

Paper 098-31

Quality of the ICT Service at KBC Group

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ABSTRACT

We use SAS® IT Management Solutions at KBC with SAS IT Resource Management for processing many ICT loggings from different computing platforms. Two years ago we changed our outflow and reporting environment dramatically. We use SAS/IntrNet® as the main engine to disclose all those information more or less locked-up in the Systems Data Warehouse and call it RapITWeb.

The development process passed three stages: first a collection of static web reporting was expanded, then dynamic web reports were introduced and finally dashboards were created. Dashboards give us the ability to drill up and down in the information (bottom-up and top-down approach).

The first part of this paper gives a short overview of the setup of a dynamic SAS/IntrNet environment, starting from the needs of technical ICT people for an ICT quality improvement project. The purpose of this project was to follow up and optimize heavy transactions that consume a major part of the available system resources. We provided a user-friendly web-based interface for exploiting the System Data Warehouse, so that developers and ICT staff can now concentrate on interpreting information rather than on collecting data and programming reports.

In the second part I explain how "Quality of ICT Services" is reported. By picking some examples, I'll explain what can be understood by quality, how it can be measured and why it is important to report on it:

- Applicative Trend Reporting
- Cost reporting
- RapITList: a monthly overview
- SLM Reporting
- Knowledge Database

For example, we highlight the following items: Objectives, target group and achieved goals.

I will conclude with some figures showing the use of our System Data Warehouse and some suggestions.

INTRODUCTION

Our mission is "Delivering ICT a centralized overall ICT dynamic reporting system that can be used as a Top down and Bottom up information system to provide management and target users with the necessary information to control the quality of ICT, so that action can be taken to give all lines of business the highest possible Quality of Service".

To achieve this mission we have changed our static reporting environment to a dynamic environment by use of SAS/IntrNet on mainframe. This architecture gives KBC the possibility to outflow the ITRM databases on mainframe via a UNIX web server accessible by an Internet browser.

MOVE FROM STATIC TO DYNAMIC REPORTS

The first RapITWeb consists of the generation of many static web reports:

In the first version of RapITWeb, only static web reports were provided:

- Web-based briefing books were created overnight
- 1000+ reports and graphics

Disadvantages:

- We don't know whether if and which reports are used.
- Overhead in processing time and space utilization for creating more reports than needed.
- Low flexibility; no customizable report layout.

Advantages:

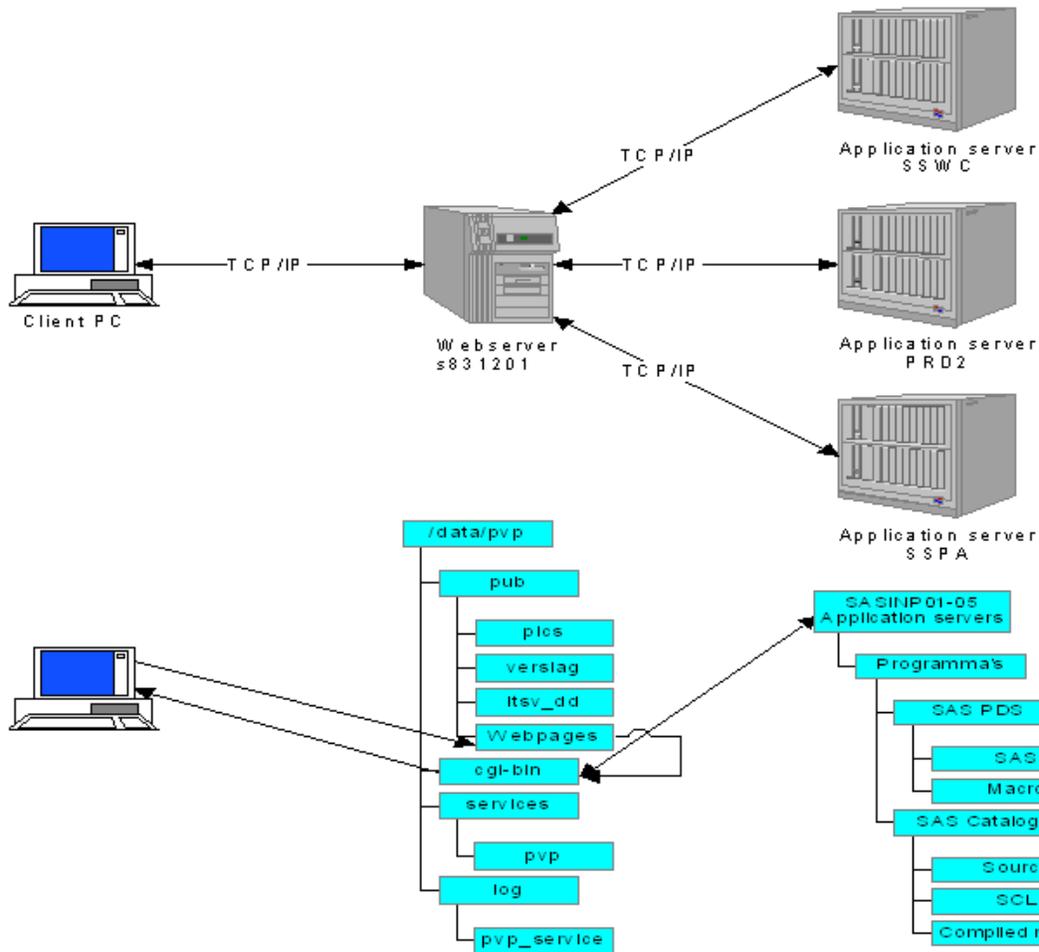
- SAS IT Management Solutions provides sample code for static web reporting.
- Reports with high processing time can be created offline.
- Efficient for repetitive requests.
- Fast response times.

