

ePRODCOM

(Extract from CoRD 024, 'A brief outline of existing data collection tools and new developments at the National Institute of Statistics of Belgium', C Dellanoy, 2000)

1. Introduction

Since Internet is accelerating change and create many new opportunities and since Internet is becoming the new communication medium with the public, NIS has decided to build Web-based Applications for the collection of statistical data, using the CASE tool COOL:Gen (Computer Associates).

A pilot project eProdcom was initiated at the beginning of 2000; the aim is to collect statistical information for the Prodcom Statistic (*monthly* statistic in Belgium) related to the Industrial production in Belgium. The PSI corresponds to the local unit of the enterprise. The criteria to participate to the survey are number of employees ≥ 10 or turnover ≥ 100 mio BEF; actually there are around 7000 PSIs for the Prodcom statistic in Belgium.

There exist 6 different forms depending of the industrial activity sector.

2. Objectives

The main objective of this project is to offer the PSI (Provider of Statistical Information) a new service: he can enter his statistical data via the web instead of filling out the paper form and sending it back to the NIS. As a result, one of the horizontal themes in the mission of the NIS, « Statistical Data Gathering », will be inline with the current evolution in society where communication via the web is gaining acceptance and is rapidly growing.

In this pilot project we will only offer this service for the PRODCOM statistics. This service will also be offered to the PSI without making any major changes to the current NIS business procedures.

The new service will have a user-friendly interface, which will lead to higher quality of the data that is entered. If the quality of the source data is higher then subsequently the NIS will have to spend less resources in correcting it. High quality of source data can be influenced by offering the PSI, wherever possible, the possibility to input only changes to previously entered data. Using radio boxes, listboxes, ... wherever possible, forces the PSI to select only valid choices.

This service shifts the data entry activity to the source of the data, thereby eliminating possible data entry errors made at the NIS. Validating the data as much as possible at the source will result in fewer contacts with the WebPSI, thereby freeing up resources for more value-added activities.

The website has been designed to offer the possibility to use it in one of the three following languages (as does the official NIS Website): dutch, french and german. We have actually use the legal basis related to the paper forms (Does there exist a specific legal basis in this domain for official web forms ?)

The « look and feel » of the official NIS Website has been adopted as much as possible, besides the language choice.

Besides the functional objectives who are more related to the actual application, there are also a number of objectives targetting the way the NIS handles projects like this.

A first objective is to prove that the technology to take MVS transactions to the Web works.

A second objective is to set out a path to acquire the knowledge to implement projects like this.

A third objective is to prepare for future similar projects by setting standards and procedures.

3. Technical architecture

Technically the application has a 3-tier architecture:

The front-end

Webbrowsers displaying the HTML-pages that represent the PRODCOM forms

WebApplication must function on different flavors of Webbrowsers, eg. IE, NetScape

The Middle-Tier

The WebServer is IIS

The WebApplication's navigation logic is implemented in ASP-pages

Using COOL:Gen's COM-proxies, the ASP-pages can access business logic located on ...

