring suite)		MS Windows XP or NT SP6a	B	OP	

VIEWERS

Product name	CPU Model	Operating systems	Class	Status	Comments
Quickview+7		MS Windows XP Professional		EV	Version recommandée pour Windo
Quickview+6		MS NT4 WS	B	OP	
Quickview+5.11		MS NT4 WS	B	PO	Sera retiré une complété le déploie

MULTILINGUAL TOOLS

Product name	CPU Model	Operating systems	Class	Status	Comments
MF WINDOWS 5		MS NT4 WS	B	OP	Multilingual kit.

HTML AUTORING TOOLS

Product name	CPU Model	Operating systems	Class	Status	Comments
FrontPage 2000		MS NT4 WS	B	OP	Les composants de FrontPage qui n
Office XP/FrontPage 2002		MS Windows XP Professional		EV	
Eurolook/WEB 1.2		MS Windows XP or NT4	B	OP	Convertisseur du format Word en H
HoTMetaL Pro		MS NT WS	C	OP	Pour usage spécifique.

WEB UTILITIE & TOOLS

Product name	CPU Model	Operating systems	Class	Status	Comments
Linkbot Developer Edition 6		MS NT4 WS	C	OP	Version non disponible sur le march
WebTrends		MS NT4 WS	C	.	Logiciel de statistique pour les sites

WEB BROWSERS

Product name	CPU Model	Operating systems	Class	Status	Comments
Internet Explorer 5		MS NT4 WS	B	OP	Dernière version recommandée : 5.
Internet Explorer 6		MS Windows XP Professional		EV	Package d'évaluation disponible da
Netscape Communicator 4 7		MS NT WS	C	PO	
Netscape 6		MS NT WS		EV	

PLUG-INS

Product name	CPU Model	Operating systems	Class	Status	Comments
QuickTime 5		MS Windows XP or NT SP6a	C	OP	(1) Disponibilité du script d''installati
QuickTime 4		MS NT 4.x	C	PO	Voir(2)
Live Picture Viewer 3.2		MS NT 4.x	C	OP	(1) Script d'installation disponible po
Flash 6.		MS Windows XP or NT SP6a	C	OP	Voir(2).
Shock Wave 8		MS Windows XP or NT SP6a	C	OP	Voir(2).
ViScape 5.62 SVR		MS NT 4.x	C	OP	Voir(2)
Neuron 5.02 Plug-in		MS NT 4.x	C	OP	Voir(1).
Real Player 8 -- Intranet version		MS NT 4.x	C	OP	Voir(2)
Real Player One		MS Windows XP Professional		EV	Voir(2).
Media Player 6		MS NT 4.x	C	OP	Voir(2) Pour Version plus récente q
Media Player 7 (codec)		MS NT 4.x	C	OP	Seulement le codec est intégré au
Media Player 8 (codec)		MS NT 4.x	C	OP	Seulement le codec est intégré au
Media Player 8		MS Windows XP Professional		EV	Package d'évaluation disponible da
DJVU 3.5		MS NT 4.x	C	OP	Voir(2). -- demandé par SJ

PROJECT MANAGEMENT

Product name	CPU Model	Operating systems	Class	Status	Comments
MS-Project 2002		MS Windows XP Professional		EV	
MS-Project 2000		MS NT4 WS	B	OP	

ELECTRONIC MAIL

Product name	CPU Model	Operating systems	Class	Status	Comments
Office XP / Outlook 2002		MS Windows XP Professional		EV	
Outlook 2000 / Exchange 5.5		MS NT4 WS	B	OP	

COMMUNICATION/COLLABORATIVE TOOLS

Product name	CPU Model	Operating systems	Class	Status	Comments
NetMeeting 3		MS NT4 WS		EV	

OCR

Product name	CPU Model	Operating systems	Class	Status	Comments
OMNIPAGE		MS Windows 3.1 / 95 / NT	C	OP	
OMNIPAGE 11		MS NT4 - Windows XP Professional		EV	
TEXIRIS		MS Windows 3.1 / 95 / NT	C	OP	

ADMINISTRATIVE SOFTWARE PACKAGES

Product name	CPU Model	Operating systems	Class	Status	Comments
LegisWrite 5		MS NT WS		EV	Déploiement prévu pour Juin 4Q02.
Euroforms		MS NT WS	B	OP	
Eurolook 4		MS Windows XP or NT4	B	OP	Dernière version: 4.1 XP1 (Voir Softl
LegisWrite 4		MS NT WS	B	OP	Dernière version: 4.5.

