

b.i.

Bulletin Informatique

JANVIER 1999

| | |
|--|----|
| Message de Madame C. FLESCHE | 3 |
| COMMUNICATIONS | 5 |
| STB INFO | 9 |
| INFORMATIONS DU CENTRE DE CALCUL | 14 |
| ARTICLES | |
| . La certification pédagogique des formateurs Bureautique | 16 |
| . Exemple de consolidation de serveurs au Centre de calcul | 17 |
| . The millennium BUG - Testing: issues and benefits | 20 |
| . The Euro comes to your PC | 26 |
| . AEIS-euro - A new forum for debate | 28 |
| . Secure E-Mail in DG IV | 31 |
| . Les Travaux du CII (Comité Interinstitutionnel de l'informatique) en 1998 | 35 |
| . Internet application development - Some reflections around the REDIS project | 37 |
| . Electronic documents come to DG XIX | 41 |
| ORGANISATION | 42 |
| TABLEAUX DE BORD | |
| . Budget informatique | 45 |
| . Ressources humaines | 46 |
| . Projets d'infrastructure | 47 |
| . Formation | 48 |
| LISTE DES PRODUITS | 49 |
| COMITES / GROUPES DE TRAVAIL | 64 |
| CALENDRIER | 65 |

C.E. / Direction Informatique / Unité Relations Utilisateurs et Cohérence Informatique

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DOCUMENT INTERNE

Message de M^{me} C. FLESCHE, Directeur général

Tout le monde en est aujourd'hui conscient: l'année 1999 sera une année d'une importance capitale pour la communauté informatique au plan mondial. Elle sera doublement importante pour la communauté informatique de la Commission.

A l'échelle planétaire, d'importants efforts devront être déployés pour permettre un passage harmonieux d'un millénaire à l'autre dans le domaine informatique. Et le problème n'a pas uniquement un aspect informatique; il concerne au même titre les responsables opérationnels de tout genre. Heureusement la prise de conscience générale des conséquences funestes que le fameux « Y2K bug », le bogue du 2^{ème} millénaire, infligera aux organisations insuffisamment préparées, augmente. Dans ce contexte, la mise en place des solutions techniques appropriées et la préparation de plans de contingence est la première priorité des informaticiens de la Commission et doit le rester tout au long de l'exercice 1999.

Parallèlement, à l'intérieur de la Commission, la Direction Informatique met en œuvre une réorganisation qui doit permettre une adaptation de ses structures et de ses méthodes de travail. Quelques huit années se sont écoulées depuis la dernière adaptation des structures des services informatiques de la Commission. Depuis lors, la technologie a connu des évolutions fulgurantes, notamment dans la foulée de l'intégration de la transmission des données, de l'image et de la voix. Il convient aujourd'hui d'adapter les structures administratives à cette évolution. La réorganisation de la Direction Informatique se traduira en pratique par un renforcement des relations entre la DI et ses clients. Elle passera par une définition du catalogue des services offerts qui précisera les performances convenues, les coûts encourus et les responsabilités réciproques. Une attention particulière sera accordée au renforcement de la gestion de la qualité et au développement de la formation informatique dans son ensemble.

L'évolution des technologies de l'information entraînera, à moyen terme, de profonds changements de notre environnement de travail grâce au développement d'outils puissants d'aide à la décision dits de « knowledge management ». Seules d'importantes adaptations des procédures et des structures permettront d'en valoriser pleinement les possibilités. La réorganisation de la Direction Informatique est un premier pas essentiel sur la voie qui nous permettra de relever ce défi.

En conclusion, je voudrais vous remercier, vous tous qui contribuez quotidiennement aux progrès de l'informatique au sein des services de la Commission. Vous serez appelés à consentir des sacrifices particuliers dans le cadre du passage à l'année 2000. Votre engagement sans faille sera indispensable pour garantir la mise en œuvre des conditions techniques nécessaires à la naissance de la Commission de demain.

Dans toutes ces entreprises, je sais que la Commission peut compter sur vous.

Colette FLESCHE

Calendrier des réunions CTI pour 1999

| | |
|-------------------|-------------------|
| 10 février 1999 | Bruxelles |
| 10 mars 1999 | Bruxelles |
| 21 avril 1999 | Bruxelles |
| 19 mai 1999 | Bruxelles |
| 16 juin 1999 | Luxembourg |
| 14 juillet 1999 | Bruxelles |
| 15 septembre 1999 | Bruxelles |
| 13 octobre 1999 | Bruxelles |
| 10 novembre 1999 | Bruxelles |
| 15 décembre 1999 | Bruxelles |

Calendrier des réunions du GP et de la CCAM de Janvier à Juillet 1999

| Date de dépôt des dossiers | Réunions GP/CCAM | Réunions CCAM |
|----------------------------|--|--|
| Mercredi 06.01.99 (16h) | <u>115ème GP</u> Mercredi 13.01.99 | <u>399ème CCAM</u> Mardi 26.01.99 |
| Lundi 08.02.99 (16h) | <u>116ème GP</u> Mercredi 17.02.99 | <u>400ème CCAM</u> Jeudi 25.02.99 |
| Lundi 08.03.99 (16h) | <u>117ème GP</u> Mercredi 17.03.99 | <u>401ème CCAM</u> Jeudi 25.03.99 |
| Jeudi 08.04.99 (16h) | <u>118ème GP</u> Mardi 20.04.99 | <u>402ème CCAM</u> Jeudi 29.04.99 |
| Lundi 26.04.99 (16h) | <u>119ème GP</u> Mercredi 05.05.99 | <u>403ème CCAM</u> Mercredi 12.05.99 |
| Lundi 17.05.99 (16h) | <u>120ème GP</u> Mercredi 26.05.99 | <u>404ème CCAM</u> Jeudi 03.06.99 |
| Lundi 07.06.99 (16h) | <u>121ème GP</u> Mercredi 16.06.99 | <u>405ème CCAM</u> Mercredi 23.06.99 |
| Lundi 21.06.99 (16h) | <u>122ème GP</u> Mardi 29.06.99 Mercredi 30.06.99 | <u>406ème CCAM</u> Mercredi 07.07.99 Jeudi 08.07.99 |

EUROPA Team - EUROPA Team
- EUROPA Team

Votre bulletin informatique est accessible à partir d'



<http://www.europateam.cc.cec/>

EUROPA Team - EUROPA Team
- EUROPA Team

**Question écrite E-1825/98 posée par
Freddy Blak (PSE) à la Commission**

Objet : Surveillance du personnel travaillant sur ordinateur

La trouvaille à la mode auprès des dirigeants d'entreprises, ce sont des programmes innocemment commercialisés sous l'appellation "d'instruments de comptes rendus". Il s'agit en fait de programmes de surveillance permettant aux chefs de service de connaître dans le moindre détail les sites visités par le personnel sur Internet. Ces programmes permettent également de suivre le personnel opérant sur ordinateur. Dès lors que l'entreprise informe ses employés qu'ils sont sous surveillance, celle-ci est légale, même si les informations recueillies sont consignées dans un épais registre.

La Commission n'estime-t-elle pas que des règles déontologiques s'imposent en matière de surveillance du personnel opérant sur ordinateur?

Réponse donnée par M. Bangemann au nom de la Commission

Si les moyens de surveillance installés par la société traitent des données susceptibles

de concerner l'utilisateur, la question de la protection des données se pose. Si des messages envoyés par courrier électronique sont lus, la question de confidentialité peut également se poser, même si celle-ci ne peut pas être autant protégée au sein d'un réseau d'entreprise que lorsqu'on utilise les systèmes de télécommunication publics. Ces questions sont régies par le droit national, conformément aux dispositions correspondantes des directives communautaires sur la protection des données.

Les Etats membres peuvent également traiter cette question en réglementant les relations entre employeurs et employés.

Il ne semble pas approprié pour l'instant de définir au niveau communautaire des règles plus détaillées sur la manière dont les entreprises devraient aborder ces questions. La commission verrait néanmoins d'un bon œil que des entreprises confrontées à ce type de situation examinent ensemble des solutions concrètes en consultation avec les employés ou des représentants du

Site Internet d'information sur les niveaux des contingents ouverts pour les produits sidérurgiques - décisions n° 2136/97/CECA et n° 1401/97/CECA de la Commission

La Commission européenne gère, à l'échelle de la Communauté, la délivrance des autorisations d'importation de produits sidérurgiques faisant l'objet de restrictions quantitatives (décisions n° 2136/97/CECA et n° 1401/97/CECA de la Commission) et utilise à cet effet un réseau électronique intégré appelé "SIGL" (système intégré de gestion des licences). SIGL est un système informatisé reliant la Commission européenne aux services chargés de délivrer les autorisations d'importation dans les Etats membres.

A partir du 1er janvier 1999, les informations concernant le niveau d'utilisation des contingents et les quantités de produits importées dans le cadre de mesures de surveillance seront accessibles sur le site suivant d'Internet :

<http://sigl.cec.eu.int>

Ce site, qui contient déjà des informations relatives aux licences pour les produits textiles, est consulté gratuitement, sans mot de passe, par le grand public.

Les informations proposées sont établies sur la base des niveaux d'utilisation des restrictions quantitatives (contingents) et seront actualisées toutes les deux heures. Le niveau d'utilisation d'un contingent sidérurgique exprime la quantité de marchandises d'une catégorie déterminée de produits sidérurgiques pour lesquels les autorités émettrices des Etats membres ont délivré des autorisations d'importation et qui ont été imputés sur la limite quantitative en question.

Les informations suivantes pourront être obtenues sur le site Internet :

- par pays exportateur, les quantités utilisées des restrictions quantitatives pour chaque année contingentaire,
- par catégorie d'acier, les quantités utilisées des restrictions quantitatives pour chacun des pays exportateurs correspondants et pour chaque année contingentaire.

A chaque interrogation, les informations suivantes sont disponibles :

- le niveau contingentaire (c'est-à-dire la limite quantitative fixée pour une année contingentaire déterminée),
- le niveau utile (c'est-à-dire le niveau contingentaire ajusté en fonction des règles de flexibilité définies dans les actes réglementaires applicables),
- les quantités autorisées (c'est-à-dire les quantités de marchandises pour lesquelles les services des Etats membres chargés de la gestion des licences ont délivré des autorisations d'importation et qui ont été imputées sur les limites quantitatives correspondantes),
- les quantités en suspens (c'est-à-dire les quantités pour lesquelles un contingent n'est pas disponible, à moins ou avant que le niveau utile ne soit ajusté en fonction des règles de flexibilité),
- l'utilisation du niveau contingentaire (%) (c'est-à-dire la proportion dans laquelle le niveau contingentaire a été utilisé),
- l'utilisation du niveau utile (%) (c'est-à-dire la proportion dans laquelle le niveau utile a été utilisé).

**Question écrite E-1029/98 posée par
Nikitas Kaklamanis (UPE) à la
Commission**

Objet: Législation communautaire concernant les travailleurs utilisant des écrans d'ordinateur

On sait que la santé des travailleurs utilisant des écrans d'ordinateur est mise à rude épreuve.

La Commission pourrait-elle dire s'il existe une législation communautaire imposant le versement d'une indemnité aux travailleurs placés dans ces conditions et s'il est prévu de leur accorder des temps de repos accrus, par exemple sous la forme de congé supplémentaire?

**Réponse donnée par M. Flynn au nom
de la Commission**

Le droit communautaire ne comporte aucune disposition imposant le versement d'une indemnité aux travailleurs utilisant des équipements à écran de visualisation ni de leur accorder un congé supplémentaire. De telles mesures relèvent de la compétence des Etats membres.

La directive 90/270/CEE relative au travail sur des équipements à écran de visualisation prévoit en revanche que l'employeur doit concevoir l'activité du travailleur de telle sorte que le travail quotidien sur écran soit périodiquement interrompu par des pauses ou par des changements d'activité réduisant la charge de travail sur écran.



REFERENCE CONFIGURATION INFO

NTP Reference Configuration version 4.0

The NTP reference configuration version 3.5 was released at the beginning of the NTP migration in September 97. Throughout the migration DI-STB supported version 3.5 as the basis upon which IRM teams would customize and deploy their specific desktop platforms. The same configuration was also pre-installed on more than 13,000 new desktop PCs.

Because we were committed to keep the reference configuration stable through the migration period, all maintenance was done by means of upgrade packs to be added to version 3.5. The NTP migration is now completed and we are aware of the growing divergence between the "baseline" version 3.5 and the specific configurations deployed in the DGs, which often include newer product versions. More importantly, the Service Pack 4 for Windows NT and the Service Release 2 for Office are now available. These upgrades not only provide fixes to a large number of known bugs, but also cover such areas as year 2000 compliance, security and improved support for the Euro symbol.

For these reasons, DI-STB is preparing a new version of the NTP reference configuration. Here are the main features of NTP 4.0:

- Year 2000 compliance
- Improved support for the Euro symbol
- Consolidation of Windows NT Workstation through application of the NT Service Pack 4
- Consolidation of the Office 97 suite through upgrade to Service Release 2
- Upgrades to newer versions of application programs (for example Netscape 4.5)

- Implementation of certain recommendations of the security workgroup of the CTI sub-committee "NTP Migration"

We plan to release a beta version by the end of February 1999. More details are found on Softline:

<http://www.cc.cec/softline/r/ntp/NtpProject/ntps-etup40/home.htm>

The NTP Security Update Kit

At the end of 1997, the CTI sub-committee "NTP Migration" set up a workgroup to review from a security standpoint the implementation of Windows NT (workstation and server) currently deployed. In its report "Security features in NT, SP3 and hotfixes", the workgroup issued a set of recommendations on ways to improve the security of NT workstations and servers.

To help IRM teams implementing those recommendations, DI-STB produced the so-called NTP Security Update Kit. The Kit contains various tools that allow LSAs to easily bring NT workstations and servers to compliance with the recommendations. The Kit also includes documentation detailing the nature of the modifications required, as well as providing a guide to the deployment in a production environment.

The NTP Security Update Kit version 1.0 is available for download from:

<http://www.cc.cec/softline/r/ntp/suk/NtpSukHome.html>

NT SERVER INFO

Workshop

As expressed by several DGs there is a need for clarification of concepts and procedures relating to data recovery in an NT Server environment.

Through a series of practical exercises, STB has developed some basic recovery procedures to demonstrate good practice and provide helpful information for DGs in defining their own recovery procedures.

The exercises have covered various server configurations, including clusters and different failure scenarios. They have been based on LEGATO (Version 5.1) and GHOST, a system utility for rapid installation and recovery. The latter is under evaluation in the Product Management context.

The results will be presented in a workshop, to be given in Luxembourg (on 16 February) and Brussels (on 18 February), with the assistance of a Legato consultant. Documentation used in this workshop will be available in Softline.

For additional information please contact:
F. WILHELMI, B. BESOHE or H. KOHL

DEVELOPMENT TOOLS INFO

Oracle on Windows NT evaluation

The project organized by DI-STB in collaboration with others DG is finished and the final report is available on Softline. Here, we reproduce the recommendations given in this document.

The following recommendations are just a general orientation that should be adequate for a big number of applications in the EC. However, they should not be applied blindly and they should be adapted in each particular case taking into consideration the characteristics of each application and the specific environment in which it will run.

Concerning the hardware configuration to be used as an Oracle server, the following recommendations can be made:

- 4 CPUs 100MHz or better.
- 512 MB of RAM or bigger.

- Disks: depends on application needs but the rule of thumb is, the more the better. To improve performance it is interesting to have different controllers for the different disks, so that the degree of parallelism accessing the disks can be maximised. The implementation of RAID is recommended. The level to be used depends on the application needs. If hardware RAID is not used, at least the use of stripe sets across different disks is suggested (for simplicity and recoverability reasons).

Taking into consideration the configuration proposed and the results of all tests and pilot projects done, the following recommendations could be made concerning the use of Oracle on Windows NT:

- Oracle on Windows NT is recommended for departmental applications with a small to medium number of users (up to 150 concurrent users should be no problem if the application is designed with performance in mind, the database is optimized and the necessary hardware is available). For these systems, a periodic shutdown of the database is recommended.
- Oracle on Windows NT is not recommended for mission critical systems that should be available 24/24.
- Oracle on Windows NT is not recommended for transactional applications where the rate of connections/disconnections to the database is very high. The test showed that with about 80.000 connections per day there is an average gain of 11 MB in the Oracle memory size per day. While it is very unlikely that normal client/server applications used at the EC reach this rate of connections, it may be the case of some Web applications accessible to the external world.

For additional information, please contact:
R. RUIZ DE LA TORRE
G. JOULAIN

Business Objects

Dans le cadre du Product Management de la famille 4 "Information systems Infrastructure", le CTI a décidé l'introduction du produit Business Objects(BO), de l'éditeur du même nom, en classe B dans la catégorie de "advanced query and reporting tool". Suite à l'autorisation de la CCAM un contrat est en train d'être signé pour l'acquisition de ces produits et des services y associés.

Le produit « star » de l'offre BO est le BO reporter/explorer qui est un outil de query, de reporting et d'analyse qui donne la possibilité d'accéder à différentes sources de données à travers un "semantic layer" qui isole l'utilisateur de la complexité du SQL en lui permettant de sélectionner les objets pour la création de ses rapports spécifiques.

Il est important de savoir, que pour qu'un utilisateur final puisse utiliser le produit, l'administrateur ou l'informaticien doit préparer l'environnement nécessaire (Univers dans la terminologie BO) qui lui permette d'accéder aux bases de données choisies.

Les produits principaux de l'offre BO sont:

- Pour l'administration (à utiliser par un professionnel)
 - DESIGNER, pour définir les "univers" à mettre à disposition des utilisateurs
 - SUPERVISOR, pour définir les profils des utilisateurs, les ressources et la sécurité de l'environnement d'accès à l'information

Il faut au minimum 1 licence DESIGNER pour pouvoir utiliser les produits end-user.

- Pour l'end-user
 - REPORTER et EXPLORER pour créer les rapports sur des query qui utilisent les "univers" préparés par l'administrateur
 Ces produits sont disponibles dans une version Client/serveur (à installer sur un poste client PC NT) et une version Web

qui fonctionne sur un browser qui donne accès à une application serveur sur un serveur Unix ou NT.

Pour toute information complémentaire sur ce dossier contacter:

J. MARÍN ou P. BRAHY.

PROJET REDIS

Summary of activities

For the REDIS project, we decided to do a Market Survey. We first defined the functions needed of a development tool and our technical framework to better understand the technologies. We then constituted a project group and launched a market survey targeting 50 vendors identified by the group as present on the market.

We received 22 answers with 32 offers containing several products. We created product sheets, and from all these products, we made a shorter list. We also went, in parallel, through a cycle of presentation and hands-on tests in the DGs.

Current situation

From this analysis, we clearly viewed that there were two different classes of applications: Web applications and Client/Server n-tiers (distributed).

These application classes are based on different technologies: HTML containing Script or Tags, sent to the browser via HTTP, and Java with a component model, and components running in an Application Server.

To better address the development of these applications, different products had to be selected.

It was also clear that some recommendations could be given relatively soon for the Web development (HTML+HTTP), whereas the situation needed more work for the distributed application part: namely, a review of the application servers.

We are currently finalising tests on the products that are likely to be proposed for Web development.

We will have a group meeting and a product management meeting in early February to present the results of these tests and make product propositions.

Future work

In the following months, we will go more in depth in the field of the application servers, by first defining our technical framework for the application servers (what functions and services should they provide, what is important for us), and then asking the vendors to present the products of their offers, showing their implementation of the requested functionality. We will keep you regularly informed of the progress, and the members of our distribution list will be invited for the presentations.

For more information, contact:
DI-STB.J. MARIN (tél: 34531),
P.A. DAMAS (tél: 33497).