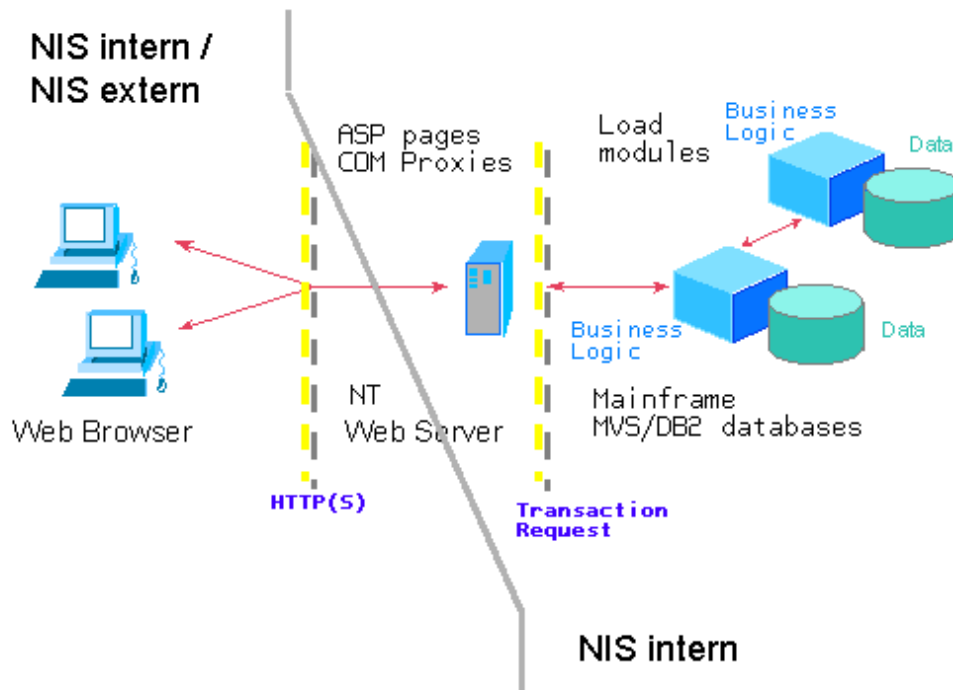
The Back-End

The business logic is implemented in COOL:Gen transactions (Server Load Modules).

These load modules reuse existing business logic used already in the on-line PRODCOM application.

The production data store is MVS/DB2

3-Tier Architecture



4. Short description

After having logged on the NSI Website (userid and password must be entered), the application shows all the PSIs (local statistical units) managed by the WebPSI and allows the WebPSI to select a declaration still to be "inputted" and/or "updated" or to update the address information for a PSI he manages.

PRODCOM Logon - Microsoft Internet Explorer provided by nisins

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Address http://server_coolgen/prodcom/WebLogon.asp Go Links >>



Enquête mensuelle sur la production industrielle PRODCOM



Identifiant :

Mot de Passe :

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Local intranet

PRODCOM Sélectionnez Déclaration - Microsoft Internet Explorer provided by nisins

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Address http://server_coolgen/prodcom/SelectDeclarationMain.asp Go Links >>



Enquête mensuelle sur la production industrielle PRODCOM



Identifiant : prodfor3

14012 SPA MONOPOLE S.A.
CIE FERMIERE DES EAUX /GAVRAY
 Décembre 1999 Introdut 

[Autre Mois/Année](#)

14022 CHAUFONTAINE MONOPOLE S.A.
MORRIER MONIQUE
 Décembre 1999 vide

14023 S.A. MATERNE CONFLUX N.V.
MR. DEROISY

Identité et adresse

[Changer les données](#)

Nom de l'unité locale :	SPA MONOPOLE S.A.
	CIE FERMIERE DES EAUX /GAVRAY
Rue et n° :	AUGUSTE LAPORTE 34
Numéro postal :	4900
Localité :	SPA
Téléphone :	087/79.41.11
Fax :	087/79.42.30
N° T.V.A. de l'entreprise :	0
Nom du correspondant :	
Qualité où service :	

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Local intranet

The declaration related to a specified statistical period is displayed according to the PSI profile (one of the six different forms) and with the values of the data related to the previous period.

Consistency checks are done at the browser.