SECURITY & CRYPTOGRAPHY TOOLS

Product name	CPU Model	Operating systems	Class	Status	Comments
SAFEGARD SIGN & CRYPT (UTIMACO)		MS NT 4.x		PO	Signature et chiffrement de fichiers
SAFEGUARD SIGN & CRYPT for Office (UTIMACO)		MS Windows XP or NT SP6a		EV/OP	Signature et chiffrement de fichiers
CryptWare User Agent – CUA (UTIMACO)		MS NT 4.x		EV/OP	PKI : générateur de clés et certificat.
SAFEGUARD Easy (UTIMACO)		MS NT WS	C	OP	Protection du poste de travail (Porta
SAFEGUARD Lancrypt (UTIMACO)		MS NT WS		EV	Chiffrement des fichiers partagés (d
SAFEGUARD Advanced (UTIMACO)		MS NT WS	C	OP	Protection renforcée du poste de tra
DiskNet (REFLEX)		MS NT WS	C	OP	

ANTI-VIRUS

Product name	CPU Model	Operating systems	Class	Status	Comments
Virus Scan Security Suite (Network Associates)		Voir Comment	B	OP	VirusScan Security Suite (VSS) Co
SWEEP (SOPHOS)		MS NT WS	B	OP	Produit complet.
F-Secure AntiVirus de F-Secure		MS NT WS	B	OP	Produit complet.

Product family managers DI : R. RUIZ DE LA TORRE

Product family managers DG : J PUIG SAQUES

jeudi 17 octobre 2002

MIDDLEWARE (CONNECTIVITY)

Product name	CPU Model	Operating systems	Class	Status	Comments
Net Service		MS Windows 95/NT, Unix		EV	Linked to Oracle 9i
NET 8		MS Windows 95/NT, Unix	B	OP	Linked to Oracle 8
SQL * Net 2		MS Windows 3.1/95/NT, Unix	B	PO	Linked to Oracle 7.
SQL * Net 1		MS Windows 3.1, Unix	B	PO	To migrate, not supported
Tuxedo		Unix	C	.	Used only in DG XXI.

DATA BASE MANAGEMENT SYSTEMS

Product name	CPU Model	Operating systems	Class	Status	Comments
ORACLE 9i		Unix / Windows NT		EV	
ORACLE 8.1		Unix / Windows NT	B	OP	
Oracle 8.0		Unix / Windows NT	B	OP	
Oracle 7.X		Unix / Windows NT	B	PO	Full support ends: 31/12/2000. Exte
ORACLE 6.0		Unix	B	PO	Not supported, migration to be plan
ADABAS C 2.2		Unix	B	PO	
ADABAS C 5 2		BS2000, MVS	B	OP	Running on PO OS.
SQL Server		Windows NT	C	OP	Used as a black-box by a packaged

RETRIEVAL AND DOCUMENT MANAGEMENT SYSTEMS

Product name	CPU Model	Operating systems	Class	Status	Comments
SEARCHServer (Fullcrum)		Unix / Windows NT	B	OP	Windows NT evaluation to be done.
ORACLE Intermedia / CONTEXT		Unix / Windows NT	C	OP	
VERITY SEARCH		Unix / Windows NT	C	OP	Only CC for web indexing.
ACTION WORKFLOW		Windows 95 / Windows NT / Unix	B	OP	Framework contract available.
PANAGON 2000		Windows 95 / Windows NT / Unix	B	OP	Framework contract available
HYPERVAWE		Unix / Windows NT		EV	Prototype until end 98.
DORIS				EV	To be used in CELEX.
DORODOC		Unix-Oracle	C	PO	
BASIS		CC. BS2000 Local: Unix	C	PO	
ORACLE IFS		Unix / Windows NT	B	OP	
Oracle WorkFlow		Unix / Windows NT	B	OP	

CONFIGURATION MANAGEMENT TOOLS

Product name	CPU Model	Operating systems	Class	Status	Comments
MS VISUAL SOURCE SAFE		Windows 95 / Windows NT	C	OP	Use specially with Microsoft tools.
PVCS		Windows 95 / Windows NT	C	OP	Recommended use: large projects a

3rd GENERATION LANGUAGES

Product name	CPU Model	Operating systems	Class	Status	Comments
C, C++		All OS	B	OP	
JAVA		All OS	B	OP	REDIS II
APL		Unix, Windows	C	OP	Used in EUROSTAT.
MARKIT		Unix, Windows	C	OP	
COBOL		All OS	C	OP	
FORTRAN		All OS	C	OP	