OFFICE AUTOMATION INFO

L'utilisation d'HTML dans l'environnement Bureautique

La production de documents HTML en vue d'une publication dans un Web est devenue une tâche courante qui impliquera à terme tous les utilisateurs. Dans ce cadre un certain nombre d'activités sont en cours:

- Convertisseur HTML pour les documents Eurolook. Il s'agit de convertir de façon automatique les documents Eurolook en document HTML sur base d'un modèle de document qui pourra être customisé. Un prototype sera disponible fin mars.
- FrontPage Express, il s'agit d'une version "ligh" compatible avec FrontPage 98 mais d'une utilisation plus simple. Pour ce produit, d'utilisation gratuite, un script sera disponible dans Softline.
- HTML 3.2 syntax checker, outil de validation du code au standard HTML 3.2. (en test au Centre de Calcul).
- Guide d'utilisation de Frontpage 98. Il s'agit d'un guide pour optimiser l'utilisation de FrontPage et faciliter la construction de pages HTML 3.2. Une version draft sera disponible le mois de mars ou avril
- Organisation des environnements de travail avec Frontpage. Une première version de ce document « Frontpage Authoring Environment » est déjà disponible.
- Activités diverses de formation aux niveaux end-users, producteurs d'information ...

Pour avoir plus d'information:
L. ROSETY ou P. BRIZZI.

L'euro et l'infrastructure

L'infrastructure PC sur base de la configuration de référence NTP permet l'introduction, la visualisation et l'impression du symbole €. Cependant, il se peut que votre PC nécessite des ajustements de configuration. Dans Sofline (Office Automation Area) vous trouverez toute l'information nécessaire pour l'utilisation de l'euro sur votre plate-forme, la configuration de la plate-forme pour supporter l'euro, les versions des scripts d'installation pour tous les systèmes (NT Server, NT Workstation et Windows 95) et un utilitaire Ecu2Euro.

Parmi les documents disponibles citons:

- Un petit guide pour les utilisateurs finals (voir le contenu dans ce bulletin)
- L'article "Current state of Euro implementation and standardisation" (mise à jour d'un article publié dans le BI précédent).
- Un guide destiné aux LSA afin de leurs fournir tous les éléments de configuration pour l'utilisation correcte du symbole €.

Pour avoir plus d'information contacter:
J.L. BARRIOS ou Anne Rose HUEMBERT.

Ecu2Euro Converter

A new PC Tool, the "Ecu2Euro Converter", is now available. It is meant for people who have to convert occurrences of the word "ecu" and all its variants ("MECU", "ECUs", etc.) into "euro" in their document(s).

References to the ECU currency are to be found in a substantial number of documents, many of them existing in several languages. Manually replacing ECU and all its variants by euro would be a time-consuming and tedious task.

The "Ecu2Euro Converter" is just the right utility for facilitating this tedious task.

Since the majority of documents to be processed are probably in Word or text format, the "Ecu2Euro Converter" is based on Word97 (running on Windows NT) and accepts the following file formats:

- Word6/95
- Word97
- Flat text and HTML
- Unicode
- Rich Text Format (RTF)

Other file formats such as Excel or PowerPoint might be added in future project phases.

Basic features

- NT environment
- Fully configurable set of rules to be applied to the conversion, also according to different languages
- Configurable set of files / directories to be analysed
- Background or online mode (user can apply / refuse any individual change)
- Log and backup functions supported

Despite the fact that this tool has been developed for the EURO, being totally configurable, it might be used to verify occurrences of any string in a set of files. It can be used to verify HTML documents in a web as well.

A Step-by-Step Guide is included in the "Ecu2Euro Converter" Help.

You can download this tool from Softline: <http://www.cc.cec/softline/r/ntp/offtools/euro/euroconv.zip>

We thank Mr RAISSIS and Mr DUTRANNOIS of DG II for their contribution to the development of this tool.

For additional information, please contact: Paolo BRIZZI or José Luis BARRIOS

Point de contacts DI-STB cités sous cette rubrique;

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1. PLATES-FORMES

| 1. PLATES-FORMES | | | | | | |
|------------------|--------------------|-------------------------|---------------|---------------|------------------|-------------------|
| Nom | Système d'exploit. | Disponibilité ON-LINE % | | Charge (TINS) | | |
| | | Déc-98 | 4ème trim. 98 | Déc- 98 | Janv-98 à déc-98 | Moyenne mensuelle |
| AMDAHL | MVS | 100,00% | 99,74% | 171,27 | 2.048,14 | 170,68 |
| | PRODCRAY | 100,00% | 99,86% | 272,91 | 3.023,73 | 251,98 |
| | SI2PRO | --- | --- | 125,00 | 311,76 | 25,98 |
| | VM | 100,00% | 99,70% | 8,80 | 223,69 | 18,64 |
| BULL | GCOS8 | 100,00% | 96,21% | 9,74 | 127,42 | 10,62 |
| DIGITAL | SINCOM A | --- | --- | 40,58 | 578,87 | 48,24 |
| | SINCOM D | --- | --- | 9,83 | 510,18 | 42,52 |
| ICL | OSLUX1 | --- | --- | 5,53 | 516,96 | 43,08 |
| SNI | BS2000 | 100,00% | 99,98% | 31,82 | 318,76 | 26,56 |
| | MILES-4 | 100,00% | 99,96% | 59,10 | 728,73 | 60,73 |
| | MILES-10 | 100,00% | 99,96% | 53,96 | 692,64 | 57,72 |
| | M600 | 100,00% | 100,00% | 107,33 | 211,25 | 17,60 |
| TOTAL | | 100,00% | 99,43% | 895,87 | 9.292,13 | 774,34 |

2. CHARGE (EN TINS) PAR SYSTEMES D'INFORMATION

| 2. CHARGE (EN TINS) PAR SYSTEMES D'INFORMATION | | | | | | |
|--|----------|----------------|------------------|-------------------|-----------------|-----------------|
| Systèmes d'information | Systèmes | Consom. déc-98 | janv-98 à déc-98 | Moyenne mensuelle | 4° trim 97 | 4° trim. 98 |
| COMEXT | PRODCRAY | 189,36 | 1.830,16 | 152,51 | 747,32 | 482,26 |
| SINCOM | SI2PR | 125,00 | 311,76 | 25,98 | | 267,11 |
| SINCOM | MVS | 123,70 | 1.265,73 | 105,48 | 317,23 | 346,54 |
| EURAMIS | M600 | 107,32 | 211,24 | 17,60 | | 211,24 |
| SINCOM | PRODCRAY | 44,37 | 417,19 | 34,77 | 392,66 | 131,23 |
| ENDUSER | SINCOMA | 40,58 | 212,05 | 17,67 | | 161,26 |
| DOCSEVER | MILES-4 | 39,77 | 557,22 | 46,43 | 211,81 | 112,30 |
| NAP | MILES-10 | 32,37 | 427,70 | 35,64 | 253,24 | 74,04 |
| NEWCRON | PRODCRAY | 32,27 | 433,07 | 36,09 | 143,41 | 137,03 |
| SYSLING | MVS | 28,80 | 363,75 | 30,31 | 68,61 | 89,82 |
| WINSUIVI | MILES-4 | 16,57 | 116,89 | 9,74 | 2,43 | 49,24 |
| APPOLREG | MVS | 11,89 | 97,59 | 8,13 | | 41,15 |
| PAIE | BS2000 | 11,60 | 64,48 | 5,37 | 7,51 | 29,03 |
| ASSIST | MILES-10 | 10,29 | 150,42 | 12,54 | 17,75 | 21,80 |
| ENDUSER | SINCOMD | 9,83 | 164,81 | 13,73 | | 87,31 |
| SOFTSERV | BS2000 | 9,57 | 122,46 | 10,20 | 23,11 | 34,90 |
| CELEX | GCOS8 | 8,30 | 91,29 | 7,61 | 23,06 | 26,41 |
| SYSSERV | OSLUX1 | 5,52 | 177,41 | 14,78 | 216,78 | 20,57 |
| CRONSEC1 | PRODCRAY | 4,56 | 102,51 | 8,54 | 43,71 | 20,21 |
| EUROFARM | MVS | 4,49 | 274,97 | 22,91 | 37,66 | 39,97 |
| Autres SI | | 39,71 | 1.899,43 | 158,29 | 1.053,64 | 200,82 |
| Total | | 895,87 | 9.292,13 | 774,34 | 3.559,93 | 2.584,24 |

**3. CHARGE (EN TINS) PAR DG TITULAIRES DES SYSTEMES D'INFORMATION**

| 3. CHARGE (EN TINS) PAR DG TITULAIRES DES SYSTEMES D'INFORMATION | | | | | |
|---|-----------------------|-------------------------|--------------------------|--------------------|--------------------|
| DG Titulaires | Consom. déc-98 | janv-98 à déc-98 | Moyenne mensuelle | 4° trim. 97 | 4° trim. 98 |
| DG XIX | 293,13 | 2.707,81 | 225,65 | 1.140,53 | 745,84 |
| EUROSTAT | 239,43 | 2.811,61 | 234,30 | 1.021,20 | 705,99 |
| SDT | 196,41 | 1.655,70 | 137,98 | 368,70 | 478,28 |
| DI | 71,08 | 678,02 | 56,50 | 46,13 | 327,13 |
| DG XVI | 44,33 | 563,92 | 46,99 | 286,13 | 115,71 |
| DG IX | 26,50 | 193,07 | 16,09 | 43,71 | 71,27 |
| OPOCE | 8,30 | 91,29 | 7,61 | 23,06 | 26,41 |
| DG I | 6,03 | 188,57 | 15,71 | 216,89 | 22,34 |
| DG XVII | 4,83 | 78,85 | 6,57 | 1,64 | 34,14 |
| DG VII | 2,76 | 63,65 | 5,30 | 15,34 | 17,15 |
| SG | 1,44 | 29,02 | 2,42 | 9,29 | 7,92 |
| DG IV | 0,97 | 6,75 | 0,56 | 2,37 | 2,07 |
| DG XVIII | 0,37 | 16,65 | 1,39 | 0,70 | 1,15 |
| DG III | 0,17 | 201,63 | 16,80 | 381,32 | 27,95 |
| CDC | 0,09 | 1,08 | 0,09 | 0,27 | 0,27 |
| DG VI | 0,04 | 3,68 | 0,31 | 1,77 | 0,52 |
| DG X | 0,01 | 0,81 | 0,07 | 0,81 | 0,10 |
| DG II | 0,00 | 0,03 | 0,00 | 0,04 | 0,00 |
| SPP | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| Total | 895,87 | 9.292,13 | 774,34 | 3.559,93 | 2.584,24 |

LA CERTIFICATION PEDAGOGIQUE DES FORMATEURS BUREAUTIQUES

En date du 23 juillet 1997, le contrat de sous-traitance commune couvrant la formation Bureautique et le développement d'autoformation, a été signé entre la Commission et la société KSI. Depuis lors, beaucoup d'eau a coulé sous les ponts, et quelques 4000 jours-instructeurs ont été prestes en un peu plus d'un an dans les locaux de la Commission par les 27 instructeurs certifiés de la firme Synaps.

Le contrat comporte un volet assurance qualité qui implique la mise en œuvre d'un plan qualité du projet. Celui-ci décrit les rôles et les responsabilités des différents intervenants, établit les critères de qualité, indique les méthodes de suivi et de contrôle. L'un des critères de qualité est que seuls les instructeurs certifiés par la Commission, peuvent assurer les formations Bureautique.

La certification consiste en une vérification sur le terrain et durant une demi-journée, de l'aptitude pédagogique des instructeurs. Une grille ne comportant pas moins de 28 critères est utilisée à cet effet et l'évaluation est faite par un responsable de la formation de la DI. Les grandes classes de critères sont respectivement: l'attitude de l'instructeur envers le public, la poursuite des objectifs du cours, l'adaptation à la situation d'apprentissage des participants, la structuration du processus d'enseignement, l'activation des participants et la garantie du transfert et des résultats du cours. L'évaluation est suivie d'une entrevue entre le certificateur et le certifié afin de cerner les points forts et les points à éventuellement améliorer dans l'approche pédagogique.

C'est ainsi que le 11 décembre 1998, s'est tenue dans les locaux du Forum Informatique à Bruxelles, une cérémonie particulièrement sympathique de remise des certificats d'aptitude pédagogique aux instructeurs certifiés.

M. BAROSCH, chef de l'unité Support Logistique et Formation, représentait pour la circonstance M. DE ESTEBAN, absent pour cause de mission. M. PENING, le responsable qualité, a rappelé les enjeux de la formation Bureautique et l'importance de l'approche qualité dans le domaine de la sous-traitance.

Les certificats furent remis par M. GRITSCH, chef du projet «Formation Bureautique».

Comme il se doit en de pareilles occasions, la cérémonie se clôtura dans une ambiance très détendue par un vin d'honneur.



Mme Martinelle, formatrice Synaps, recevant son certificat des mains de M. Gritsch

Jean Louis BROUSMICHE
DI / FORUM

EXEMPLE DE CONSOLIDATION DE SERVEURS AU CENTRE DE CALCUL

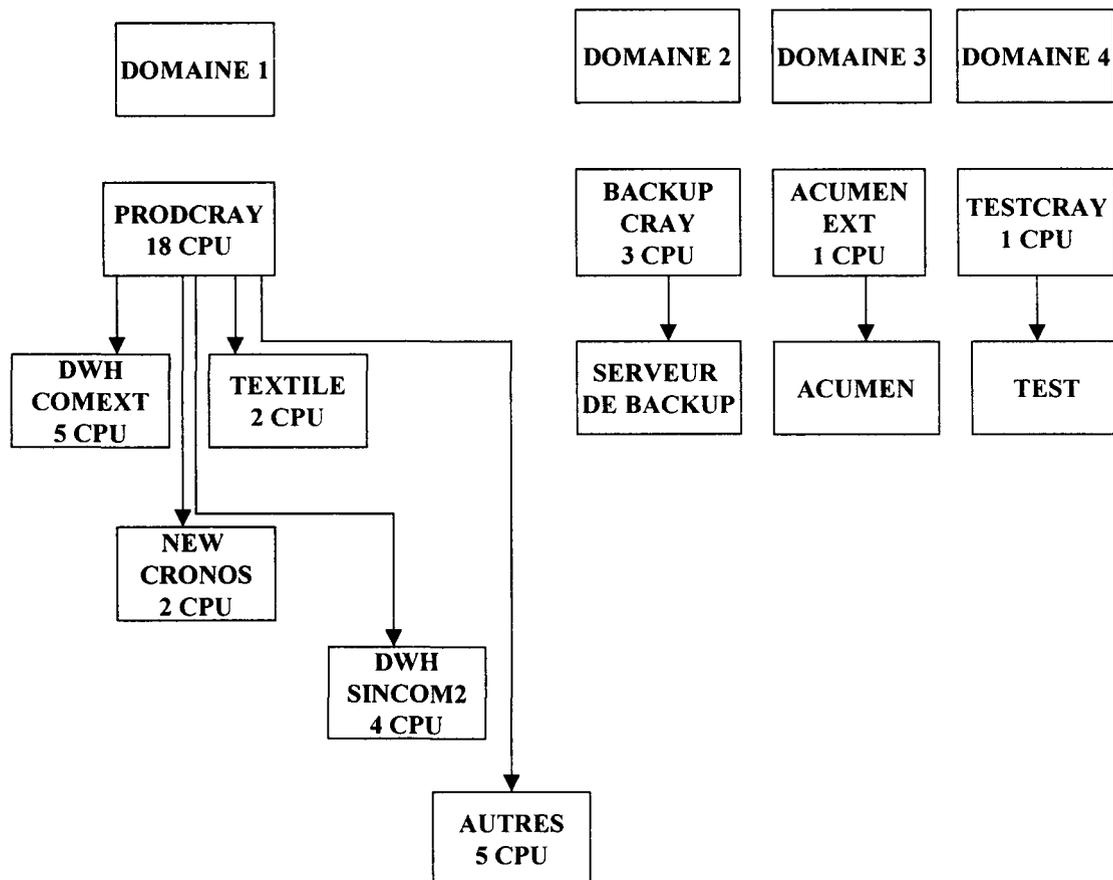
Au début des années 1990, avec l'introduction de l'architecture client-serveur, des systèmes UNIX, et de la décentralisation, le monde informatique a vu la multiplication tous azimuts de serveurs. Très souvent, on ne mettait qu'une application par machine, du fait qu'au début ces systèmes n'offraient ni la stabilité suffisante ni la gestion des ressources nécessaire pour supporter plusieurs applications, à l'opposé des mainframes où cohabitent des dizaines de services d'information (avec NT, on se retrouve aujourd'hui à une situation comparable à celle de UNIX au début des années 1990).

En 1995, le Centre de Calcul a lancé un appel d'offres pour acquérir des serveurs UNIX destinés à quelques applications importantes: datawarehouse SINCOM2, COMEXT et de DIFFUSION. Parmi les 3 types de serveurs UNIX retenus à savoir BULL AIX, DIGITAL UNIX et CRAY SOLARIS, le dernier offrait la possibilité de consolider plusieurs applications sur une seule machine grâce aux facilités suivantes:

- Le maximum de 64 CPU et de 64 GIGABYTES de mémoire peut être divisé en plusieurs domaines (max. 8)
- Chaque domaine peut en plus être partagé: on peut définir des groupes d'utilisateurs et d'applications auxquelles on alloue du CPU, de la mémoire et/ou de l'espace disque permettant de garantir les ressources nécessaires au bon fonctionnement des systèmes d'information et de respecter les contrats de service signés avec les Directions Générales.

Les négociations à la signature des contrats nous ont permis de remplacer la machine CRAY, installée en octobre 1996, par son successeur dans la gamme, un Enterprise 10000 de SUN au printemps 1997 avec des nouveaux processeurs de 250 MHZ et des moyens de transfert de données beaucoup plus performants.

La configuration actuelle est divisée en quatre domaines, dont le domaine principal comporte cinq partitions:



Le datawarehouse COMEXT est pour l'instant l'application la plus importante avec ses 752 utilisateurs définis. En tenant compte de la mise en production du datawarehouse SINCOM2 à la Commission (plus de 2000 utilisateurs potentiels), COMEXT risque d'être détrôné.

Expériences concrètes avec les partitions dans le domaine PRODCRAY.

Le fait de regrouper plusieurs applications dans un seul environnement de production offre de nombreux avantages par rapport à la dispersion de celles-ci sur des serveurs individuels:

- L'overhead système (gestion des priorités, des entrées, sorties, etc.) n'entre en compte qu'une seule fois.
- Un seul point d'entrée pour la définition des utilisateurs, leurs droits d'accès et la comptabilité associée.
- La gestion de l'espace disque est largement simplifiée par le fait qu'on peut facilement puiser dans une réserve commune en cas de besoin.
- La surveillance de l'ensemble au niveau des performances, de la disponibilité, des sauvegardes et des restaurations d'un seul système représente une économie sensible au niveau des ingénieurs système.

- L'utilisation de partitions garantit la disponibilité des ressources contractuelles aux applications ou aux groupes d'utilisateurs, tout en laissant à la disposition de la partition système les ressources non utilisées.
- En cas de besoin, les ressources peuvent être redistribuées par quelques commandes: le suivi journalier a montré que la partition DHW COMEXT était chargée à 100% pendant les heures de pointe. Par une seule commande leurs ressources permanentes ont été augmentées de 25% en passant de 4 à 5 CPU. D'autres applications doivent faire face à des besoins temporaires dans le cas de travaux importants. Ainsi on a doublé les ressources CPU de l'application NEW CRONOS pendant quelques jours.

Au niveau budgétaire plusieurs facteurs plaident en faveur de la consolidation:

- D'après le Gartner Group, les petits serveurs sont le plus souvent sous-utilisés (<20%), alors que dans le monde des mainframe IBM une charge de 100% aux heures de pointe n'est pas exceptionnelle.
- Le coût des licences est le plus souvent basé sur le nombre de serveurs dans le monde UNIX.
- La planification de capacité, qui constitue un cauchemar dans un monde multiserveurs, est largement simplifiée avec la consolidation.

Plusieurs études menées par des organismes indépendants ont montré que les coûts peuvent être réduits de 25% à 30% par la consolidation. Dans un cas concret, la réduction de 6 serveurs à 2 a permis à une société de réduire les coûts de 38% sur une période de 3 ans.