PRODCOM Détail formulaire - Microsoft Internet Explorer provided by nisins

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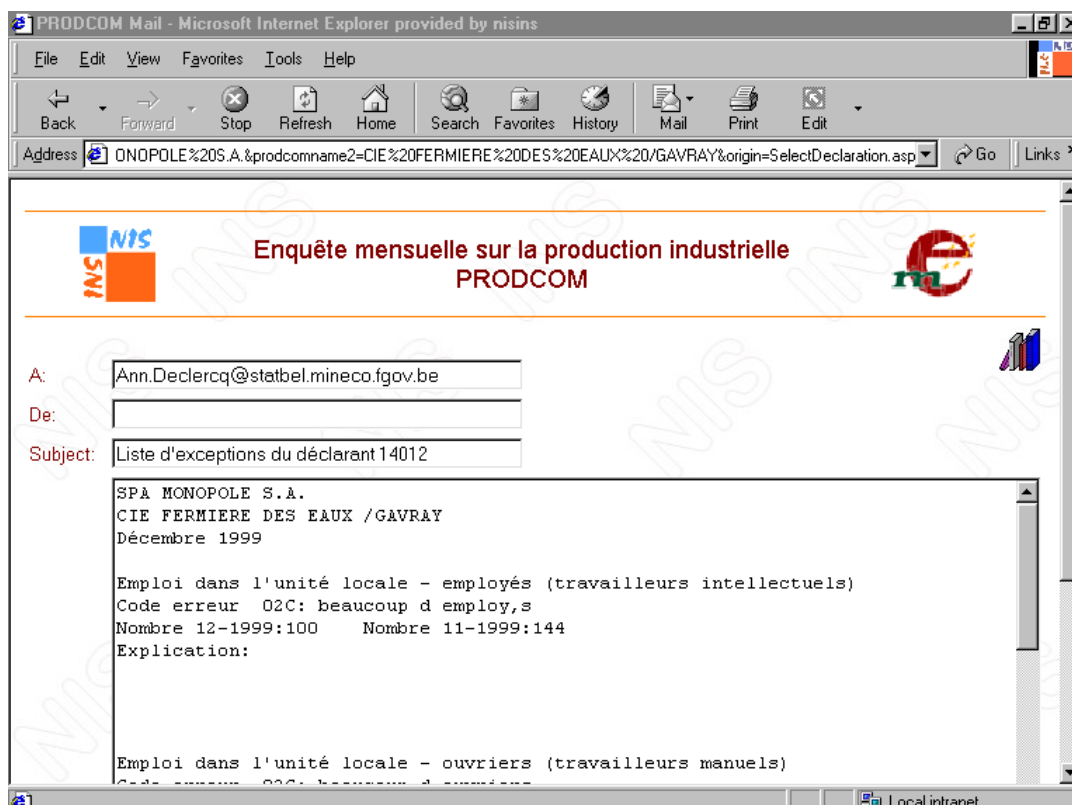
Address [ONPOLE%20S.A.&prodcomname2=CIE%20FERMIERE%20DES%20EAUX%20/GAVRAY&origin=SelectDeclaration.asp](#) Go Links >>

Emploi et volume du travail	Code	Nombre 12-1999	Nombre 11-1999
Emploi dans l'unité locale			
- employés et ouvriers	01	0	675
- employés (travailleurs intellectuels)	02	100	144
- ouvriers (travailleurs manuels)	03	200	537
Heures prestées par les travailleurs : <u>ouvriers + employés</u>: (des personnes déclarées aux codes 02 et 03)	04	300	69259

Rubriques complémentaires	Code	Valeur TVA exclue 12-1999	Valeur TVA exclue 11-1999
traitements et services industriels fournis à des tiers (non compris les services industriels déclarés dans le cadre production en regard des rubriques de la liste PRODCOM)	10	0	0
Livraisons commerciales	11	100	291
Livraisons des produits fabriqués à façon pour votre compte par des entreprises situées à l'étranger	12	0	0

Done Local intranet

After submitting a new or an updated declaration, the data are directly stored in the MVS/DB2 database on the mainframe (this allows to mix data issued from Internet with data related to paper-forms entered inside the NIS). Simultaneously an e-mail is automatically generated with the remaining “errors”; this e-mail can be edited and updated by the WebPSI to explain the “errors”. After that, the WebPSI sends this e-mail to the responsible at the NIS.



An on-line help related to the survey and to the functioning of the application is also provided to the WebPSI.



The eProdcom projet is in an experimental phase. Some WebPSIs are candidate (β-testers) to test the Web application. Those tests are forseen in the short term.