4th GENARATION ENVIRONMENT

Product name	CPU Model	Operating systems	Class	Status	Comments
ColdFusion XP		Windows NT / Unix		EV	
ColdFusion 5.0		Windows NT / Unix	B	OP	
COLDFUSION 4 5		Windows NT / Unix	B	PO	
POWERBUILDER 6		MS Windows 3.1/95/NT, Unix	B	OP	
DEVELOPER/2000 2 0		MS Windows 3.1/95/NT, Unix	B	OP	Only Oracle context
VISUAL BASIC 6.0		Windows 95 / Windows NT	B	OP	Windows integration.
MS-ACCESS 97		Windows 95 / Windows NT	B	OP	End-User Tool
MS-ACCESS 97 and ODE		Windows 95 / Windows NT	B	OP	Office developer tool.
NATURAL 2.2		Mainframes	B	OP	
NATURAL 2 2		Unix	B	OP	

CASE TOOLS

Product name	CPU Model	Operating systems	Class	Status	Comments
POWERDESIGNER		Windows 95 / Windows NT	C	OP	Training on demand.
DESIGNER 2000 2.0		Windows 95 / Windows NT	C	OP	Training on demand.
OBJECT ORIENTED CASE TOOL				.	UML CASE tool evaluation.

TESTING TOOLS

Product name	CPU Model	Operating systems	Class	Status	Comments
WIN RUNNER		Windows 95 / Windows NT	C	OP	Training on demand.

PROJECT MANAGEMENT TOOLS

Product name	CPU Model	Operating systems	Class	Status	Comments
MS-PROJET		Windows 95 / Windows NT	B	OP	Included in family 3

WEB SERVERS

Product name	CPU Model	Operating systems	Class	Status	Comments
Entreprise Netscape 3.0		Unix / Windows NT	B	OP	
Internet Information Server 4.0		Windows NT	B	OP	
Apache Web Server 1.3		Unix	B	OP	
Apache Web Server 2.0		Unix		EV	

APPLICATION SERVERS

Product name	CPU Model	Operating systems	Class	Status	Comments
WebLogic		Unix / Windows NT	B	OP	
Oracle iAS		Unix / Windows NT		EV	

DEVELOPMENT ENVIRONMENT

Product name	CPU Model	Operating systems	Class	Status	Comments
WebGain		Unix / Windows NT	B	OP	

STATISTICAL OR DATA ANALYSES SOFTWARE PACKAGES

Product name	CPU Model	Operating systems	Class	Status	Comments
SAS		All Platforms	B	OP	
FAME		Unix, Windows	B	OP	No support available at DI.
ORACLE EXPRESS		Unix / Windows NT	C	OP	
ACL		Unix	C	OP	DG XX, audit language
ACUMEN		Unix	C	OP	Eurostat, DG VII.
TROLL		Unix	C	OP	DG 2, 12, 17B.
AREMOS		Unix	C	PO	DG 2, Eurostat.

ADVANCED QUERY AN REPORTING TOOLS

Product name	CPU Model	Operating systems	Class	Status	Comments
BUSINESS OBJECTS		Windows 95 / Windows NT	B	OP	
DISCOVERER 2000		Windows 95 / Windows NT	C	OP	

ADMINISTRATIVE SOFTWARE PACKAGES (EXTERNAL)

Product name	CPU Model	Operating systems	Class	Status	Comments
ASSYST		Unix	B	OP	Central help desk tool.
GLOBUS		Unix	C	OP	Financial package (DG II-SOF)
BAVARIA		BS2000	C	PO	Financial package, running in PO O

ADMINISTRATIVE SOFTWARE PACKAGES (INTERNAL)

Product name	CPU Model	Operating systems	Class	Status	Comments
SIC		Windows 98/NT, Unix	B	OP	
ADONIS		Windows 98/NT, Unix	B	OP	
SYSLOG		Windows 98/NT, Unix	B	OP	
SINCOM		Windows 98/NT, Unix	B	OP	
ELS/INVENTAIRE		Windows 98/NT, Unix	B	OP	
ELS/SICMOD		Windows 98/NT, Unix	B	OP	
SICMOB		Windows 98/NT, Unix	B	OP	

INFRASTRUCTURE INFORMATION SYSTEMS PACKAGES

Product name	CPU Model	Operating systems	Class	Status	Comments
MULTILIS		Unix	C	OP	
MILLENIUMS		CC MVS	C	OP	Financial package, running in PO O
IRC		Unix	C	OP	Web information dissemination.
SAP			C	OP	

GEOGRAPHICAL INFORMATION SYSTEMS

Product name	CPU Model	Operating systems	Class	Status	Comments
ARCView		Windows NT	B	OP	No support available DI.
ARC/INFO		Unix	B	OP	No support available DI.
MAP INFO		MS Windows	C	PO	No support available DI.