Voilà pourquoi il n'est donc pas étonnant que parmi les priorités les plus importantes des data center la consolidation des serveurs se retrouve en quatrième position (compatibilité Y2K en première position d'après une étude du META Group).

Conclusion

Etant donné qu'il devient de plus en plus difficile de trouver des ressources budgétaires et humaines nécessaires pour l'informatique d'un côté, et que d'autre part l'inventaire effectué dans le cadre de la problématique "Y2K compliance" a montré la présence d'un nombre impressionnant de petits serveurs à la Commission, il est peut être temps de réfléchir à la consolidation ou au moins d'essayer d'appliquer à l'avenir le principe « keep the rabbits from multiplying ».

Nico NOSBUSCH
DI / CC

The Millennium BUG

Testing: Issues and benefits

This report is based on the contents of the seminar "EUROSTAR 98" on the subject "Application testing YEAR 2000"

1. Executive Summary

1.1. The bug

The millennium bug affects **cross millennium dates comparison**. This is what we have to fight if we want to get safely to the next millennium.

| |
|-------------|
| 1999 < 2000 |
| 99 > 00 |

Every effort invested in trying to solve anything else (existing bugs, development project management issues, ...) simply is an investment that will divert energy from this primary goal.

The primary issue for the management is that it is not possible to test 100% of all programs. Ultimately the problem reduces to a risk versus cost trade-off. In real life, depending on the criticality cost range from 0% to 80% of the remediation budget.

1.2. Usefulness, purpose and benefits of testing

- For Information systems, undetected residual program faults will show up in one of two ways:
 - Outright program failure and halt of the application until the program can be repaired
 - Data corruption and halt until the program and the data errors are repaired
- Testing is required to both ensure that:
 - Year 2000 modifications did not introduce new problems

- The programs will continue to operate correctly as the data they process begins to include dates in the 2000's as well as 1900's.

- Testing has a very positive impact on the remediation process itself, it brings visibility and the "focusing" methods used in the test process are highly appreciated at the remediation stage.

It is important to keep in mind that all software has faults but most are too trivial to worry about, this is referred to as a containable level of faults.

The millennium bug is a matter of degree, not a matter of kind. The level of daily faults can overwhelm the support staff and the contingency backup support, which is designed for isolated crises.

This paper summarises what is required to achieve risk minimisation within the limits of what is practical and affordable.

2. Some questioning

2.1. Data versus code modification

A naïve approach to Y2K remediation for an application would be to modify all the data and consider it as ok.

Highly experienced people in the Y2K remediation business won't even think of data modification. They take it for granted that the code only has to be modified, at any cost.

If your application consist of much more data than code *and* you have total control on the current and past data, then you may think of data modification. Unfortunately, this definition applies only for your local, personal, non archived, excel or access files. This is the reason why most professionals start immediately with code modification and don't want to touch the "holy" data.

2.2. Remediation and testing ratio

What is the best remediation and testing investment ratio?

Remediation is a necessity, the question then becomes: what return on investment can I expect from testing?

Since testing is the most obvious way to avoid blind remediation, let's see if we have some other means to achieve the same goal:

- Do we have a strong culture of internal, well documented application development?
- Do we have a strong culture of development outsourcing and quality assurance procedures?

If both questions have a negative answer, then the knowledge is in the code and among the users if they really understand the business, in which case the only solution is to test with their co-operation.

3. Methodological Overview

3.1. Risk Minimisation Project

We cannot eliminate all risk in a Year 2000 project. A practical goal is to reduce the faults to a containable level.

To minimise risk in Year 2000 testing, we must meet two conditions:

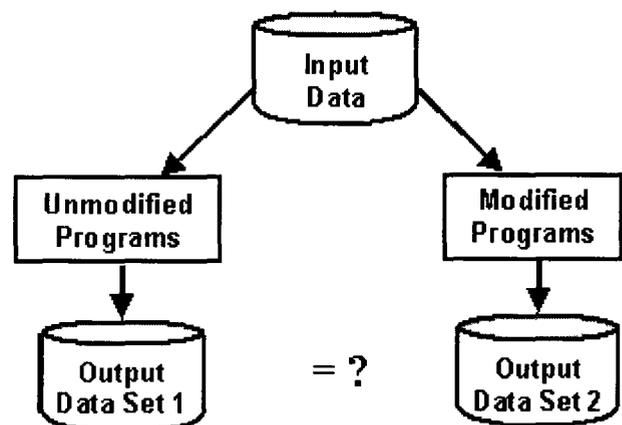
- every line of code in every combination of used pathway through a program must be executed

- every computation or comparison involving dates within the program must be examined for its boundary conditions, and each must be executed with a sufficient combination of numerical conditions to ensure that any inaccuracy results will be revealed

These conditions are discussed in more detail below.

3.1.1 Testing Methodology

The practical way to meet these conditions for a large scale testing project is through comparison, or *regression testing*, initially at the unit test stage but eventually at each of the stages of testing. Regression testing can be visualised like this:



It is important to note that this is the stage where most (90%) bugs are usually found. Of course, the use of the "Unmodified program" implies that this kind of testing has to be made at *pre-2000 dates*, more often at current date or even past dates if automation and reproducibility have to be achieved.

Therefore, test in a *post-2000 environment* is something we have to do in the very late stages of the testing process.

3.1.2 Unit Versus Production Parallel Testing

Testing is typically divided into the following stages:

| Test type | Definition | In our case ... |
|------------------------------------|--|----------------------------------|
| Unit, non regression | Processing the minimum amount of data that will yield exercise of all test paths by a single program | Focus on Date comparison modules |
| Integration, non regression | Dual processing of old and new program code against separate but identical production databases, with regression comparisons | Within our infrastructure |
| Production (or system) | The stringing together of unit tests into production execution groups using the same test data as unit testing | Across DG or Member States? |
| Acceptance | Demonstrating final acceptance criteria have been met to allow the repaired system into production | In case of outsourcing |
| Stress performance | To determine the throughput capacities of the new program code | If relevant |

It is up to the test manager to decide the proportion between Unit, Integration and Production testing.

One thing is for sure, automated testing is mainly available at Unit level.

3.1.3 System infrastructure versus development tools and Code compliance

To remediate and test a piece of code in a current or even a past date environment, you need real Y2K compliance for the development tool only.

This leaves room to adapt the remaining infrastructure (Hardware, OS, ...) later on, taking advantage of this de-synchronised approach to apply the latest patches to the system when they become available.

3.1.4 The Problem of Logistics

Now we come to the crux of the problem: to truly minimise our risk from failure, we require sufficient computer and personnel resources to run fully parallel for at least a year for baseline, 19XX, and perhaps as many as 5 future date cases. Thus, we would require 1 to 7 times the current resources used in production work in terms of CPU horsepower, disk space, floor space, air conditioning, operations personnel, and the balance of the computer infrastructure.

However, even if these resources were fully available, or if we decided to stretch out the testing for several years, the logistical organisation required to make effective use of them could still defeat the testing project. Consider only one issue among many: data ageing. Data ageing requires that a database be duplicated for each of the future cases, the dates aged forward according to the test plan, and tape backups taken to allow reloads and reruns after found faults are rectified. One client site has reported that it took two weeks to physically age the data for a single test run involving 107 batch programs, of 39,000 needed to test. Just the time to reload test data and retest the repair of a discovered fault can seriously degrade a project schedule.

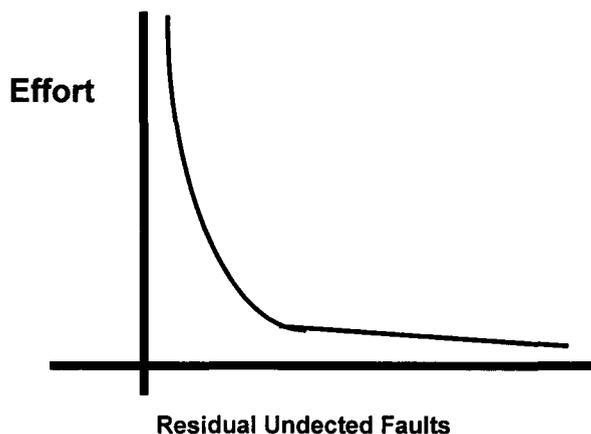
3.2. Risk and Cost Optimisation Project

The practical question raised is how to achieve an optimal balance of risk and costs, within the time frame remaining before the applications reach their time horizon for failure.

3.2.1 Determining Testing Budgets or Efforts

In deciding to pursue a project at less than the minimum possible risk, we are implicitly deciding to accept a degree of business risk. We do so either because sufficient resources cannot be physically deployed in the time remaining to reach the minimum risk criterion.

Risk can be presumed to be proportional to the number of remaining undetected faults. Since the incremental cost of finding the next fault within a system will continue to increase as we discover problems, fix them and test for remaining problems, we can expect that a graph of cost versus residual faults will be shaped like this:



The salient characteristic of a graph like this is that there is no obvious point where we can say that we have completed enough testing.

Indeed, this is precisely the point: we have to have another criterion for deciding to stop, because there is no logical point within the technical information where we can say that we have reached a containable level of residual faults.

As a result, we recommend that testing budgets be derived from a business analysis (potential failure, consequences, ...)

This set of subjective analyses must be integrated and a budget derived. We recommend that the process should be similar to that employed in deciding whether to pay an insurance premium insuring against a rare event such as a war risk. The questions to be answered are, how much self-insurance are you willing to carry, and how much are you willing to pay for what degree of coverage.

Once we have a budget, it is then possible to concentrate on obtaining the widest possible code coverage within the allocated

resources. Optimisation can be achieved in a number of areas:

- Triage, both of systems and of individual programs within systems
- Logical code coverage
- Future date data coverage

Let us consider these each in turn.

3.2.2 Triage

In our case, the triage process is directly submitted to EC Decision 95/1510 that deals with the security classification of every Information System within the Institution.

Prioritisation 2 is related to time horizon to failure, i.e., the date upon which we can reasonably anticipate program failure or data corruption to begin to occur if the renovated programs are not yet in production.

Prioritisation 3 needs to be made on whether a contingency plan is or can be made available.

A final prioritisation needs to be made of the assessed likelihood of the failure actually occurring, balanced against the technical audit.

Once all the prioritisation's are complete, an optimised overall priority derived from a set of weightings unique to each organisation can be assigned. This priority can be used to determine the first level of triage, and the applications should then be tested in the order of this priority.

The same process occurs within the application itself, e.g. report programs that only move date data but perform no calculations nor comparisons may be considered for avoiding future date testing entirely.

At the Unit Test level, we can construct a qualitative risk matrix derived from the technical audit:

| Probability of Failure Assessment | Date Data Movement Only | Date Data Calculations or Comparisons |
|--|-------------------------|---------------------------------------|
| Data retrieval only | Very Low | Low |
| Extract to or update of subsidiary files | Low | Mid |
| Update of main files or database | Low | High |

Of course, care must be taken of the future use of these data, and certainly also if the application is surrounded by a galaxy of decentralised small pieces of diffusion, data entry, decision taking or modification pieces of code.

Programs that only move date data are contrasted with those that perform calculations or comparisons on date data. Programs that only retrieve data are contrasted with those that update the main data files or database. This analysis will only be as accurate as the identification of date fields, which is typically on the order of 95% to 98% accurate. Therefore, it cannot be the basis for eliminating testing altogether, but it does indicate where to profitably emphasise testing and where testing can be reduced with a reasonable degree of safety.

3.2.3 Logical code coverage

The test coverage (both test path coverage and future date coverage) goals for each application should be determined from a combination of prioritisation, technical details of the application, and time remaining to failure. It is important to ensure that test coverage goals are seen as flexible, to be extended if the project is ahead of schedule and reduced if behind schedule.

3.2.4 Future date data coverage

Future date data coverage includes both year to year coverage and coverage within years.

To provide complete risk minimisation for year to year coverage, we need to process with:

- date data containing years wholly prior to 2000,

- date data containing years which cross the 1999-2000 boundary, and date data containing years wholly after 2000

3.2.5 Avoiding Analysis Paralysis

As time is growing short, it is imperative to balance time spent in analysis against the time spent actually testing. There will be occasions when it may be faster to test an application than to determine that it does not need to be tested. Furthermore, the testing project must be flexible, allowing as many mid-course corrections as needed. In this way, testing can commence immediately, while analysis to refine the process proceeds in parallel.

3.2.6 Opportunities For Economies of Scale

So far, we have discussed the theory of conventional testing, both the risk minimised case and the risk and cost optimised case.

A fully automated testing methodology, in which the process can be designed to be self-executing, is distinguished from partial automation in the cases of re-useable testing modules, automated file comparisons, and other ad hoc uses of automated tools.

The concept behind fully automated Year 2000 testing is used for regression testing and can be stated relatively simply:

- Capture an image of *all* I/O's flowing through the baseline program, including READ/WRITE, CICS, SQL and other database CALL's, DATE/TIME CALL's, and indeed any action which causes data to be transferred into or out of the program

- Replay that image through the modified program to achieve 19XX testing while insulated from the production environment
- Replay the same image through the modified program with date data offset by a parameterised interval to achieve 20XX testing

3.2.7 *Logistical Implications of Automated Testing*

By reducing all testing to processing against a captured image of test or production data, potential faults in programs under test cannot affect production data. This by itself will eliminate the otherwise mandatory effort by staff systems personnel to create multiple isolated testing environments for application testing. It will also eliminate the need to directly involve end-user personnel as a critical path element in performing testing. It does not, however, eliminate the need to perform final acceptance testing in a separate system or isolated region with all software components set to post year 2000.

Less obviously, by making practical the ability to test with production data volumes, extended production parallel testing becomes sensible, and the economies of scale derived from this approach will allow a major testing project to reach the risk minimisation standard while using a practical level of staff and computer resources.

4. Conclusions

If we accept to modify our current beliefs in the field of testing, this is what we can do:

- Improve our remediation processes with the feedback benefits brought by testing
- Focus, at each stage of both the remediation and testing processes, to the most efficient actions, based on triage and efficient logical code coverage
- Start **now** at the more appropriate stages of testing, instead of waiting to see what happens in a Commission-wide / future date / difficult to set-up environment.
- Be ready to run parallel tests, both for the infrastructure and for the Information systems, free of chronological dependencies.
- Under specific conditions, take advantage of the automated testing tools available on the market.

B. THYSEBAERT
DI / STB

The €uro comes to your PC

It's here!

From January, the euro will be a reality and people will be wanting to use it in their day-to-day work. And of course they will want to use the new euro symbol (€) in their documents, spreadsheets, e-mail messages, etc.

This guide tells you how to use € on your PC.

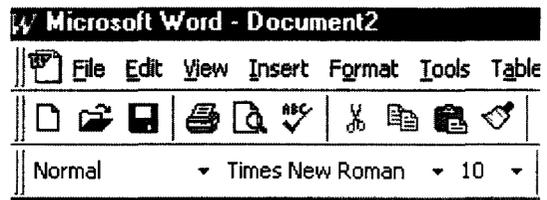
Most Commission PCs can handle €, since the almost ubiquitous NTP platform already features it. The Windows 3.x platform does not.

How do I type the euro symbol?

On most keyboards the € is produced by the key combination **AltGr+e** (AltGr+Epsilon for the Greek keyboard). There are a few possible exceptions; for instance, the UK keyboard might use AltGr+4 and the US international AltGr+5. If you don't have an AltGr key, use Alt+Ctrl instead.



currently using: just go to the font box in the application's toolbar area and select another one.



In Eurolook, which is the standard format for EC documents, you can also use the function INSERT EURO SIGN (go to the Eurolook menu).

What's gone wrong? I want the euro symbol but all I get is a box.

When you press the right key combination, the € should appear on your screen. If it doesn't and you see a different symbol (such as a small box), your application is using a font that does not yet support the €. To solve this problem, select one of the following fonts: Arial, Courier New, Times New Roman, Tahoma, or MS Sans Serif. These are preinstalled in the NTP platform.

Tip: In applications such as Word or Excel, it is easy to change the font you are

How do I print the euro symbol?

Since the paperless office is still a dream, you will often need to print €. This is perfectly possible. But if your printer refuses to cooperate and prints squares or simply white spaces instead of €, please contact your help desk.

How do I €-mail?

Is it possible to send the € via e-mail? Yes, provided the € is part of a document that is attached to your e-mail message. Note that external correspondents will only be able to see the € on their screen if their PC can also handle the new sign.

Unfortunately, if you type the € directly in the Route400 text editor, it may well appear

on your screen, but it will not be transmitted correctly. Your correspondent will see a different sign such as “_”. This is because the current e-mail system was not designed to handle the €. The future system will.

How do I use the euro symbol in Excel 97?

It is easy to use € (or “EUR”) for monetary values in Excel’s currency and accounting format via the FORMAT/CELLS/NUMBER dialog box. If you can’t find the € (or “EUR”) among the predefined currency symbols, please ask the help desk to adapt your system’s configuration.

| | |
|-----------------|-------------------|
| Category: | Sample |
| General | |
| Number | |
| Currency | Decimal places: 2 |
| Accounting | Symbol: € |
| Date | Negative numbers: |
| Time | -1.234,10 € |
| Percentage | 1.234,10 € |
| Fraction | -1.234,10 € |
| Scientific | -1.234,10 € |
| Text | |
| Special | |
| Custom | |

How do I publish the euro symbol on the web?

When you publish information on the Web (on the Internet or in intranets) you have to be sure that readers can reproduce it properly on screen. Our recommended browser (currently Netscape 4.5) already handles €. But there are still a lot of people outside whose computers have not yet been upgraded to handle €. They will not be able to display the new € character no matter what browser they use.

So for maximum compatibility, you should insert € as a graphic. (This solution has its drawbacks too – users may have a different default font size from the one you used in your graphic.)

Can I use the euro symbol in file names?

Although Windows can handle it, you should avoid using the € in file names because some applications will not recognise it.

Anne-Rose HUEMBERT
Paolo BRIZZI
DI / STB

Happy new Euro !



AEIS_EURO

A new forum for debate

In June 1998, the first Symposium on *Adapting European Information Systems to the Euro* was organised by the Informatics Directorate and DGIII/IDA. One of the conclusions of the Symposium was [*Request the Informatics Directorate to manage and animate on EUROPA an interest group which would be the forum for the exchange of information and experiences between Member State public administrations and the Commission*]. As an answer to this request an interest group called AEIS_EURO was created on Internet using IRC (Information Resource Center) as technical solution.

IRC is basically a powerful document management tool. It allows creation and management of interest groups, documents repository organised in sections and subsections, general information presentation, consult contacts and new meeting and news-groups promotion. Administrators can control user access and a directory service is provided.

IRC was a project led by Eurostat and sponsored by IDA. It was developed in 1996, since then, different European Commission sectors as Eurostat, OPOCE, DGIII, DGV, DGVI, DGX, DGXXIII, and SG are using IRC.

Recently IRC has changed its denomination. Now it is called CIRCA (Communication and Information Resource Centre Administrator).

Users can think that to exchange documentation e-mail will be enough. CIRCA offers several advantages in relation with e-mail. The first one is that e-mail services left organisational matters to users since CIRCA shows information already organised. The second is that CIRCA will keep historical documents and messages to be accessed by users when needed. The third is that by e-mail lists, users receive much more information than they want.

For administrators, CIRCA is an easy-to-use tool that allows them to control users, functions and documents.

AEIS_EURO

AEIS_EURO is a forum to debate EURO and IT related topics. It can be accessed at the following url, using "AEIS_EURO" as userid and password:

<http://forum.europa.eu.int/ida>

We believe that it should be an open group of exchange of information directed to experts from different countries, the commission and other institution.

AEIS_EURO offers the following services

- Information
- Library
- Contacts
- Meetings
- Newsgroups

Under the information point it is possible to find general information; links to other interesting web sites. Information is based on HTML pages that allow documents in this section to be connected. Each month a topic for a debate will be proposed. Contributions to the debate will be formatted and included in this section. Longer papers will be added to the library section.

It is one of the main services of the forum. The library is the place to organise documents, hierarchically classified into sections and subsections. Original documents in different formats can be found. A summary of each document is provided including the following information: title, author, reference, status, version, keywords, abstracts, file name and size. They can be easily consulted or downloaded and search facilities are included.

The screenshot shows a Netscape browser window displaying the AEIS-EURO Library website. The page title is "Library: AEIS-EURO Library/General interest papers". The interface includes a navigation menu with buttons for Home, Help, Mail, Search, and Exit. Below the menu, there are buttons for Information, Contact, Meetings, and Newsgroups. The main content area displays a list of documents with columns for Title, Author, Size, DATE, and Version. A search facility is located on the left side, and a "Return to the previous section" link is at the bottom. Annotations with arrows point to various elements: "Title of the section" points to the navigation menu; "Back to other sections" points to the "Return to the previous section" link; "Information about a document" points to the document list; "Search facility" points to the search box; "Operations allowed" points to the "Download" and "View Made" buttons; and "Open a document to browse or copy" points to the document list.

| Title | Author | Size | DATE | Version | Info | Email |
|---|---|-----------|------------|----------|------|-------|
| The Introduction of the Euro and the rounding of currency amounts Europaper 22 | DGH/D1 European Commission | 115 01 KB | 14/10/1998 | EN-Final | 📄 | ✉ |
| The current state of Euro sign implementation and standardisation | Arnerose Humbert, Informatics Directorate | 73 00 KB | 14/10/1998 | 27/05/98 | 📄 | ✉ |
| Fact sheets on the preparation of national public administrations to the euro Euro Paper 27 | DG II European Commission | 188 99 KB | 8/10/1998 | EN | 📄 | ✉ |
| Analysis model for adaptation of IT systems to the euro | Statskontoret (Sweden) | 508 84 KB | 8/10/1998 | EN | 📄 | ✉ |
| Preparing Financial Information Systems for the euro | Pieter Dekker, DG XV | 165 42 KB | 29/9/1998 | EN | 📄 | ✉ |

Contacts are included in this page. For each contact a complete set of co-ordinates can be provided (name, title, organisation, Phone, FAX, address, e-mail). Fields are not mandatory, so contacts are free for not including the complete set of information.

For each meeting, we can find the following information: title, audience, date, duration, location, organisation, agenda, audience, contact and events. Search tools are provided allowing users to select their interest meetings. Documents from past meetings will be available on library section.



Newgroups is the site of exchanging messages. AEIS_EURO allows creating new groups in order to classify messages from the same topic.

CONTENTS

AEIS_EURO contains the main papers issued on *Adapting European Information Systems to the Euro*. These papers discuss both technical aspects such as rounding or formatting documents and managerial ones as organisation for the changeover and Member States co-ordination. Documents presented to the Symposium on June 1998 and to the Lisbon Conference are also included.

Our strategy in order to promote the debate is to focus it in a different topic each month. Topics to begin with are presented in this table:

Adapting European information Systems to the EURO
Topics for debate

Managerial

January: Training employees
February: Co-ordination of regional and local public administration
March: Ways to promote and exchange public administration experiences
April: Managing changeover: institutional strengths and weakness of Public Administration

Technical

January: Historical data
February: Reformatting documents
March: About using decimals
April: Rounding special problems

Suggestions, messages and documents are more than welcome. A forum will only be successful if participation is achieved. A summary of contributions will be presented at the second AEIS-EURO Symposium in Brussels on June 1999.

Magdalena CORDERO
DI / SSI

SECURE EMAIL IN DG IV

The following article describes the participation of DG IV in the pilot project "Secure email" of the Commission. It outlines the context, enumerates the underlying objectives, describes the installation phase, and the issues and "minor" obstacles that had to be dealt with both in the preparation phase as during the actual rollout. It also expands on some remaining topics, and ends with some considerations for the near future.

Context

At the beginning of 1998, Mr. Van Miert and Mr. Bangemann requested to implement a secure electronic mail in order to better protect the transmission of confidential information.

Secure electronic mail offers the following facilities:

- *proof of origin* : unequivocal authentication of the sender of the message
- *integrity of the information* : guarantee that the content of the message has not been tampered with
- *confidentiality* : protection against unauthorized disclosure of the message

Following a briefing note to the Director's Committee by Mr. Vervaeke (IRM of DG IV), the Director's Committee decided on its meeting dd. 14.09.1998, to participate in the Commission's pilot project 'secure email'.

This decision entailed the following global actions:

- Installation of the software on the user's PC (the product is called "Sendmail")
- Generation of the keys
- Installation of the keys + sharing of the keys
- Training and support

Preparatory work, the installation phase

As a first step, a note was sent by DG IV to every possible candidate by email, clearly explaining the objectives and the origin of the project, the procedures for installation, and the planning. This note was also published on the DG IV intranet.

The DI provided DG IV with a detailed installation manual, and an installation procedure, which we slightly refined in order to reduce user intervention to the maximum possible extent.

The installation script modifies certain parts of the registry and as such must be executed by a user with administrator privileges.

DG IV first had to do some preparatory work. Among other things, this involved setting up a distribution server for the software, and a share available to all users concerned, containing the public key database. Since the Certificate Authority (CA) is not yet available in online mode (but it will be soon), the "X400exchange" procedure is currently used to distribute on a daily basis the public-key database from the CA to the DGx MTA platforms. From there, a procedure was developed to FTP the files daily to an NT share. Note that the role of CA is assumed by the Security Office.

Another issue was making up the final list of participants. A document listing all officials in the selected categories was distributed, requesting all candidates to

review the list, and notify the Informatics unit of DG IV in case certain names were to be added, or should – on the contrary – disappear from the list. This way, a definitive list of participants could be obtained, which contained over 130 names. The difficulty lies – as one can imagine – in the tracking of all associated secretaries, since there was no obvious way of finding out who is a secretary to whom.

A important conceptual discussion involved the existing manager-secretary co-operation. As suggested by Mr. Vervaeke (IRM DG IV), it is best respected by implementing a system which closely resembles the current working methods. Therefore, the concept of "authentication of origin" is transformed into "authentication of originating office". As a result, a message can be sent by a manager or his/her secretaries, but it always seems to come from the manager. It is in fact only a matter of interpreting the digital signature as being written by "a member of the office of manager X" (manager X or his/her secretaries). Of course, it is up to the manager to decide whether he/she agrees.

The Informatics unit of DG IV and a DI colleague started the product distribution from Wednesday 21.10.1998 onwards for the following categories of staff:

- Director-General
- Deputy-Director-General
- Director
- Head of Unit / Deputy Head of Unit
- Advisor
- Assistant to the Director-General
- **All** their secretaries

The product was to be installed only on the PC that one normally uses, for obvious security reasons. The procedure to follow used a 3 step approach:

1. DG IV Informatics Unit centrally prepared the creation of user certificates and associated keys. In response, a reply from "BDS-CERTIFICATION-AUTHORITY" arrived, containing some files to install, upon receipt of which the official notified DG IV Informatics Unit (by email), thereby triggering step 2 of the process.
2. Installation of the software on the PC, necessitating a visit to the official's office and even his/her personal presence. The user had to log out temporarily to enable the installation. Immediately following the installation, the user's certificate and the private key were generated. At this point, the keys existed, but were not certified.
3. A few hours after the previous step, the certified keys arrived from "BDS-CERTIFICATION-AUTHORITY", implying another short visit to the official's office, during which the keys were finally installed.

Issues encountered

Unfortunately, the product could not be installed centrally on a server. The installation script had to be run interactively on the PC of the user, so we had to go on-site and perform the installations locally, thereby briefly disrupting twice the user's activities.

The installation procedure itself works quite well, and very few problems were encountered during installations. At some point, there have been inconsistencies in the "secure addressbook", or in the public-key database, mostly due to name mismatches. Some problems were related to incorrectly written usernames in the shared.ini file (~ the local addressbook).

The main difficulties which we encountered during installation of the software in DG IV were in fact of an organisational nature.

Although every user had been informed extensively beforehand about the upcoming installations, we noticed - to our surprise - that quite a lot of users were not really expecting the first message from the Security Office, and thus reacted in various ways:

- Some users sent an email back to the Security Office, asking what this was all about (which implies they did read the message, where this behaviour was suggested)
- Other users simply deleted the message, obviously not knowing what to do with it, and forcing us to retrieve a copy afterwards (which we luckily had kept)
- Others even tried to execute themselves the partial installation procedure described in the message, which we definitely did not want them to do.
- Several users remembered not to throw away the message, but instead of keeping it in electronic form, they printed it, which was not a great help either

Sadly, the same story applies to the second message sent by the Security Office (with the certified keys), which was also deleted in too many cases. So, as much as I regret to say this, our informational campaign has not been a tremendous success.

Another major issue of organisational nature was simply due to the fact that members of management tend to have a lot of meetings, making it in some cases very difficult to make an appointment with them to perform the installations, especially since they need to be present to introduce the final password.

Yet another topic was that some users forgot their temporary password, making it impossible to complete the installation, and forcing us to do the installation all over again.

Forgetting the final password is - in my view - also the biggest "production" issue we face once the installations are completed, since there is no way of resetting or retrieving the password, thus necessitating partial re-installations.

Users expectations

Users naturally want to use the product to exchange messages with their main correspondents. Therefore, to ensure proper use of the system, it has to be made available to some key correspondents of DG IV, being certain units within the Legal Service, and the Cabinet of Commissioner Karel Van Miert. These installations are under way or have already been completed.

Another frequently asked question was "For which kind of documents should I use this system?"

Here, the answer is simple and complicated at the same time: it should be used for information which is confidential, but not classified (since specific Commission / Council regulations apply to classified information).

Some users clearly stated they would rarely use the product, because they found it cumbersome. They referred to the fact that, in order to send a secure email, 2 consecutive passwords have to be entered: the Route400 message store password, followed by the Sendmail password, protecting their secret key. This, however, is basically the price to pay for security.

Remaining issues

DG IV requested a manual of procedures to the Security Office to be able to support the installed user base.

Following problems are likely to occur in the near future:

- A new user has to be equipped
- A user forgets his/her password
- A "Sendmail" user changes unit or even directorate
- A "Sendmail" user leaves DGIV altogether
- A PC of a Sendmail user is broken and has to be replaced

Within DG IV, the implementation is somewhat specific in the sense that managers share their secret key with their secretaries, if they are willing to do so.

DG IV locked down the installation directories on the user's PC to the maximum possible extent. Secret key files, protected by a password are stored in such a way that only the user concerned has read-only access to them. However, it is virtually impossible to guarantee that secret key files are not copied elsewhere. This poses the problem of revoking certificates based on certain criteria.

Training

The "Sendmail" product does not offer any sophisticated features, apart from its advanced security features, and is as such very easy to use. However, to give every user the opportunity to start on an equal knowledge basis, a course was organised after successful completion of the majority of installations. The course took place in the DG IV training room from 23.11.98 to 27.11.98, and took about 2 hours per session (15 sessions were organised during that week to accommodate all participants). The course was given by specialists of the Informatics Directorate, since DG IV did not have the resources available to do it ourselves. The date on which the courses ended was considered as the official starting date of the new "secure email" product.

Future

Currently, Sendmail is an add-on product to the INSEM2 environment, consisting of 4 modules, one of which provides the integration with Route400, although the Route400 interface is not used for sending messages (this was decided deliberately in view of INSEM3).

In the future, the encryption software from Utimaco will be part of INSEM3. At that moment, there will probably be support for S/MIME, and external communication will be possible (currently, the CA is only for internal usage).

In the near future, the CA will be made available online, which will facilitate the key generation procedure considerably.

Central installations of the product on a server were currently not recommended by the DI (a.o. due to the fact that an ini-file contains user-specific data).

An alternative that is worthwhile investigating might be to install all executables and DLL's on a server, causing a download and launch of the appropriate files when clicking the product icon. Other possible alternatives might involve deployment on Terminal Server platforms, but this option has not been investigated up till now.

Of course, as pointed out earlier by Mr. Schaefer (heading the project at the DI), we should bear in mind that the current project is only a pilot, and is as such strictly limited both in scope, in time and in budgetary resources.

DGIV has learned a lot from the pilot installations, and will cooperate with the DI and the other pilot participants (SG, BDS, SJ) to improve the product.

F. KEPPENS
DG IV / LSA

Les travaux du CII en 1998

(Comité Interinstitutionnel de l'Informatique)

En application de son mandat, le Comité Interinstitutionnel de l'Informatique (CII) a essentiellement comme objectif de:

- permettre l'échange régulier, entre les managements de l'informatique des Institutions, d'informations dans les différents domaines de l'informatique;
- détecter, inciter et suivre à haut niveau des synergies d'activités informatiques entre les différentes Institutions, notamment en vue d'optimiser les ressources disponibles.

Le CII est composé des responsables de plus haut niveau directement compétents en matière d'informatique au sein de chaque Institution. La composition du Comité a été la suivante en 1998:

| | |
|--|---------------------------|
| Parlement Européen | M. Papachristodoulou (ff) |
| Commission | M. de Esteban (Président) |
| Secrétariat Général du Conseil | M. Bryan-Kinns |
| Comité Economique et Social / Comité des Régions | M. Smet |
| Cour de Justice | M. Lequime (avril 98) |
| Cour des Comptes | M. Beurotte |
| Banque Européenne d'Investissement | M. de Crayencour |

Le Comité aura tenu trois réunions en 1998, en mars, juin et octobre.

M. Scheller de la Banque Centrale Européenne a été invité à participer au CII, à la demande du Collège des Chefs d'Administrations.

LE CADRE INTERINSTITUTIONNEL

Le CII rapporte au Collège des Chefs d'Administration à qui il transmet un rapport annuel.

Le CII suit la mise en œuvre du budget affecté à l'article "A-430 Coopération interinstitutionnelle dans le domaine informatique". Ce budget de 2,2 Mécus en 1998 a permis la poursuite des activités de développement pluriannuelles associant les institutions (la paie, "Press Cuttings", les procédures de concours, gestion des traducteurs et de l'aide à la traduction, utilisation de Europa, les SIC).

Cinq groupes de travail interinstitutionnels rapportent au CII et traitent de sujets plus spécialisés:

- la bureautique
- les télécommunications
- la gestion du contrat ORACLE
- les acquisitions sur le marché
- l'impact EURO et AN 2000

Il existe d'autres groupes interinstitutionnels qui dépendent du comité de direction de l'OPOCE. Ces groupes traitent en général de domaines spécifiques tels que:

- de projets ou services (EUR-LEX, EUDOR, ...)
- de bases de données documentaires (CELES, ...)
- de répertoires
- de la structure des publications électroniques.

La Task Force Interinstitutionnelle Internet (TFII) est un groupe à vocation horizontale qui rapporte directement au Collège des Chefs d'Administration. La TFII possède ses propres sous-groupes spécialisés et n'a pas de lien direct avec le CII.

LES TRAVAUX PRINCIPAUX DU CII EN 1998

Les résultats les plus importants du CII en 1998 sont:

- un accord sur l'harmonisation des formats d'échanges interinstitutionnels et sur un cadre de concertation en matière de traitement de texte
- un état des lieux détaillé des systèmes d'administration utilisés dans les institutions (et dans les agences); leur adéquation à l'an 2000 a été examinée
- la mise en œuvre progressive d'un réseau interinstitutionnel commun par le biais d'un appel d'offres commun (services VAN).

L'essentiel des activités du CII consiste en un échange d'informations entre institutions. En ce qui concerne la Commission, les autres institutions ont été informées:

- des activités stratégiques concernant la mise en œuvre de l'euro et l'adaptation à l'an 2000 de l'infrastructure informatique de la Commission
- de l'appel d'offre courrier électronique et de la stratégie en matière de Gestion Electronique des Documents
- du succès de la Nouvelle Plate-forme Technologique (les autres institutions déploient une NPT en décalage de plus ou moins un an par rapport à la Commission).

P. GARANT
Secrétaire du CII

INTERNET APPLICATION DEVELOPMENT

SOME REFLECTIONS AROUND THE REDIS PROJECT

During the REDIS project, we asked ourselves several questions, and touched problem areas that needed clarification. These different subjects lead to discussions, and the results of these discussions impacted our view on the tools, the techniques and the global solutions. We already described the application architectures and the various technologies in previous articles in the Bulletin Informatique.

We want now to share with you these different topics, and the purpose of this article is to introduce and give an idea about the different findings. For each topic, we have a document explaining it in more details. You are welcome to request them, and/or comment on these subjects.

What is an Internet application?

The REDIS project focuses on the development and the deployment of Internet applications. The definition of Internet applications can be broad.

An Internet application can be HTML applications, based on dynamic pages displayed in browsers, Java applets running in the browser, or Java applications, running outside the browser. But it can also be component-based applications with a distributed nature (where the client application, whatever technology it uses, is remotely activating server logic over TCP/IP). Web applications (HTML + HTTP) and multi-tiers client-server applications (based on components) are thus both included in the definition of an Internet application. Different development tools exist for these type of applications.

We will cover all these aspects in our study.

Web development: how to create dynamic pages?

A lot of solutions are proposed on the market, either to open existing development tools to Web page production, or to create

original ways of generating pages. Two different approaches are found: processes generating HTML by concatenation of HTML tags in strings, and HTML template pages containing scripts or tags to insert the data or the dynamic parts of the page.

For maintainability reasons, the second solution is favoured, since the development of the design of the page can be made by a professional designer and can be modified independently of the functionality of the application. The Web developer includes afterwards the different tags or scripts to give a dynamic behaviour to the page. On the other hand, scripts, java programs, etc. generating HTML can hardly be adapted without having to dig into sometimes very complex code. Strings containing HTML tags and scripts are really hard to manage in a program. So, a "page server", using server-side includes or scripts, is the preferred solution.

Which architecture for the application: 2-tiers or 3-tiers?

When the complexity of the application is high, and the need for a scalable, distributed solution is present, 3-tiers, component-based applications present

several benefits. Since they are component based, they can be deployed on different servers to balance the load, and pool of components can be organised to serve rapidly numerous requests.

The complexity of the application can be divided in simpler components, developed in parallel, and easier to maintain and change: if it is well designed, procedure or legislation changes can be integrated by simple replacement of one or more components. Moreover, different applications can share the same logic or different user interfaces can access the same functionality.

If the business logic of your DG or unit is complex to define and should be reused across different applications, a 3-tiers architecture, based on components, should be envisaged.

If you have only presentation logic and data integrity logic, with a few simple rules that are easy to code (either in the interface or in the database), a 2-tiers architecture is valid. It can reduce development time, particularly for simple applications. Don't over-architect an application.

Which component interface to use: COM, CORBA, Enterprise Java Beans?

The business logic should not be developed for a specific component interface.

The ideal way is to create classes implementing the rules, and wrap them when needed for a certain interface. The same logic can be reused via COM, CORBA, or even via HTTP: communication protocols are isolated from the business rule implementation.

Which language should be used?

Object Oriented languages are best suited for representation of the actual business

problem. Today, most of the vendors are focusing on Java, which presents all the needed characteristics for the development.

The usage of Java will give us the best chance to reuse the code across different platforms, particularly on the server side. However, performance issues have to be addressed for high volumes data.

What is the best tool? A 4GL or 3GL?

4GLs allowed the developer to focus more on the business functionality of the application, and not on the technical implementation, by providing an integrated development environment (IDE), and high level primitives, for example for database access. But the life of the application becomes linked to the life and the evolution of the development tool.

3GLs needed a higher development time and a higher complexity of the tasks, by having to code most of the technical implementation of the operations.

However, ANSI C applications for example have long life duration, and almost any editor can help.

Now, Java is present. Object orientation and integrated development environments have leveraged the productivity by adding a higher degree of abstraction. Java IDEs are now comparable to former 4GLs: classes and tools provide database and component access. But the existing JDK Java classes do not offer a sufficiently high level of abstraction, so development tools will have to provide their own classes, on which the application life will depend.

What can we develop with Java?