INTERFACE, PROTOCOL, STANDARD

Product name	CPU Model	Operating systems	Class	Status	Comments
DCE RPC			A	OP	
SQL 2			A	OP	
SQL 3			A	EV	
ODBC 3			A	OP	
JDBC			A	OP	
WINSOCKETS			A	OP	
HTTP 1.1			A	OP	
CORBA IIOP			A	EV	
DCOM			A	EV	
SGML			A	OP	
HTML 3.2			A	OP	
DHTML			A	EV	
J2EE			A	EV	
XML			A	EV	
UNICODE 2.0.			A	OP	

COOPERATION ENTRE LA DI ET LES DG/SERVICES

COMITES/GROUPES	PARTICIPANTS	
e-Commission Steering Committee	Président	F. Colasanti (INFSO)
	Rapporteur	J. Leonard (DI)
	DG	ADMIN, AGRI, AIDCO, BUDG, CCR, COMP, DEV, EAC, ECFIN, EMPL, ENTR, ESTAT, FISH, INFSO, MARKT, OPOCE, PRESS, REGIO, RTD, SANCO, SDT, SG, TAXUD, TRADE
Comité Technique Informatique (CTI)	Président	F. García Morán (DI)
	Rapporteur	R.Rieder (DI)
	DG	Ouvert à toutes les DG
Groupe d'Evaluation des Besoins Informatiques des Services (GEBIS)	Co-Présidents	Bertrand P. (BUDG) / J.P. Weidert (DI)
	Rapporteur	Bertrand P. (BUDG)
	DG	SG, SJ, ENTR, INFSO, EAC, ESTAT, ADMIN, BUDG, IAS, ainsi que AGRI, FISH, DEV, AIDCO (sur base d'une rotation)
Cellule Evolution Stratégique (CES)	Co-Présidents	F. Kodeck (SG) / J. P. Weidert (DI)
	Rapporteur	P. Garant (DI)
	DG	SDT, BUDG, ENTR, ADMIN, INFSO, ESTAT, AIDCO, ECFIN, SG, EMPL
Cellule Systèmes d'Information (CSI)	Co-Présidents	J.P. Buisseret (BUDG) / T. Vassiliadis (DI)
	Rapporteur	P. Garant (DI) ad interim
	DG	BUDG, ENTR, AIDCO, SANCO, ADMIN, TAXUD, ESTAT, EMPL, OLAF, ECFIN, SG, AGRI
Sous-Comité CTI « E-Commission technological Platform »	Co-Présidents	G. Benali (DI) / W. Beurms (ENTR)
	Rapporteur	G. Benali (DI)
	DG	Ouvert à toutes les DG
User Committee Adonis	Président	J.F. Blerot (DI)
	Rapporteur	R. Rinkens (DI)
	DG	Ouvert à toutes les DG
Groupe de travail Formation Informatique	Président	J. L. Brousmiche (DI)
	Rapporteur	A. Puers (DI)
	DG	EMPL, DEV, ADMIN, PRESS, ENV, INFSO, MARKT, REGIO, BUDG, OPOCE, SJ
Groupe Interservices IDA	Président	M. Finetti (ENTR)
	Rapporteur	G. Murgia (ENTR)
	DG	Ouvert à toutes les DG

Calendrier 38/2002

concernant la coopération entre la DI et les DG / SERVICES 26.11.2002

	COMITES				Information
(2)	28.11.2002	*annulée*		Cellule Evolution Stratégique	L. MANNEBACK
	11.12.2002	10H00-17H30	Bruxelles	Comité Technique Informatique	R. RIEDER
(1)	22.01.2003	10H00-17H30	Bruxelles	Comité Technique Informatique	R. RIEDER
(1)	19.02.2003	10H00-17H30	Bruxelles	Comité Technique Informatique	R. RIEDER
(1)	26.03.2003	10H00-17H30	Bruxelles	Comité Technique Informatique	R. RIEDER

	GROUPE DE TRAVAIL				Information
	28.11.2002	15H00-17H00	JECL 7/7F	Groupe de Travail "Interopérabilité des systèmes informatiques de gestion"	T. VASSILIADIS Tel.: 61739
	12.12.2002	09H15-12H15	JECL 7/1A	Groupe de Travail "Formation Informatique "	J.-L. BROUSMICHE A. PUERS (55793/56193)

	PRESENTATIONS / DEMONSTRATIONS / SEMINAIRES / WORKSHOPS / COURS / AUTRES				Information
	26.11.2002	10H00-17H00	JECL 7E	Présentation Coldfusion MX, Flash and other Macromedia products	G. GUTFREUND Tel.: 34038
(2)	28.11.2002	*annulée*		User Forum sur les Services du Data Centre	M. GUINET-VERNADAT Tel.: 34538
(1)	03.12.2002	10H00-17H00	WAG C4	Présentation Coldfusion XM, Flash and other Macromedia products	G. GUTFREUND Tel.: 34038

(1) nouvelle action
(2) annulation

Contributions: à envoyer à F. ROSSA JMO C2/113
e-mail: Francois.Rossa@cec.eu.int
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