- Applications: we can develop Java applications that run outside a browser. These Java applications can be installed in a classical way (remote or local setups), but also with dedicated clients or via the browser.

- Applets: we can develop small (or sometimes more complex) visual interfaces that are displayed in HTML pages.
- Non-visual applets: instead of using JavaScript to give dynamic behaviour to the HTML pages, we can use non-visual Java applets that use the document object model of the browser to interact with the interface.
- Servlets: these Java classes run on the server, receive their request via the Web server and return results to the calling page or applet. This is a practical way for a server to send information to an applet (e.g. exchange of data via XML)
- Components: Java Beans (visual interface component), Enterprise Java Beans (non visual), COM and CORBA (non-visual) components can all be developed using Java.
- Windows applications: Windows user interfaces, NT services... Java can now be used where VB, VC++ or any C/S tool were used.

How to implement application security?

From an application perspective, the security implementation should allow or not allow access of a user to application functionality, data or components.

Ideally, the infrastructure is responsible for the user authentication (be it a NT domain, a proxy, a Web server), and the application can ask it the privileges and the groups of the current user. The application matches this information with the security rights needed by the requested object, and allows or does not allow access to it.

Users and groups should be globally managed (and not depend on a specific application), and stored in directory services that should be accessible through standard mechanisms. The ideal solution would be to

have the same directory service for the web, the NT domains, the electronic mail, the network infrastructure, and it is a solution we aim at. In the meantime, any solution used in an application (special tables, logon page...) should be implemented in a way that it can be migrated to the usage of a global identification mechanism.

Database connections, in a Web or a distributed environment, should not be based on the user identification since they are generally pooled and reused. At least one connection per application-authorisation group (e.g. user, manager, administrator) could be provided, or a mechanism to set the corresponding role when a connection is used by a user of another group.

Secure protocols, certification and signing of components are also studied, particularly with the Bureau de Sécurité and in the Secure Infrastructure project.

Application Servers

We have seen in the vendor solutions that their development tools aimed generally at a particular platform. The proposed Java IDEs are generally tied to a particular application server, giving productivity tools, wizards, for best integration, easy deployment, etc...

When we select a development tool, we should also evaluate the corresponding application server. Java IDEs (Integrated Development Environment) are now evolving to Integrated Application Environments (IAE), integrating the application server.

The next phase of the project will focus particularly at the evaluation of the application servers.

How to print on the Internet?

Paperless offices are not for today. Printing the information, a report, or an official document is still a hot topic. Printing from

the browser does not guarantee the design of the output, requested for official documents, because the user can change the aspect of the document. Printing from a Java applet requires to bypass the browser security. Printing from a Java application needs new tools: report designers for Java. Replacing client-based reporting solutions, the server based report production, consists in sending the result of a query as a standard (or client supported) format (such as Adobe .pdf) that will be printed locally.

We will then have to examine a new category of tools: reporting servers.

Which web server should we choose?

We have seen in the different offers that the deployment platforms for the Web applications were Web Server neutral: they just plug-in via a standard interface (ISAPI or NSAPI). The Web Server is more considered as an HTTP listener. Its up to the Application Server to provide the object model to access the application services, such as security, transaction management, etc...

We consider it as a non-critical issue. The tendency is that all operating systems or hardware platforms will have an integrated HTTP service. We should keep our existing Netscape servers on the Unix platform, and take benefit of the Internet Information Server present on the NT platform. The will both allow our Application Server to work in the most performing way.

Multilingual issues

Java is a platform based on Unicode. Applications based on the Java 2 platform (JDK 1.2) allow us to display and enter multilingual data. We should check the full deployment line, up to application servers and UTF-8 databases (component protocols, JDBC drivers), but also the development environments: do they allow the development of interfaces presenting simultaneously several languages?

For the Web, the current situation is that most of the Web pages are monolingual. The tendency, however, is to use UTF-8 also in HTML. We should be prepared for this evolution.

Future Work

We still have other subjects: How does PowerBuilder fit in this evolution? What is the strategy of the vendors? What are the different types of solutions? How to choose between them?

We will continue to inform you regularly on these subjects. Don't hesitate to send us questions and subjects on which you want to open a discussion.

Pierre A. DAMAS
DI / STB

Electronic Documents come to DG XIX

DG XIX's Unit C3 replaced a 750.000 pages Archive by an electronic repository.

Over the last years the unit C3 "Fichiers Tiers/Third Party" Verification Team (FTVT) has been building up a huge archive of proofing documents, related to the Commission's financial transactions. Managing this archive manually lead to despair because new documents streamed in and the spacious store room in the JECL building was running full.

Using the newest Commission Electronic Document Management techniques, Unit 03 put together a computer system that can contain all 750.000 documents and show them on PC screens.

Feeding the system with over 700.000 documents was a giant task, which took over two months of continuous scanning.

Christian Haedens (XIX/C3): "This system is exactly what we needed. We have made a quantum leap in productivity, because we now have the documents on screen. Each day, this system saves our personnel over 250 physical moves back and forth to the archive room. Moreover, the risk of misplacing consulted documents has simply become non-existent."

Pascal Mercier (XIX/C3): "My job as an archivist has become much more pleasant. Before, I carried heaps of paper; now my scanning makes the new documents travel straight to the right electronic file. My colleagues are happy to find the result of their work on the screen after less than a few hours."

The FTVT system was set up as one of the Commission's "Electronic Document Management Systems" pilot projects. Running a pilot project had its price in terms of effort and time, but we now feel it was worthwhile. It showed that the Commission's new Electronic Document Management software can handle the job and we have gained expertise which will surely be of great help in future documentary projects.

Jan CORTVRIEND
DG XIX

Technical data:

The Repository was built around a 20 Gigabyte NT-server. We used Filenet Mezzanine EDMS software together with an @Mezzanine Web interface. Document entry is done through Kofax Ascent Capture software using a Fujitsu 3096 scanner. Document search and lookup runs via Internet Explorer or Netscape on the DGXIX intranet. Unit C03 scans up to 800-900 pages per day and the repository is consulted between 250 and 400 times per day.

DIRECTION INFORMATIQUE

Directeur Général
Directeur
Conseiller
Assistant

C. FLESCH (*)
F. de ESTEBAN
P. MARCELLI
J.L. SION

Gestion des ressources internes

M. O'LEARY

COORDINATION DES ORGANISATIONS LOCALES

1. Relations utilisateurs et cohérence informatique
- Chef de secteur "Relations Utilisateurs"

D. KÖNIG
J. LAVADO

2. Coordination des ressources humaines et
budgétaires (schémas directeurs)

P. BERTRAND

SERVICES OPERATIONNELS

3. Support des systèmes d'information
Chef adjoint d'unité

D. DEASY

4. Support logistique et formation
Chef adjoint d'unité

W. BAROSCH
F. PELTGEN

5. Support technique et Bureautique
Chef adjoint d'unité

J. MARIN NAVARRO
J.P. LAMBOT

6. Service de transmission de données
Chef adjoint d'unité

R. KROMMES
K. DE VRIENDT

7. Centre de Calcul
Chef adjoint d'unité

J.P. WEIDERT
A. BODART

(*) Egalement responsable du Service de Traduction

| DG | IRM Information Resources Manager | Position de l'informatique dans l'organigramme | SA System Administration | SU Support Utilisateurs | DV Développement | ISO Informatics Security Officer | Corresp. Inform. O/N |
|---------------------|---|--|-----------------------------------|----------------------------|---------------------------------------|-------------------------------------|----------------------------|
| 1 | COBBAERT J.L. | Unité horizontale | GIULIANA V. PENA FERNANDEZ A | BOUCHEZ T GIULIANA V | COBBAERT J.L. | COBBAERT J L | O |
| I A Siège + délé | GRAYKOWSKI C (f.f.) | dans unité horizontale | DEBUCK Y | DEBUCK Y. / ELORZA A | ALLARD T. | | |
| I B | CORIJN J (ff) | secteur dans unité horizontale | CORIJN J | CORIJN J. | CORIJN J | CORIJN J. | |
| 2 B L | HIRN P. HOLLMANN F. | unité rattachée au Dir.Gén unité rattachée au Dir SOS | HIRN P. MAYER A | HIRN P FEE A. | HIRN P HOLLMANN F | HIRN P. HERAN M | O O |
| 3 | BEURMS W | dans unité horizontale | DEGREVES J. | | MAEBE P | MAEBE P | O |
| 4 | VERVAET G | unité rattachée au Dir Gén. | LENART M | SCHWEIGER P | OLIVIER J-L. | VANDENRYDT P. | O |
| 5 B L | BLANCHAR E LEBEAU J. | secteur dans unité horizontale rattachée au Directeur | NASSI D. MELEN J -M. | DEWAEEL Ph CONTER I | DE SMET J LEBEAU J | BLANCHAR E. MELEN J M | |
| 6 | PEARE C | unité dans dir horizontale | VLAHOPOULOS G | VLAHOPOULOS G | FRIZ A. | VLAHOPOULOS G | |
| 7 | MAMBOURG A | dans unité horizontale | HECHTERMANS B. | HECHTERMANS B | REMY T | MAMBOURG A | |
| 8 | BOSMAN R | unité rattachée au Dir Gén. | JOWETT I | LAVOREL B | ----- | ----- | O |
| 9 B L | VANTILBORGH H. | unité rattachée au Dir Gén | CUCE G. KOEPP C | CUCE G. KOEPP C. | BIERLAIRE P. LUISETTI R / WILKIN G | MARTINEAU G | O |
| 10 | CRUCKE F. | rattachée au Directeur Général | FAIRCLOUGH M | MURGIA G | CRUCKE F | MURGIA G | |
| 11 | CUNNINGHAM T. | unité rattachée au conseiller principal | VANDERLINDEN E | FOULART P. | PHILIPPAERTS E. | CUNNINGHAM T | O |
| 12 | DE BACKER A | unité horizontale | SACK C | SACK C | BORDET O | DE BACKER A | O |
| 13 B L | DE BRUIJN B. (ff) | unité horizontale rattachée au directeur général | DE SADELEER H. GARCIA-BLANES V | DE SADELEER H | SANZ VILLEGAS M-T MAUCQ Th. | MATHIEU A ----- | O O |
| 14 | DOM F | dans unité horizontale | ADRIAENSEN L. | DEWALQUE J F | DOM F. | RIZO MARTIN J | |
| 15 | VAZQUEZ SOUTO S. | position horizontale | VAN DE STEEN P. | VASQUEZ SOUTO S. | VASQUEZ SOUTO S | VASQUEZ SOUTO S | |
| 16 | BOTMAN M | unité dans dir horizontale | BOTMAN M ENGELHARDT P. | BOTMAN M. | | VAN DEN EYNDE P | O |
| 17 B L | DE COSTER J M. KSCHWENDT H | dans unité horizontale unité dans dir opérationnelle | SELDERS W LIMBACH T. | SELDERS W DAVIES N | KARMAN J. WAGNER H | DE COSTER J M DAVIES N | |

ORGANISATIONS LOCALES

Situation au 27 01 1999

| DG | IRM Information Ressources Manager | Position de l'informatique dans l'organigramme | SA System Administration | SU Support Utilisateurs | DV Développement | ISO Informatics Security Officer | Corresp. Inform. O/N |
|------------|--|---|-----------------------------|-----------------------------|---------------------------|-------------------------------------|----------------------------|
| 19 | BUISSERET J.P. | rattachée au Dir. Général | LENOIR M. | VANDERMEULEN G | PUTSEYS H. | VAN GEEL A | O |
| 20 | CABALLERO A. | dans unité horizontale | TRUSSART J.L | LEDOUX C./ DE HENAU C | MEFTAH C | CABALLERO A | O |
| 21 | DASCALU I. | unité dans dir. horizontale | SURMONT C. | BONNE R. | ----- | | |
| 22 | JANSEN R. | position horizontale | SPYCKERELLE P | | MORAY D. | MORAY D. | |
| 23 | KEYMOLEN M. | dans unité horizontale | RODRIGUEZ CASTRO E | RODRIGUEZ CASTRO E | VERNELEN J | LOPEZ SANTO L | O |
| 24 | CENTURIONE F | rattachée à l'Assistant | ARNAUTS A | ARNAUTS A. | CENTURIONE F. | CENTURIONE F | O |
| SG - CAB | KODECK F | unité rattachée au Secr Général | RUYS P | RUYS P. | DUJARDIN C | DUJARDIN C. | |
| SJ | ORTMANN E | dans unité horizontale | ACKERMANS L | ACKERMANS L | DONVIL J | GRUNWALD J. | |
| SPP | MAC CANN D | position horizontale | GEORGES L | MAC CANN D. | MAC CANN D. | PRATS X. | |
| OSCE | DEFAYS D | unité dans dir. horizontale | PETIT T | ZILLIOX N | PONGAS G. | ----- | O |
| AAE | MOTA J. | position horizontale | CARVALHOSA M. | CARVALHOSA M | MOTA J | MONASSE D. | |
| BS | BRUNET F | rattachée à l'Assistant | ANDRE P VIJVERBERG M | ANDRE P. VIJVERBERG M. | ANDRE P. VIJVERBERG M. | ANDRE P. VIJVERBERG M | |
| SCR | HAİK J. | | | | | HAİK J | |
| CDP | FLOYD W | rattachée à l'Assistant | WAGNER L. | WAGNER L. | WAGNER L | WAGNER L. | |
| SDT B L | GARCIA MORAN F | unité rattachée au Dir Gén | BASTIEN C | CAPLEN H BIRCHEM M | LOGNONE B DEBART F | BASTIEN C | O |
| IGS | LOTTEFIER D | rattachée à l'Assistant | LOTTEFIER D | ROBINSON P | LOTTEFIER D | DE GAULTIER DE LAGUIONIE | |
| SCIC | D'HOEKERS A. | dans unité horizontale | VAN DEN EEDE G | VAN DEN EEDE G | GEVAERT H. | ELIAS C. | O |
| ECHO | SOETEWY E | rattachée à l'Assistant | DELSINNE D | | TOLVASEN S. | SMITH F (ff) | |
| OPOCE | DÖLL F. | dans unité horizontale | MEYER P | SCHMIT C | SCHMITZ P. | PIERARD A | |
| CCR | SALVI F | rattachée à l'assistant | FERRALORO S | FERRALORO S | SALVI F | LHOST G / SALVI F. | |
| DI B L | CRELOT J. | dans unité horizontale | VAN RENTERGEM D CRELOT J | VAN RENTERGEM D CRELOT J | TOSETTI A | CRELOT J | O |

| |
|--|
| Budget Informatique sur le Titre A5 & Article A-430 |
|--|

| | (en KECU) |
|------------------------------------|----------------|
| DG | TOTAL |
| I | 1.714 |
| I/A Siège | 1.660 |
| IB | 1.048 |
| II/BXL | 1.002 |
| II/LUX (ex XVIII) | 628 |
| III | 1.859 |
| IV | 1.299 |
| V/BXL | 576 |
| V/LUX | 454 |
| VI | 3.555 |
| VII | 767 |
| VIII | 1.183 |
| IX | 5.759 |
| X Siège | 1.361 |
| X Bureaux | 1.526 |
| XI | 1.100 |
| XII | 79 |
| XIII/BXL | 569 |
| XIII/LUX | 247 |
| XIV | 511 |
| XV | 876 |
| XVI | 291 |
| XVII/BXL | 686 |
| XVII/LUX | 860 |
| XIX | 4.848 |
| XX | 697 |
| XXI | 1.022 |
| XXII | 510 |
| XXIII | 703 |
| XXIV | 1.059 |
| SG | 3.906 |
| SJ | 425 |
| SPP | 337 |
| OSCE | 3.443 |
| AAE | 49 |
| DI | 1.095 |
| BS | 302 |
| SCIC | 1.394 |
| SDT | 3.424 |
| CDP | 133 |
| IGS | 129 |
| ECHO | 461 |
| TFNA | 124 |
| SCR | 837 |
| Dépenses communes | 14.805 |
| TOTAL DG | 69.314 |
| Management | 150 |
| Support des Systèmes d'Information | 1.780 |
| Support Logistique et Formation | 770 |
| Support Technique et Bureautique | 2.946 |
| Support Transmissions des Données | 11.692 |
| Centre de Calcul | 13.359 |
| Sécurité informatique | 97 |
| TOTAL Services Centraux | 30.794 |
| Réserve générale | 14 |
| TOTAL Réserves IRMB | 14 |
| TOTAL | 100.122 |

RESSOURCES HUMAINES DANS L'EQUIPE IRM EN 1998

(1) (2) (3) (4)

| DG | Personnel Inform. débt. 98 (5) | Personnel Inform. fin 98 (5) | Développ./Mainten. | | Adm. Syst. | | Supp Util. | | Mgt. (+ tâches adm.) | | Autres Stat | Total Equipe IRM | | |
|------------|--------------------------------|------------------------------|--------------------|-------|------------|------|------------|------|----------------------|------|-------------|------------------|-------|--------|
| | | | Stat. | Ext. | Stat. | Ext. | Stat. | Ext. | Stat. | Ext. | | Stat. | Ext. | Equipe |
| I | 596 | 540 | 3 | 5,4 | 1 | 1,1 | 1 | 2,8 | 2 | | | 7 | 9,3 | 16,3 |
| IA | 859 | 859 | 2 | 4,4 | 3 | 1,9 | 2 | 3,8 | 2 | | | 9 | 10,2 | 19,2 |
| IB | 502 | 502 | 2 | 2,1 | 1 | 1,0 | | ,5 | 2,9 | 1,5 | | 5 | 7,0 | 12,0 |
| II | 362 | 370 | 4,5 | 3,4 | 2 | | | 1,5 | 1,3 | 2 | | 10 | 4,6 | 14,6 |
| II SOF | 127 | 133 | 3,8 | 4,2 | 2 | | | 1 | 1,2 | 2 | 1,3 | 10 | 5,3 | 15,3 |
| III | 1079 | 1081 | 5 | 5,7 | 7 | 1,0 | 8 | 3,6 | 4 | | 2 | 26 | 10,3 | 36,3 |
| IV | 534 | 588 | 5 | 3,9 | 3 | 1,0 | 4 | 2,3 | 1 | | | 13 | 7,2 | 20,2 |
| V/Bxl | 698 | 655 | 2 | | 2 | | 4 | | 1 | | | 9 | 4,8 | 13,8 |
| V/Lux | 142 | 130 | | 2,1 | 1 | | | 1,4 | 1 | | 1 | 3 | 3,5 | 6,5 |
| VI | 1095 | 1095 | 12 | | 3,5 | | 3,5 | | 5 | | | 24 | 20,3 | 44,3 |
| VII | 340 | 340 | 1 | 1,6 | 2 | ,4 | 1 | 1,7 | 2 | | | 6 | 3,7 | 9,7 |
| VIII | 702 | 702 | 6 | 4,8 | 5 | | 2 | 3,6 | 3 | | | 16 | 8,4 | 24,4 |
| IX | 1907 | 1907 | 24 | 31,7 | 5 | 2,1 | 6 | 6,4 | 9 | | | 44 | 40,2 | 84 |
| X | 609 | 609 | 3 | 4,7 | 2 | | 5 | 3,5 | 3 | | | 13 | 8,2 | 21,2 |
| X Bureaux | 485 | 485 | | ,7 | | 2,5 | 13 | 2,1 | 1 | | | 14 | 5,3 | 19,3 |
| XI | 563 | 574 | 4 | 1,4 | 2 | ,8 | 9 | 2,0 | 2 | | | 17 | 4,2 | 21,2 |
| XII | 1056 | 1056 | 10,8 | | 7,9 | | 2,9 | | 3,3 | | 1,3 | 26 | | 26 |
| XIII/Bxl | 615 | 615 | 4 | 1 | 4,3 | 1 | 2,8 | 1,2 | 3 | | | 14 | 3,8 | 17,8 |
| XIII/Lux | 244 | 251 | 1 | ,8 | 1 | | 4 | ,5 | 4 | | | 10 | 1,3 | 11,3 |
| XIV | 273 | 281 | 2,5 | ,9 | 1,8 | ,2 | 2 | 1,6 | 3,3 | | 2 | 11,5 | 2,8 | 14,3 |
| XV | 450 | 450 | 2 | ,6 | 1 | 1,0 | 3 | 2,8 | 1 | | | 7 | 4,4 | 11,4 |
| XVI | 485 | 475 | 6 | ,8 | 1 | | 4 | ,1 | 6 | | | 17 | ,9 | 17,9 |
| XVII/Bxl | 363 | 367 | 2,5 | 2,0 | 2,5 | | | 1,4 | 1 | | | 6 | 4,4 | 10,4 |
| XVII/Lux | 302 | 303 | 8 | ,5 | 5 | ,8 | 2 | 1,4 | 3 | | 1 | 19 | 2,7 | 21,7 |
| XIX | 381 | 381 | 10 | 36 | 3 | 2,0 | 9 | 2,1 | 7 | | | 29 | 40,1 | 69,1 |
| XX | 256 | 256 | 1 | 3,7 | 2 | 1,0 | 2,5 | 1,0 | 1,5 | | | 7 | 5,7 | 12,7 |
| XXI | 437 | 451 | 17 | | 2,5 | 1,9 | 2,5 | 2,1 | 11 | | | 33 | 4,8 | 37,8 |
| TFRH | 326 | 362 | 2,5 | ,6 | 1,5 | 1,0 | 2 | 1,3 | 1 | | 1 | 8 | 2,9 | 10,9 |
| XXIII | 244 | 266 | 1 | 1,2 | ,5 | ,4 | ,5 | 2,7 | 2,5 | | ,5 | 5 | 4,3 | 9,3 |
| XXIV (SPC) | 442 | 351 | 2 | 3,7 | 2 | ,3 | 1 | 2,4 | 1 | | 2 | 8 | 6,3 | 6 |
| SG | 1233 | 1233 | 3,5 | 10,1 | 3,3 | 2,2 | 4,8 | 7,9 | 4 | | 4 | 19,5 | 20,2 | 39,7 |
| SJ | 239 | 240 | 1 | ,3 | 1 | ,9 | 1,8 | 1,1 | 2 | | | 5,8 | 2,3 | 8,1 |
| SPP | 77 | 73 | | 2,3 | | | 1 | ,1 | 1 | | | 2 | 2,4 | 4,4 |
| EUROSTAT | 784 | 731 | 11 | 15 | 8 | 1,9 | 6 | 5,0 | 5 | | | 30 | 23,0 | 53,0 |
| AAE | 24 | 24 | ,4 | ,2 | 1 | | ,2 | ,0 | ,5 | | | 2,1 | ,2 | 2,3 |
| BS | 90 | 98 | ,3 | 1,1 | ,5 | ,6 | 1,1 | ,4 | ,8 | | | 2,7 | 2,1 | 4,8 |
| CDP | 34 | 44 | ,1 | ,2 | ,1 | ,3 | ,5 | ,2 | ,3 | | ,2 | 1,1 | ,8 | 1,8 |
| SDT | 1990 | 1990 | 10 | 11,0 | 12 | 1 | 23 | 3,9 | 3 | | 4 | 52 | 15,9 | 67,9 |
| IGS | 27 | 29 | ,2 | ,4 | ,2 | | ,8 | ,1 | ,4 | | | 1,6 | ,5 | 2,1 |
| DI (6) | 355 | 373 | 6,3 | 4,7 | 2,5 | ,4 | 5,8 | 2,2 | 3 | | | 17,5 | 7,3 | 24,8 |
| SCIC | 622 | 704 | | 3,2 | | 1,1 | | 3,2 | | | | | 7,4 | 7,4 |
| ECHO | 147 | 156 | 3 | 1,0 | 2 | ,9 | | ,6 | 1 | | | 6 | 3,6 | 9,6 |
| Totaux | 22096 | 22130 | 183,2 | 193,9 | 107,9 | 36,5 | 144,5 | 92,2 | 111 | | 20,1 | 566,8 | 322,7 | 889,4 |

REMARQUES et CONVENTIONS

- Sont répertoriés ici le personnel statutaire et les externes (globalement).
- Les chiffres des DG correspondent aux annexes des schémas directeurs 1998-99 et concernant 98
- Les chiffres de la Direction Informatique correspondent à l'état courant.
- Dans les colonnes des ressources statutaires les chiffres correspondent à des postes, qu'ils soient occupés ou non
- Source des chiffres de cette colonne: personnel Informatisable 1998 utilisés dans le cadre de l'allocation à priori
Personnel informatisable SYSLOG DG Effectifs 1999 colonne 98 pour colonne fin 1998 (chiffres en gras = début 98)
- L'équipe IRM de la Direction Informatique est comptabilisée dans le tableau des DGs.

| | |
|----------------------------|-----|
| Direction informatique (6) | |
| 265 | 265 |

Les chiffres concernant les externes sont obtenus en prenant les montants planifiés et en les divisant par 100 (100 Kecu par h/A)

Projets d'Infrastructure

(situation au 25/12/98)

| 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 Amélioration de la qualité Outils d'encryptage E-mail pour projet NPT File transfer body part | SCHÄFER | DI/IDA | OP FS OP DEF | 5/98 4/98 | 1/98 1/98 9/98 |
| INSEM3 | Appel d'offre | SCHAFFER | DI | FS | 6/98 | 6/99 |
| EUROPA EUROPA EUROPA PLUS EUROPA TEAM (4) | DIFFUSION DE L'INFORMATION Serveur externe Serveur interne Proxy interinstitutionnel | DE CONINCK | DI | OP OP OP | | 1996 1996 1996 |
| ADONIS v 3.1.h Adonis/image(V5) Adonis 5.1 | ADMINISTRATION DES DOCUMENTS Corrections, améliorations, sécurité scannérisation, visualisation et impression des documents Dossiers, intégration, courrier électronique, EUROLOOK | J.F. BLEROT | DI | OP OP EF | 12/98 | 1997 9/98 |
| SICMOB | GESTION DES BIENS MOBILIERS V/1, 11A | J.F. BLEROT | DI | OP | | 1997 |
| ELS | GESTION DES BIENS ET HELPDESK V/2, 12 T V/2, 12T2 INVENTAIRE FINANCIER (ELS V220) | | | OP OP OP | | 1997 1997 11/98 |
| TCENTER FTS | CENTRE DE TELECOMMUNICATIONS New Fax/ Telex Server | AGUDO | IDA | OP | | 1997 |
| DIR | DIRECTORIES Annuaire interinstitutionnel Annuaire interinstitutionnel | SCHÄFER | IDA | FS CO | 3/97 5/97 | 5/97 12/97 |
| SNET | SEAMLESS NETWORK | JORTAY | DI | OP | | 97/98 |
| EURO | INTRODUCTION DE L'EURO | | DI | | | |
| GROUPWARE | GROUPWARE/WORKGROUP COMPUTING | TOSSOUNIDIS | DI | | | 1996 |
| NTP | NEXT TECHNOLOGICAL PLATFORM | PUIG SAQUES | DI | OP | | 97/98 |
| CD-ROM | INTEGRATION CD-ROM DANS L'ENV, BUREAUT, | GARCIA MORAN FRASER | DI | OP | | 1996 |
| EUROFORMS | PRODUCTION DE FORMULAIRES SUR PC Version 1.2 Version 1.3a Version 1,4 | CABALLE | DI | OP OP OP | | 1997 1997 1/05/98 |

Légendes:

- (1) les modifications par rapport à la version précédente sont indiquées par un *.
- (2) PA : préanalyse; FS/EF : étude de faisabilité; DEF : définition; 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").
- (4) précédemment EUROPA CLUB

PROGRAMMES DE FORMATION INFORMATIQUE

Le catalogue et le calendrier des actions de formation se trouvent dorénavant sur notre serveur *EUROPAplus*.

Informatics Directorate **i² Informatics Information**

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Guide to the i² Informatics Information Service

| Subjects | Hot Subjects | DI Sites | Other Sites |
|-------------------------|---------------------|-----------------------|--------------------|
| Architecture | EURO Y2k | CC | CTI |
| Applications/Projects | | GRI | Forrester Intranet |
| Guides and Standards | News Updates | RUC | Gartner Group |
| Informatics Directorate | Calendrier | SLF | Sievers Consulting |
| Informatics General | DI Events | SSI | |
| Organisation | Info Tech | STD | |
| Tableaux de bord | Informations IRM | Bulletin Informatique | |
| Telecommunications | | Forum Informatique | |
| Training | | Softline | |

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J.-L. BROUSMICHE
DI / SLF

Hardware and Operating Systems

Product family managers :
P. Hirn DG II / J.P. Lambot DI-STB

LOCAL OPERATING SYSTEMS

| Product name | Classe | Statut | Comments |
|----------------------------|--------|--------|-----------------------|
| DOS 5.0 | B | PO | PC Desktop |
| Windows 3.1 | B | PO | PC Desktop |
| Windows 95 | B | PO | PC Desktop |
| Windows 95 | B | OP | PC Portables |
| Windows NT Workstation 4.0 | B | OP | PC Desktop |
| Windows NT Server 4.0 | B | OP | Serveurs bureautiques |
| Windows NT Server 4.0 | B | EV | Serveurs applicatifs |
| UNIX divers (*) | B | PO | Serveurs bureautiques |
| UNIX divers (*) | B | OP | Serveurs applicatifs |

(*) conformes au standard de jure ISO (POSIX 1003) complété par les spécifications UNIX 95TM de l'Open Group

WORKSTATIONS and CLIENT OPERATING SYSTEMS

| Product name | Operating systems | Classe | Statut | Comments |
|--|-----------------------------|--------|--------|----------------------------|
| NCD X-Terminals | UNIX | C | AD | X-Terminal |
| DIGITAL X-Terminals | UNIX | C | AD | X-Terminal |
| BULL ZDS 425SH+ ; 433DH+ (80486) | DOS5.0/WIN3.1/WIN95 | B | AD | Desktop |
| ICL ErgoPro D4/33XG, D4/66 XG et Xgi (80486) | DOS5.0/WIN3.1/WIN95 | B | AD | Desktop |
| SNI PCD-4HVL (80486) | DOS5.0/WIN3.1/WIN95 | B | AD | Desktop |
| OLIVETTI M4-62, M400-40, M6-440, M6-460, M4-66 (80486) | DOS5.0/ WIN3.1/WIN95 | B | AD | Desktop |
| ICL ErgoPro e450/75, e451/75, e451/100, x450/100, x451/100 (Pentium) | DOS5.0/WIN3.1/WIN95/ WIN NT | B | OP | Desktop |
| OLIVETTI M4-75, M4-90, M4-100, M4-166, M2-233 MT (Pentium) | DOS5.0/WIN3.1/WIN95/ WIN NT | B | OP | Desktop |
| SNI Scenic Pro M5/166 (Pentium) | DOS5.0/WIN3.1/WIN95/ WIN NT | B | OP | Desktop |
| OLIVETTI M6000 MT | DOS5.0/WIN3.1/WIN95/ WIN NT | B | OP(*) | Desktop |
| OLIVETTI Philos 44 et 46 (80486) | DOS5.0/WINDOWS 3.1 | B | AD | Portable |
| TEXAS INSTRUMENTS TM 4000 (E) (80486) | DOS5.0/WINDOWS 3.1 | B | AD | Portable |
| OLIVETTI Philos 48C (80486) | DOS5.0/WIN3.1/WIN95 | B | OP | Portable |
| OLIVETTI Echos 75C et 133S (Pentium) | DOS5.0/WIN3.1/WIN95 | B | OP | Portable |
| SNI PCD-4ND 100 (80486) | DOS5.0/WIN3.1/WIN95 | B | OP | Portable + Docking Station |
| SNI PCD-5ND 75 (Pentium) | DOS5.0/WIN3.1/WIN95 | B | OP | Portable + Docking Station |
| SNI Scenic Mobile 700 (Pentium) | DOS5.0/WIN3.1/WIN95 | B | OP | Portable + Docking Station |
| TOSHIBA 440 CDT | WINDOWS 95 | B | OP | Portable |
| TOSHIBA 460 CDT | WINDOWS 95 | B | OP(*) | Portable |
| COMPAQ ARMADA 7770 | WINDOWS 95 | B | OP(*) | Portable + Docking Station |

Hardware and Operating Systems

Product family managers :
P. Hirn DG II / J.P. Lambot DI-STB

LOCAL SERVERS

| Product name | CPU Model | Operating systems | Classe | Statut | Comments |
|---|--------------------------|---------------------|--------|--------|---------------------|
| BULL DPX 20 | IBM Power | AIX 3 2 x | B | AD | |
| BULL Escaia Mxxx, Dxxx, ,Rxxx | PowerPC | AIX 4 1 | B | OP | |
| BULL Z-server LT and EX | Intel 486/Pentium | SCO ODT 3/Unixware | B | AD | |
| BULL Z-server MXP | Intel Pentium | SCO ODT 3/Unixware | B | OP | |
| DIGITAL 433, 450, PCT | Intel 486 | SCO ODT 3 | B | AD | |
| DIGITAL Prioris HX xxxMP/Prioris ZX | Intel Pentium/PentiumPro | Windows NT/SCO OS 5 | B | OP | |
| DIGITAL Server 7100 | PentiumPro | Windows NT/SCO OS 5 | B | OP(*) | |
| DIGITAL AlphaStation 3000 | DEC AXP | Digital Unix | B | OP | |
| DIGITAL AlphaServer1xxx/2xxx/4xxx/8xxx | DEC AXP | Digital Unix | B | OP | |
| HP9000 D-Class Enterprise Server (Model Dxxx) | PA - 7200 | HP-UJ 10 10 | B | EV | Projets-pilotes GED |
| HP9000 K-Class Enterprise Server (Model Kxxx) | PA - 7200, PA-8000 | HP-UJ 10 xx | B | EV | Projets-pilotes GED |
| HP NetServer 6/xxx and 5/xxx | Intel PentiumPro | Windows NT | B | EV | Projets-pilotes GED |
| ICL FX486,MX486 | Intel 486 | SCO ODT 3/ Unix V.4 | B | AD | |
| ICL F5/60 | Intel Pentium | SCO ODT 3 | B | AD | |
| ICL TeamServer Exxxi/Hxxxi | Intel 486/Pentium | NX V7/SCO ODT 3 | B | AD | |
| ICL SuperServer Hxxxs/Kxxxs | Sparc | NX V7 Mplus | B | OP | |
| NCR 34xx/35xx | Intel 486/Pentium | UNIX SRV4 | B | AD | |
| NCR Entry Level Servers Sxx | Intel Pentium | UNIX SRV4 | B | OP | |
| NCR WorldMark 4xxx | Intel Pentium | UNIX SRV4 | B | OP | |
| OLIVETTI LSX 5040/5050 | Intel 486/Pentium | SCO ODT 3/Unix V.4 | B | AD | |
| OLIVETTI LSX 65xxx | Mips R3000/R4400 | DC/OSX | B | OP | Pyramid Server |
| OLIVETTI SNX Systema xxx | Intel Pentium | SCO ODT3/ SCO OS 5 | B | OP | |
| OLIVETTI NetStrada 7000 | Intel PentiumPro | Windows NT/SCO OS 5 | B | OP | |
| SNI PCE 4/5 | Intel 486/Pentium | SCO ODT 3 | B | AD | |
| SNI Primergy xxx | Intel Pentium | SCO OS 5 | B | OP | |
| SNI RM 400/600 | Mips R4400 | SINIX V 5.4 | B | OP | |
| SNI-Pyramid Nile 100/150 | Mips R4400 | DC/OSX | B | OP | |
| SUN SparcStation 4/5 and SparcServer 4/5 | MicroSparc-II | SOLARIS 2.x | B | AD | |
| SUN SparcStation 10/20 and SparcServer 10/20 | SuperSparc(+) | SOLARIS 2.x | B | AD | |
| SUN SparcServer 1000/SparcServer 2000 | SuperSparc | SOLARIS 2 x | B | OP | |
| SUN Enterprise 1/2 (UltraServer 1/2) | UltraSparc | SOLARIS 2.x | B | OP | |
| SUN Enterprise 3000/4000/5000 | UltraSparc | SOLARIS 2.x | B | OP | |

OP(*) = Nouvelles acquisitions

CENTRAL SERVERS and OPERATING SYSTEMS

| Product name | CPU Model | Operating Systems | Classe | Statut | Comments |
|-----------------------|----------------|-------------------------|--------|--------|----------|
| AMDAHL 5995-2570M | IBM System 390 | VM/ESA | B | PO | DI-CC |
| AMDAHL 5995-2570M | IBM System 390 | MVS/ESA | B | PO | DI-CC |
| BULL DPS 9000 | - | GCOS 8 | B | PO | DI-CC |
| CRAY 6400E | SuperSparc | Solaris 2.5.1 | B | OP | DI-CC |
| SIEMENS H130-A | - | BS2000 - v10/OSF1/ OSD2 | B | PO | DI-CC |
| SNI Pyramid Nile 1000 | MIPS R4400 | Reliant UNIX 5 43 | B | OP | DI-CC |
| SUN 3000 | SuperSparc | Solaris 2 5 1 | B | OP | DI-CC |

Seuls sont repris les modèles de serveurs UNIX installés au Centre de Calcul et qui ne figurent pas dans la liste des serveurs locaux.

Hardware and Operating Systems

Product family managers :
P. Hirn DG II / J.P. Lambot DI-STB

PRINTERS

| Interface, protocol, standard | Operating systems | Classe | Statut | Comments |
|---|-------------------|--------|--------|---------------------------------------|
| Adobe Postscript | - | A | OP | |
| HP-PCL 3, 4, 5 et 6 | - | A | OP | |
| HP DeskJet 310, 320 | DOS/WINDOWS | B | OP | Portable; N&B; HP-PCL3 |
| HP DeskJet 340 | DOS/WINDOWS | B | OP(*) | Portable; N&B; HP-PCL3 |
| HP DeskJet 500 | DOS/WINDOWS | B | AD | Personal; N&B; HP-PCL3 |
| HP DeskJet 510, 520, 540, 600 | DOS/WINDOWS | B | OP | Personal; N&B; HP-PCL3 |
| HP LaserJet IIIP | DOS/WINDOWS | B | OP | Personal; N&B; HP-PCL5 |
| HP LaserJet 4L | DOS/WINDOWS | B | OP | Personal; N&B; HP-PCL5 |
| HP LaserJet 5L, 5P | DOS/WINDOWS | B | OP | Personal; N&B; HP-PCL5 |
| HP LaserJet 6L et 6P | DOS/WINDOWS | B | OP(*) | Personal; N&B; HP-PCL |
| HP LaserJet III | DOS/WINDOWS/UNIX | B | AD | Shared; N&B; HP-PCL3 |
| HP LaserJet IIISi | DOS/WINDOWS/UNIX | B | OP | Shared; N&B; HP-PCL3 |
| HP LaserJet 4, 4M, 4P Plus, 4M Plus | DOS/WINDOWS/UNIX | B | OP | Shared; N&B; HP-PCL 5 ou Post-Script |
| HP LaserJet 4Si/SiMX/V/MV | DOS/WINDOWS/UNIX | B | OP | Shared; N&B; HP-PCL 5 ou Post-Script |
| HP LaserJet, 5, 5N, 5M | DOS/WINDOWS/UNIX | B | OP | Shared; N&B ; HP-PCL 6 ou Post-Script |
| HP LaserJet, 5, 5N, 5M | DOS/WINDOWS/UNIX | B | OP | Shared; N&B ; HP-PCL 6 ou Post-Script |
| HP LaserJet 5Si/SiMX | DOS/WINDOWS/UNIX | B | OP | Shared; N&B; HP-PCL 5 ou Post-Script |
| HP LaserJet 4000/4000T/4000N/4000NT | DOS/WINDOWS/UNIX | B | OP(*) | Shared; N&B, HP-PCL6 |
| HP DeskJet 500C | DOS/WINDOWS | B | AD | Personal; color; HP-PCL3 |
| HP DeskJet 550C, 560C, 660C, 690C, 850C, 870Cxi | DOS/WINDOWS | B | OP | Personal; Color; HP-PCL3 |
| HP DeskJet 890C | DOS/WINDOWS | B | OP(*) | Personal; color; HP-PCL3 |
| HP DeskJet 1100C | DOS/WINDOWS | B | OP(*) | Personal; color; HP-PCL3 |
| HP DeskJet 1200C/CPS, 1600 C/CPS | DOS/WINDOWS/UNIX | B | OP(*) | Shared; color; HP-PCL3 |
| MT 660/690 | UNIX | B | OP | Imprimante à chaîne |
| OCE 66xx | UNIX | B | OP | HP-PCL3 ou Post-Script |
| SNI 9014 | DOS/ WINDOWS | B | OP | Multicopy forms printing |
| TI (XL) PS 17/PS 35 | UNIX | B | OP | Postscript |
| OLIVETTI DM 624 | DOS/ WINDOWS | C | OP | Multicopy forms printing |

SCANNERS

| Product name | Operating systems | Classe | Statut | Comments |
|----------------------------|-------------------|--------|--------|----------|
| HP SCANJET IIP, IIIP | DOS/WINDOWS | B | OP | |
| HP SCANJET IIC, IICx, IIIC | DOS/WINDOWS | B | OP | |

Hardware and Operating Systems

Product family managers :
P. Hirn DG II / J.P. Lambot DI-STB

OFFICE EQUIPMENTS (fax, photocopier, ...)

| Product name | Type | Classe | Statut | Comments |
|----------------------------|----------------------------|--------|--------|--------------------------------|
| CANON L500, L600, L800 | FAX | B | OP | |
| ADLER 1121, 1428 | Office calculator | B | PO | |
| OLIVETTI LOGOS 452, 384 | Office calculator | B | PO | |
| CITIZEN 440 DP | Office calculator | B | OP | |
| NASCO 2400 | Office calculator | B | OP | |
| PRECISA 5700 | Office calculator | B | PO | |
| MINOLTA EP1050/EP 1083 | Photocopier | B | OP | 0- 5 Kcop/month 15 A4/m (1) |
| AGFA X310 | Photocopier | B | OP | 5-20 Kcop/month 35 A4/m(1) |
| CANON NP6050 | Photocopier | B | OP | 20-35 Kcop/month 50 A4/m(1) |
| CANON NP6062 | Photocopier | B | OP | 35-55 Kcop/month 62 A4/m(1) |
| CANON NP6085 | Photocopier | B | OP | 55-100 Kcop/month 85 A4/m(1) |
| CANON CLC700 | Photocopier colour | B | PO | 4-8 Kcop/month, 5 A4/m (7) |
| CANON CLC 1000 | Photocopier colour | B | OP | 5-50 Kcop/month; 31 A4/m |
| MINOLTA CF 900 | Photocopier colour | B | OP | < 5Kcop/month 6 A4/m |
| OCE 2600 | Photocopier | B | OP | 100-500 Kcop/month 100 A4/m(1) |
| OCE 3165 | Photocopier multi-fonction | B | OP | > 40 Kcop/month; 65 A4/m |
| RANK XEROX 5690 | Photocopier | B | OP | > 500 Kcop/month 135 A4/m (1) |
| RANK XEROX Docutech | Photocopier | B | OP | >500 Kcop/month 135 A4/m (1) |
| Assmann M800, M205, MC8 | REP. Cassette | B | OP | |
| DICTAPHONE 270 | REP. Cassette | B | OP | |
| PHILIPS LFH 2505 | REP. Cassette | B | PO | |
| OLIVETTI L93, ET112, ET121 | Typewriter | B | PO | |
| OLYMPIA ES106, SGE75 | Typewriter | B | PO | |
| TA 400 | Typewriter | B | PO | |
| TRIUMPH-ADLER TA 410 | Typewriter | B | OP | |

- (1) Automatic feeding, sorting, two-sided copying
- (2) Automatic feeding
- (3) On-line binding
- (4) Addressing, zones treatment, « mode cachet »
- (5) Color centralized service
- (6) Color decentralized service, basic modification of original
- (7) Color decentralized service, advanced modification of original
- (8) Zones treatment

Hardware and Operating Systems

Product family managers :
P. Hirn DG II / J.P. Lambot DI-STB

LAN INTEGRATION PRODUCTS

| Product name | Operating systems | Classe | Statut | Comments |
|--|-------------------------------|--------|--------|----------|
| NETBIOS | - | A | OP | |
| OLE 2.0 | - | A | OP | |
| SMB | - | A | OP | |
| TCP/IP | - | A | OP | |
| WINSOCKETS | - | A | OP | |
| PC-NFS 5.x | DOS, WINDOWS | B | PO | |
| LAN MANAGER 2.x Server | UNIX | B | PO | |
| MS LAN MANAGER 2.x Client | DOS, WINDOWS | B | PO | |
| NFS | UNIX, BS2000, MVS/ESA, VM/ESA | B | OP | |
| HUMMINGBIRD NFS Maestro | WINDOWS NT Client | B | OP | |
| Diskshare Intergraph | WINDOWS NT Server | B | OP | |
| Advanced Server for Unix (Bull, NCR, SNI, SCO) | UNIX | C | OP | |
| Vision SCO NFS | UNIX | B | OP | |

EMULATORS

| Product name | Operating systems | Classe | Statut | Comments |
|--------------------------|---------------------|--------|--------|----------|
| 3270 | - | 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, Windows NT | B | OP | |
| LOG - WS (9750 emulator) | WINDOWS, Windows NT | B | OP | |
| RUMBA 3270 | WINDOWS, Windows NT | B | OP | |
| TerWinal | WINDOWS, Windows NT | B | OP | |

SYSTEM MANAGEMENT PRODUCTS

| Product name | Operating systems | Classe | Statut | Comments |
|------------------|------------------------------------|--------|--------|----------|
| SNMP | - | A | OP | |
| CAPACITY NetCon | DOS/WINDOWS/Windows NT | B | OP | |
| LEGATO NETWORKER | UNIX, WINDOWS NT Server | B | OP | |
| ALEXANDRIA | PYRAMID UNIX DCOSx, SCO Openserver | C | OP | |
| Diskeeper | Windows NT Server | B | OP | |
| Quota manager | Windows NT Server | B | OP | |
| 0&0 Defrag | Windows NT Client | | EV | |
| SMS | Windows NT Server | | EV | |

Hardware and Operating Systems

Product family managers :
P. Hirn DG II / J.P. Lambot DI-STB

SECURITY

| Product name | Operating systems | Classe | Statut | Comments |
|--|--------------------------|--------|--------|---|
| Identification / Authentification renforcée | | | | |
| Carte à puce: SLE44CR80S (UTIMACO) | DOS5.0/WIN95/WIN NT/UNIX | | EV | SINCOM 2, courrier électronique sécurisé, généralisation possible |
| Lecteur Carte à puce | DOS5.0/WIN95/WIN NT/UNIX | | EV | SINCOM 2, courrier électronique sécurisé, généralisation possible |
| Token (SECURE-ID, DIGIPASS, etc.) | DOS5.0/WIN95/WIN NT/UNIX | | EV | Par BS/SI |
| Journalisation, Monitoring, Alerte | | | | |
| INTRUDER ALERT (AXENT TECHN) | | | EV | |
| BRAIN TREE SECURITY SOFTWARE | | | EV | |
| Systèmes d'audit | | | | |
| TIGER-COPS-TRIPWIRE | UNIX | | EV | Par BS/SI (version INTERNET révisée) |
| PC-UNIX-AUDIT (INTRUSION DETECTION) | DOS5.0/WIN3.1/WIN95 | | EV | Par BS/SI |
| KANE SECURITY ANALYST | WIN NT | | EV | Par BS/SI |
| SATAN | UNIX/WIN NT | | EV | Par BS/SI (version INTERNET révisée) |
| ISS-SCANNER (ISS) | UNIX/WIN NT | | EV | Par BS/SI, classe B/OP à prévoir |
| Sécurité physique (antivol) | | | | |
| SECUPLUS | | | EV | Par BS/SI |
| LOCK-IT | | | EV | Par BS/SI |
| Matériel | | | | |
| CRYPTOFAX | | | EV | Domaine classifié / classe C / OP à prévoir (DGIA) |
| Matériel TEMPEST | | | EV | Domaine classifié |

Network and Telecommunication

Product family managers:
W. BEURMS DG III / K. DE VRIENDT DI-STB

SUPPORTED PROTOCOLS *PROTOCOLS SUPPORTED INTERNALLY*

| Product name | Version | Operating system | Environnement | Classe | Status | Comments |
|---|---------|------------------|---------------|--------|--------|--|
| - basic networking | | | | | | |
| IP (and the various application protocols above it) | | | | A | OP | Basic networking protocol |
| SNMP | | | | C | OP | Local management + IDNet/Snet management |
| - for e-mail | | | | | | |
| APS | | | | A | OP | Remote access to mailboxes |
| SMTP | | | | C | OP | For mail applications |
| X.400 (P1 and P7) | | | | A | OP | Basic protocol for INSEM2 |
| X.500 | | | | | EV | |
| RSA, DES, X.509 | | | | | | <i>Actual status?</i> |

SUPPORTED PROTOCOLS *PROTOCOLS SUPPORTED FOR EXTERNAL COMMUNICATIONS*

| Product name | Version | Operating system | Environnement | Classe | Status | Comments |
|----------------------------|---------|------------------|----------------|--------|--------|---|
| - for e-mail | | | | | | |
| Fax Group 3 | | | Telecom Center | A | OP | |
| SMTP | | | Telecom Center | A | OP | |
| Telex | | | Telecom Center | C | PO | |
| X.400 (84) | | | Telecom Center | C | OP | |
| X.400 (88) | | | Telecom Center | C | OP | |
| X.400 (92) | | | Telecom Center | A | OP | |
| X.500 | | | | | EV | |
| - for file transfer | | | | | | |
| FTAM | | | Telecom Center | C | PO | |
| FTP | | | Telecom Center | A | OP | |
| - for remote access | | | | | | |
| ISDN | | | Telecom Center | A | OP | For external access to TC services |
| PPP | | | Telecom Center | A | OP | For external access to TC services |
| PSTN | | | Telecom Center | A | OP | For external access to TC services |
| Telnet | | | Telecom Center | C | OP | Via GWI |
| X.25 | | | Telecom Center | A | PO | |
| X.3 | | | | | | <i>Still supported?</i> |
| - for Web access | | | | | | |
| HTTP/HTTPS | | | Telecom Center | A | OP | For access to external Web sites, for external access to Europa servers, for limited access to internal servers (in combination with SSL) |
| SSL | | | Telecom Center | | EV | |

Network and Telecommunication

Product family managers:
W. BEURMS DG III / K. DE VRIENDT DI-STB

SUPPORTED PROTOCOLS

PROTOCOLS RELATED TO E-MAIL APPLICATIONS

| Product name | Version | Operating system | Environnement | Classe | Status | Comments |
|---------------|---------|------------------|---------------|--------|--------|-------------------------------------|
| CMC | | | | A | OP | Application in Unix environment |
| MAPI (16 bit) | | | | A | OP | Applications in Windows environment |
| SMTP | | | | A | OP | |

PRODUCTS

E-MAIL RELATED PRODUCTS

| Product name | Version | Operating system | Environnement | Classe | Status | Comments |
|--|---------|------------------|----------------|--------|--------|--------------------------------|
| LMS | 2.0 | | Telecom Center | C | OP | Gateway X.400/SMTP/Fax/Telex |
| OLE server for Route400 CMC Mail Services - 32 bit version | 2.0.0.3 | | | B | OP | Developed and maintained by DI |
| Route400 Fax printer driver | ??? | | | B | OP | |
| Route400 Fax viewer | ??? | | | B | OP | |
| Route400 MTA | 3.5 | SCO/ODT | | B | OP | Basis for INSEM2 |
| Sendmail | 8.8.8 | | | C | OP | For applications |

PRODUCTS

NETWORK MONITORING TOOLS (TO BE REVIEWED)

| Product name | Version | Operating system | Environnement | Classe | Status | Comments |
|---------------------------------|---------|------------------|---------------|--------|--------|---|
| Expert Sniffer Network Analyser | | | | B | OP | <i>What network analysis tools to keep?</i> |
| LanProbe II | | | | B | OP | <i>What Class/Status to give to</i> |
| Open View Network Node Manager | | | UNIX/MOTIF | B | OP | <i>remaining products?</i> |
| Probeview/SNMP | | | MS WINDOWS | B | OP | |
| LAN Analyser | | | | C | PO | |

PRODUCTS

SECURITY RELATED PRODUCTS

| Product name | Version | Operating system | Environnement | Classe | Status | Comments |
|-----------------------------|---------|------------------|----------------|--------|--------|----------|
| Firewall-1 | ??? | Solaris | Telecom Center | C | OP | |
| Netscape certificate server | 2.5 | Solaris | Telecom Center | | EV | |
| SIS (Telis) | ??? | | Telecom Center | C | PO | |

PRODUCTS

VARIOUS PRODUCTS

| Product name | Version | Operating system | Environnement | Classe | Status | Comments |
|-----------------------|---------|------------------|----------------|--------|--------|------------------------------------|
| FTRG | | | Telecom Center | C | PO | Gateway FTP/FTAM (X.25/TCP/IP) |
| GWI | | | Telecom Center | C | PO | Interactive access to DG machines |
| Minitel gateway | | | Telecom Center | C | PO | |
| Netscape proxy server | ??? | Solaris | Telecom Center | C | OP | Gateway to Internet for WWW access |

Office Automation and Documents Management

Product family managers:
F. KODECK SG / J. PUIG DI-STB

ARCHITECTURAL SPECIFICATIONS

| Product name | Environnement | Classe | Status | Comments |
|-----------------------------|--------------------------------|--------|--------|-------------------------------|
| UNICODE | | A | OP | |
| OLE 2.0 | | A | OP | |
| WordPerfect 5.2 file format | MS Windows 3.1 / 95 / NT | A | OP | Echanges interinstitutionnels |
| MS-Word 6 file format | MS Windows 3.1 / 95 / NT | A | OP | Migration NTP |
| MS-Excel 5 file format | MS Windows 3.1 / 95 / NT | A | OP | Migration NTP |
| MS-Powerpoint 4 file format | MS Windows 3.1 / 95 / NT | A | OP | Migration NTP |
| HTML 3.2 | MS Windows 3.1 / 95 / NT, Unix | A | OP | Europa / Europa + |
| SGML | MS Windows 3.1 / 95 / NT, Unix | A | OP | |
| Adobe PDF V.2 | MS Windows 3.1 / 95 / NT | A | OP | Migration NTP |
| Adobe PDF V.3 | MS Windows 3.1 / 95 / NT | A | EV | Post-migration NTP |

WORD PROCESSING

| Product name | Environnement | Classe | Status | Comments |
|---------------------|--------------------|--------|--------|----------|
| Word 6.0 | MS Windows 3.1 | B | PO | |
| Office 97 / Word 97 | MS Windows 95 / NT | B | OP | |

SPREADSHEET

| Product name | Environnement | Classe | Status | Comments |
|----------------------|--------------------|--------|--------|----------|
| Excel 5.0 | MS Windows 3.1 | B | PO | |
| Office 97 / Excel 97 | MS Windows 95 / NT | B | OP | |

PRESENTATIONS

| Product name | Environnement | Classe | Status | Comments |
|---------------------------|--------------------|--------|--------|----------|
| Powerpoint 4.0 | MS Windows 3.1 | B | PO | |
| Office 97 / Powerpoint 97 | MS Windows 95 / NT | B | OP | |

AGENDA

| Product name | Environnement | Classe | Status | Comments |
|------------------------|--------------------------|--------|--------|------------------------------|
| Office 97 / Outlook 97 | MS Windows 95 / NT | C | OP | Uniquement agenda individuel |
| CaLAnDar 3.12 | MS Windows 3.1 / 95 / NT | B | OP | Year 2000 not compliant |
| CaLAnDar 4 | MS Windows 95 / NT | | EV | Year 2000 compliant |
| Lotus-Organizer | MS Windows 3.1 | C | PO | |
| MS SCHEDULE + | MS Windows 3 1 | C | PO | |

GRAPHICS TOOLS

| Product name | Environnement | Classe | Status | Comments |
|--------------|--------------------------|--------|--------|----------|
| VISIO 4 | MS Windows 3.1 / 95 / NT | B | OP | |
| VISIO 5 | MS Windows 95 / NT | | EV | |
| Corel Draw 6 | MS Windows 3.1 | C | PO | |
| Corel Draw 8 | MS Windows 95 / NT | C | OP | |
| INTERLEAF | UNIX, MS DOS | C | OP | |

Office Automation and Documents Management

Product family managers:
F. KODECK SG / J. PUIG DI-STB

DOCUMENT EXCHANGE TOOLS

| Product name | Environnement | Classe | Status | Comments |
|-----------------------|--------------------|--------|--------|----------|
| ACROBAT Reader V.2 | MS Windows 3.1 | B | PO | |
| ACROBAT Reader V.3 | MS Windows 95 / NT | B | OP | |
| ACROBAT Distiller V.3 | MS Windows 95 / NT | B | OP | |
| ACROBAT Exchange V.3 | MS Windows 95 / NT | B | OP | |

VIEWERS

| Product name | Environnement | Classe | Status | Comments |
|--------------|--------------------|--------|--------|----------|
| Outside-In | MS Windows 3.1 | B | PO | |
| Quickview+ 4 | MS Windows 95 / NT | B | OP | |

MULTILINGUAL TOOLS

| Product name | Environnement | Classe | Status | Comments |
|----------------|--------------------|--------|--------|------------------|
| MF WINDOWS 4.x | MS Windows 3.1 | B | PO | Multilingual kit |
| MF WINDOWS 5 | MS Windows 95 / NT | B | OP | Multilingual kit |

HTML AUTHORIZING TOOLS

| Product name | Environnement | Classe | Status | Comments |
|----------------|--------------------|--------|--------|----------------------------------|
| HoTMetal Pro 3 | MS Windows 3.1 | B | PO | |
| HoTMetal Pro 4 | MS Windows 95 / NT | C | OP | Utilisation limitée |
| FrontPage 98 | MS Windows 95 / NT | B | OP | Extensions propriétaires exclues |

WEB BROWSERS

| Product name | Environnement | Classe | Status | Comments |
|---------------------------|--------------------|--------|--------|----------|
| Netscape 3.0 | MS Windows 3.1 | B | PO | |
| Netscape 3.2 | MS Windows 95 / NT | B | PO | |
| Netscape Navigator 4.0 | MS Windows 95 / NT | B | OP | |
| Netscape Communicator 4.0 | MS Windows 95 / NT | | EV | |
| Internet Explorer 4 | MS Windows 95 / NT | C | OP | |

PROJECT MANAGEMENT

| Product name | Environnement | Classe | Status | Comments |
|---------------|--------------------|--------|--------|----------|
| MS-Project 5 | MS Windows 3.1 | B | PO | |
| MS-Project 98 | MS Windows 95 / NT | B | OP | |

ELECTRONIC MAIL

| Product name | Environnement | Classe | Status | Comments |
|---------------------|--------------------------|--------|--------|--------------------|
| Route400 UA 5.1.0 | MS Windows 3.1 | B | PO | |
| Route400 RUA 5.2.2 | MS Windows 3.1 / 95 / NT | B | OP | |
| SendMail (UTI MACO) | MS Windows 95 / NT | | EV | Classe B à prévoir |

OCR

| Product name | Environnement | Classe | Status | Comments |
|--------------|--------------------------|--------|--------|----------|
| OMNIPAGE | MS Windows 3 1 / 95 / NT | C | OP | |
| TEXIRIS | MS Windows 3 1 / 95 / NT | C | OP | |

Office Automation and Documents Management

Product family managers:
F. KODECK SG / J. PUIG DI-STB

ADMINISTRATIVE SOFTWARE PACKAGES

| Product name | Environnement | Classe | Status | Comments |
|---------------|--------------------|--------|--------|----------|
| Euroforms 1.4 | MS Windows 95 / NT | B | OP | |
| Eurolook 3.7 | MS Windows 95 / NT | B | OP | |

CRYPTOGRAPHY TOOLS

| Product name | Environnement | Classe | Status | Comments |
|---------------------------------------|--------------------------|--------|--------|--------------------|
| SAFEGUARD Sign & Crypt (UTI MACO) | MS Windows 3.1 / 95 / NT | C | OP | Classe B à prévoir |
| CUA - CryptWare User Agent (UTI MACO) | MS Windows 3.1 / 95 / NT | C | OP | Classe B à prévoir |

ANTI-VIRUS

| Product name | Environnement | Classe | Status | Comments |
|---------------------------------|--------------------------|--------|--------|-------------------|
| Dr. SOLOMON (S&S Int.) WinGuard | MS Windows 3.1 / 95 / NT | B | OP | Résident d'alerte |
| Dr. SOLOMON (S&S Int.) | MS Windows 3.1 / 95 / NT | B | OP | Produit complet |
| VIRUS SCAN (Mc Afee) | MS Windows 3.1 / 95 / NT | B | OP | Produit complet |
| SWEEP (SOPHOS) | MS Windows 3.1 / 95 / NT | B | OP | Produit complet |
| F-PROT (Frisk / DataFellows) | MS Windows 3.1 / 95 / NT | B | OP | Produit complet |

Information Systems Infrastructure

Product family managers:
J. BUS DG XIII / J. MARIN DI-STB

Middleware (connectivity)

| Product name | Classe | Statut | Environments | Comments |
|---|--------|--------|----------------------------|---------------------------|
| Net 8 | B | EV | MS Windows 95/NT, Unix | linked to Oracle 8 |
| SQL* Net 2 | B | OP | MS Windows 3.1/95/NT, Unix | linked to Oracle 7 |
| SQL*Net 1 | B | PO | MS Windows 3 1, Unix | to migrate, not supported |
| Object Transaction Server or application server | | EV | | REDIS project going on |

Data Base management systems

| Product name | Classe | Statut | Environments | Comments |
|--------------|--------|--------|------------------|--|
| ORACLE 8 X | B | EV | Unix, Windows NT | |
| ORACLE 7 X | B | OP | Unix, Windows NT | |
| ORACLE 6 0 | B | PO | Unix | not supported, migration to be planned |
| ADABAS C 2.2 | B | PO | Unix | |
| ADABAS C 5 2 | B | OP | BS2000, MVS | Running on PO OS |

Retrieval and document management systems

| Product name | Classe | Statut | Environments | Comments |
|-----------------------------|--------|--------|---------------------------|----------------------------------|
| SEARCHServer (Fullcrum 3.0) | B | OP | Unix, Windows NT | Windows NT evaluation to be done |
| ORACLE CONTEXT | C | OP | Unix, Windows NT | |
| VERITY SEARCH | C | OP | Unix, Windows NT | only CC for Web indexing |
| ACTION WORKFLOW | B | OP | Windows 95/NT, Unix | Framework contract available |
| SAROS/MEZZANINE | B | OP | Windows 95/NT, Unix | Framework contract available |
| HYPERVAWE | | EV | Unix, Windows NT | Prototype until end 98 |
| DORIS | | EV | | to be used in CELEX |
| DORODOC | C | PO | Unix-Oracle | |
| BASIS | B | PO | CC BS2000 Local : Unix | |
| MISTRAL V | B | PO | CC. GCOS 8 | running in OS PO |

3rd generation languages

| Product name | Classe | Statut | Environments | Comments |
|--------------|--------|--------|---------------|------------------------|
| C, C++ | B | OP | all OS | |
| JAVA | | EV | all OS | REDIS project going on |
| APL | C | OP | Unix, Windows | used in EUROSTAT |
| MARKIT 2.2 | B | OP | Unix, Windows | |
| COBOL | C | OP | All OS | |
| FORTRAN | C | OP | All OS | |

Information Systems Infrastructure

Product family managers:
J. BUS DG XIII / J. MARIN DI-STB

4th generation Environment

| Product name | Classe | Statut | Environments | Comments |
|----------------------|--------|--------|----------------------------|--|
| 4GL web tool | | EV | | REDIS project going on |
| POWERBUILDER 6 | B | EV | MS Windows 3 1/95/NT, Unix | |
| POWERBUILDER 5 | B | OP | MS Windows 3 1/95/NT | C/S tool recommended |
| DEVELOPER/2000 2.0 | B | OP | MS Windows 3.1/95/NT, Unix | Only Oracle context |
| VISUAL BASIC 5.0 | B | OP | MS Windows 95/NT | Windows integration |
| MS-ACCESS 97 | B | OP | MS Windows 95/NT | end-user tool |
| MS-ACCESS 97 and ODE | B | OP | MS Windows 95/NT | Office developer tool |
| NATURAL 2.2 | B | OP | Mainframes | |
| POWERBUILDER 4 | B | PO | MS Windows 3.1 | not supported, migration to be planned |
| DEVELOPER/2000 1.3 | B | PO | Windows, UNIX | |
| VISUAL BASIC 4.0 | B | PO | MS Windows 95/NT | only 16 bits platforms |
| VISUAL BASIC 3.0 | B | PO | MS Windows 3.1 | |
| MS ACCESS 2 | B | PO | MS Windows 3.1 | end-user tool |
| NATURAL 2.2 | B | PO | Unix | |
| SQL*Forms 3 | B | PO | Unix | not supported |
| SQL*Report 1 | B | PO | Unix | not supported |
| DBASE4 FOR WINDOWS | C | PO | MS Windows 3.1 | |
| FOXPRO For Windows | C | PO | MS Windows 3.1 | |

Case tools

| Product name | Classe | Statut | Environments | Comments |
|---------------------------|--------|--------|------------------|-----------------------------|
| POWERDESIGNER 6.0 | C | OP | MS Windows 95/NT | training on demand |
| DESIGNER 2000 2.0 | C | OP | MS Windows 95/NT | training on demand |
| Object oriented case tool | | | | Selection to be done (1999) |

Testing tools

| Product name | Classe | Statut | Environments | Comments |
|--------------|--------|--------|------------------|--------------------|
| WIN RUNNER | C | OP | MS Windows 95/NT | training on demand |

Configuration Management tools

| Product name | Classe | Statut | Environments | Comments |
|-----------------------|--------|--------|------------------|---|
| MS VISUAL SOURCE SAFE | C | OP | MS Windows 95/NT | use specially with Microsoft tools |
| PVCS | C | OP | MS Windows 95/NT | Recommended use. large projects and co-ordination of several small projects |

Information Systems Infrastructure

Product family managers:
J. BUS DG XIII / J. MARIN DI-STB

Project Management tools

| Product name | Classe | Statut | Environments | Comments |
|--------------|--------|--------|------------------|----------------------|
| MS-PROJET | B | OP | MS Windows 95/NT | Included in family 3 |

Web servers

| Product name | Classe | Statut | Environments | Comments |
|---------------------------------|--------|--------|------------------|--|
| Enterprise Netscape 3.0 | B | OP | Unix, Windows NT | Windows NT, to be evaluated, REDIS project |
| Internet Information Server 4 0 | | EV | Windows NT | To be done in REDIS project |

Statistical or data analyses software packages

On-line analytical process
product, Data Decision Systems

| Product name | Classe | Statut | Environments | Comments |
|----------------|--------|--------|------------------|-----------------------|
| SAS | B | OP | all platforms | |
| FAME | B | OP | Unix, Windows | |
| ORACLE EXPRESS | C | OP | Unix, Windows NT | |
| ACL | C | OP | Unix | DG XX, audit language |
| ACUMEN | C | OP | Unix | Eurostat, DG VII |
| TROLL | C | OP | Unix | DG 2, 12, 17B |
| AREMOS | C | PO | Unix | DG 2, Eurostat |

Advanced query an reporting tools

| Product name | Classe | Statut | Environments | Comments |
|------------------|--------|--------|------------------|------------------------------|
| BUSINESS OBJECTS | B | OP | MS Windows 95/NT | En attente cadre contractuel |
| DISCOVERER 2000 | C | OP | MS Windows 95/NT | |

Administrative software packages (external)

| Product name | Classe | Statut | Environments | Comments |
|--------------|--------|--------|--------------|-------------------------------------|
| ASSYST | B | OP | Unix | Central Help desk tool |
| GLOBUS | C | OP | Unix | Financial package (DG II-SOF) |
| DRC?? | | | | |
| BAVARIA | C | PO | BS2000 | Financial package, running in PO OS |

Information Systems Infrastructure

Product family managers:
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Administrative software packages (internal)

Stategy to be defined

To be discussed, which family

| Product name | Classe | Statut | Environments | Comments |
|----------------|--------|--------|---------------------|-------------|
| SIC | B | OP | Windows 98/NT, Unix | |
| ADONIS | B | OP | Windows 98/NT, Unix | |
| EUROFORM | B | OP | Windows 98/NT, Unix | To family 3 |
| SYSLOG | B | OP | Windows 98/NT, Unix | |
| SINCOM | B | OP | Windows 98/NT, Unix | |
| ELS/INVENTAIRE | B | OP | Windows 98/NT, Unix | |
| ELS/SICMOD | B | OP | Windows 98/NT, Unix | |
| SICMOB | B | OP | Windows 98/NT, Unix | |

Infrastructure information systems packages

| Product name | Classe | Statut | Environments | Comments |
|--------------|--------|--------|--------------|-------------------------------------|
| MULTILIS | C | OP | Unix | |
| MILLENIUMS | C | OP | CC: MVS | Financial package, running in PO OS |
| IRC | C | OP | Unix | Web information dissemination |
| SAP | C | OP | | |

Geographical information systems

| Product name | Classe | Statut | Environments | Comments |
|--------------|--------|--------|--------------|----------------------------|
| ARCView | B? | OP | Windows NT | Contract being negotiated |
| ARC/INFO | B? | OP | Unix | no support available in DI |
| MAP INFO | C | PO | MS-Windows | no support available in DI |

Interface, Protocol, standard

| Product name | Classe | Statut | Environments | Comments |
|--------------|--------|--------|--------------|------------------------|
| DCE RPC | A | OP | | |
| SQL 2 | A | OP | | |
| SQL3 | A | EV | | |
| ODBC 3 | A | OP | | |
| JDBC | A | EV | | REDIS project going on |
| WINSOCKETS | A | OP | | |
| HTTP 1 1 | A | OP | | |
| Corba IOOP | A | EV | | REDIS project going on |
| DCOM | A | EV | | REDIS project going on |
| SGML | A | OP | | |
| HTML 3.2 | A | OP | | |
| DHTML | A | EV | | REDIS project going on |
| XML | A | EV | | REDIS project going on |
| UNICODE 2.0 | A | OP | | |

COOPERATION ENTRE LA DI ET LES DG/SERVICES

| COMITES/GROUPES | PRESIDENT(S) | RAPPORTEUR | DG PARTICIPANTES [1] |
|--|-------------------------------------|--------------------------------------|-------------------------------------|
| COMITES | | | |
| . Cellule de Pilotage des Schémas Directeurs | P. BERTRAND (DI) | P. BERTRAND (DI) | 3,9,10,13/B,19,OSCE,SG |
| . Comité Technique Informatique | C. FLESCHE | M. ALVES LAVADO (DI) | ouvert à toutes les DG |
| . Comité de Suivi du Projet "Mesure de la Satisfaction des Utilisateurs" | M. ALVES LAVADO (DI) | M. ALVES LAVADO (DI) | 24, SdT |
| . Sous-comité du CTI "Migration NTP" | G. VERVAET / M. PUIG | | ouvert à toutes les DG |
| . Cellule Evolution Stratégique | D. KOENIG / R. BOSMAN | M. GARANT (DI) | 1A,2,3,10,13/B,13/L,19,OSCE,SDT |
| . Steering Committee Outils logistiques | ----- | M. TOSETTI / BLEROT | 3,9,20 |
| . User Committee Adonis | M. DEASY (DI) | M. BLEROT (DI) | ouvert à toutes les DG |
| . User Committee outils logistiques | P. BERTRAND (DI) | M. BLEROT (DI) | ouvert à toutes les DG |
| . User Committee Forum SIC MAP 2000 | | | |
| . User Committee Sei-Leg | M. FANALS/J. LEONARD | M. FANALS/J. LEONARD | SG,SDT (+ les DG utilisant Sei-Leg) |
| COMITES DE SUIVI DE PROJET DE SOUS TRAITANCE COMMUNE | | | |
| . Central call dispatch | M. De Backer (DI) | M. De Backer (DI) | À déterminer |
| . Formation bureautique | M. Gritsch (DI) | M. Gritsch (DI) | DG 10 |
| . Local call dispatch | M. De Backer (DI) | M. De Backer (DI) | DG utilisant ce contrat |
| . Support PC commun | B. Thysebaert (DI) | B. Thysebaert (DI) | DG utilisant ce contrat |
| PRODUCT MANAGEMENT | | | |
| . Equipements et systèmes d'exploitation | J.P. LAMBOT / P. HIRN | J.P. LAMBOT / P. HIRN | ouvert à toutes les DG |
| . Réseaux et protocoles | K. DE VRIENDT(DI) / W. BEURMS(DG 3) | K. DE VRIENDT (DI) / W. BEURMS(DG 3) | ouvert à toutes les DG |
| . Bureautique individuelle et collective | J. PUIG / F. KODECK | J. PUIG / F. KODECK | ouvert à toutes les DG |
| . Infrastructure des systèmes d'information | J. MARIN / J. BUS | J. MARIN / J. BUS | ouvert à toutes les DG |
| GROUPE | | | |
| . An 2000 - Le virus du millénaire | W. HEYER (DI) | W. HEYER (DI) | |
| . Groupe consultatif de préparation du CTI | J. ALVES LAVADO | J. ALVES LAVADO | 1, 2, 5L |
| . EDMS/GED | M. DEASY (DI) | H. KOHL (DI) | 3,4,8,9,13,15,16,19,20,OSCE,SCIC,SG |
| . GED | M. FEIDT (EUROSTAT) | T. GRÖMER (DI) | 1,2,3,13,17B+L,CCR-Ispra, EUROSTAT |
| . Groupe de travail formation informatique | M. GRITSCH (DI) | | 5,8,9,10,11,13,15,16,19,22,OPOCE,SJ |
| . Groupe de travail harmonisation des procédures | L. ALLGAYER (DI) | C. ERIKSSON | 1B,3,6,16,21,EUROSTAT |
| . Libéralisation des télécoms | R. KROMMES / F. PELTGEN | R. KROMMES / F. PELTGEN | 3, 4, 9, 13, SG |
| . NT - cluster workgroup | D. MC CANN (SPP) | H. KOHL (DI) | 2,3,6,10,22,23,SPP |
| . NT - administration tools | D. MC CANN (SPP) | H. KOHL (DI) | |
| . Project management | C. PEARE (DG 06) | T. GRÖMER (DI) | 4,6,12,18,19,21,SG |
| . Sécurité | M. BREMAUD (BS) | M. BREMAUD (BS) | 5/L,6,8,14,16,19,21,OPOCE,OSCE,DI |
| . SNET | M. JORTAY | | ouvert à toutes les DG |
| . Systèmes Administratifs Institutionnels | D. DEASY / J. LEONARD | D. DEASY / J. LEONARD | 9, 19, SG |
| . Year 2000 and Euro compliance | C. PEARE / W. HEYER | C. PEARE / W. HEYER | ouvert à toutes les DG |

[1] la DI participe à tous les Comités et Groupes

Calendrier

04/99

concernant la coopération entre la DI et les DG / SERVICES

26.01.1999

COMITES

| | | | | |
|-----|----------|-------------|--------------|---|
| | 03.02.99 | 16H00-19H00 | VID BREY | Cellule Evolution Stratégique |
| | 01.02.99 | 10H00-12H30 | CCAB | Sous-Comité CTI "Migration NTP" |
| | 10.02.99 | 10H00-17H30 | CCAB | Comité Technique Informatique |
| | 17.02.99 | 11H00-13H00 | VID BREY | Comité de Coordination pour la Standardisation |
| | 16.02.99 | 15H00-17H00 | BREY 12/A | Groupe de coordination "Organisation et Management" |
| (1) | 25.02.99 | 15H00-17H00 | VID BREY | Comité de Coordination pour la Standardisation |
| | 10.03.99 | 10H00-17H30 | A déterminer | Comité Technique Informatique |
| (1) | 08.04.99 | 15H00-17H00 | VID BREY | Comité de Coordination pour la Standardisation |
| | 21.04.99 | 10H00-17H30 | A déterminer | Comité Technique Informatique |
| (1) | 06.05.99 | 15H00-17H00 | VID BREY | Comité de Coordination pour la Standardisation |
| | 19.05.99 | 10H00-17H30 | A déterminer | Comité Technique Informatique |
| (1) | 03.06.99 | 16H00-18H00 | VID BREY | Comité de Coordination pour la Standardisation |
| | 16.06.99 | 10H00-17H30 | Luxembourg | Comité Technique Informatique |
| (1) | 01.07.99 | 16H00-18H00 | VID BREY | Comité de Coordination pour la Standardisation |
| | 14.07.99 | 10H00-17H30 | Bruxelles | Comité Technique Informatique |
| (1) | 02.09.99 | 15H00-17H00 | VID BREY | Comité de Coordination pour la Standardisation |
| | 15.09.99 | 10H00-17H30 | Bruxelles | Comité Technique Informatique |
| (1) | 30.09.99 | 15H00-17H00 | VID BREY | Comité de Coordination pour la Standardisation |
| | 13.10.99 | 10H00-17H30 | Bruxelles | Comité Technique Informatique |
| (1) | 28.10.99 | 15H00-17H00 | VID BREY | Comité de Coordination pour la Standardisation |
| | 10.11.99 | 10H00-17H30 | Bruxelles | Comité Technique Informatique |
| (1) | 02.12.99 | 15H00-17H00 | VID BREY | Comité de Coordination pour la Standardisation |
| | 15.12.99 | 10H00-17H30 | Bruxelles | Comité Technique Informatique |

GROUPE

| | | | | |
|--|----------|-------------|-----------|--|
| | 17.02.99 | 10H00-12H00 | BUI 2/117 | Groupe de travail "Formation Informatique" |
| | 17.03.99 | 10H00-12H00 | AN88 5/14 | Groupe de travail "Formation Informatique" |

« PRODUCT MANAGEMENT » ET REUNIONS DE TRAVAIL ASSOCIEES

| | | | | |
|--|----------|-------------|-----------|--|
| | 03.02.99 | 10H00-16H30 | JECL 7/1A | Présentations techniques des produits Business Objects |
|--|----------|-------------|-----------|--|

PRESENTATIONS / DEMONSTRATIONS / SEMINAIRES / WORKSHOPS

| | | | | |
|-----|--------------|-------------|----------------|---|
| | 26.01.99 | 10H30-12H00 | JECL 7/1A | Présentations SIC Map2000 |
| | 02.02.99 | 10H00-17H00 | CCAB | Support Information Exchange |
| | 04.02.99 | 09H00-17H00 | CCAB O/D | Year 2000 : Testing, Issues, Benefits |
| (1) | 16.02.99 | 10H00-13H00 | JMO C2/50 | Practices on Windows NT Server Recovery |
| (1) | 18.02.99 | 10H00-13H00 | JECL 7/ | Practices on Windows NT Server Recovery |
| (2) | 22au24.02.99 | 09H30-17H00 | JECL 7/1B | Gérer un projet de systèmes d'informations |
| (2) | 24au26.03.99 | 09H30-17H00 | JECL 7/1B | Planification et suivi de projets |
| (1) | 20au22.04.99 | 09H30-17H00 | WAG C4 salle 1 | Gérer un projet d'infrastructure informatique |

(1) Nouvelle action

(2) Salle JECL 7/1B max 12 places

Contributions: à envoyer à F. ROSSA JMO C2/82
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Internet: Francois.Rossa@di.cec.be

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