Because of disadvantages mentioned above, we decided to make outflow more dynamic, so that our users were

able to create reports on demand. At the same time an extra requirement was to be able to put more complex business logic in reports, not only static pictures based on ITRM data.

By using browser technology all ITRM data on different mainframes is easy accessible, because we have SAS/IntrNet running on every mainframe. We also use intensively various ODS features: HTML, Java graphs, RTF, PDF and automatic export to MS Excel. Use of Web pages gives us possibilities for dynamic linking on different objects. We use Java applets for graphs because this technology only requires access to a web server. With customized templates and cascading style sheets we create a uniform look and feel.

SAS/INTRNET INFRASTRUCTURE



WHY SERVICE REPORTING?

We need to emphasize that reporting is a tool that could help us doing things better. RapITWeb helps ICT to obtain information on how we are doing our job, giving excellent service to our business. Our slogan is "Your ICT, our business."

Reports provide useful information for optimizing resource usage for:

- Cost reduction
- Efficiency of applications
- Better application performance

Information in SAS IT Resource Management databases is available for:

- Capacity planning
- System performance follow-up
- Cost accounting
- ...

RAPITWEB PORTAL

The RapiTWeb portal is created to let our users navigate in a structured manner through all available data. This portal is divided into four major groups: Management, Systems, Services and Processes.

Management

Contains several reports on a daily and monthly basis concerning information for ICT management as primary target group. Ex. Process & Service reports, Capacity & usage reports, ICT production costs, Risk matrix, ...

Systems

Contains items that are related to the follow up of applications, infrastructure, networks and front-end information.

Services

This tab contains reports with information about Service Level Management and Service Level Agreements.

Processes

Operational processes are reported here. This means KPI incident and many reports about Release evaluation.

The screenshot shows the RapiTweb portal interface. At the top, there is a navigation bar with the KBC logo and the text 'RapiTweb' and 'Contact webmaster'. Below this, there are four main navigation tabs: 'Management', 'Systems' (which is currently selected and highlighted with a red border), 'Services', and 'Processes'. The main content area is organized into three columns:

- Mainframe applications:**
 - Application Trend Reporting
 - Toppers
 - [Batch programs](#)
 - [Online programs](#)
 - [Batch jobs](#)
 - Detailed reporting
 - [Batch programs](#)
 - [Online programs](#)
 - [Batch jobs](#)
 - [Packages](#)
 - Exceptions
 - [by domain](#)
 - [by system manager](#)
 - [EUC reporting](#)
 - [Batch accept reporting](#)
- Mainframe Infrastructure:**
 - Technical Trendreporting
 - [Utilization Started Tasks](#)
 - [Utilization Test tools](#)
 - Utilization ChangeMan
 - [Jobs](#)
 - [Started Tasks](#)
 - Z/OS
 - [CPU Utilization Z/OS](#)
 - VM
 - [CPU Utilization VM](#)
 - [TSLA VM](#)
 - Network**
 - Middleware
 - [eGate](#)
 - [SLAs](#)
 - [WAN](#)
- Front-end:**
 - Branch ATMs
 - [Business](#)
 - [Technical](#)
 - [End-to-end response times](#)
 - [Business NC reporting](#)
 - [Timeouts](#)
 - Agents
 - [NC-transactions SAP FS-CD](#)
 - [KBC-M@tic](#)
 - [Online to the Bank](#)
 - Web traffic
 - [NextGen logging_be](#)
 - [NextGen logging_com](#)
 - [Usage Knowledge base](#)
 - [KBCINET statistics](#)
 - Overall**
 - CPM
 - [Sizer](#)
 - [CPM requirements](#)
 - Analyser
 - [Mainframe](#)

APPLICATIONS

Underneath some reporting applications developed at KBC group to achieve the general "Quality of Service" objectives mentioned before indicating specific objectives, target audience and achieved results. Also a screenshot of the provided report is included.

TREND REPORTING

Trend Reporting is one of the most important applications for our Development Department. Before this functionality was available, it was very difficult to follow up resource consumption of their developed programs and modules. We

have now unlocked all necessary information so that developers can optimize their applications. This also results in a global cost reduction for ICT.

Objectives

- Follow up resource usage of DB2 modules
- Follow up resource usage of batch jobs
- Setup exception reporting

Target audience

- System managers
- Developers
- Performance engineers

Achieved

- Optimized mainframe CPU usage
- Impact analysis of application releases (UOC)
- Detailed information for developers
- Advisory functions for performance engineers

COST REPORTING

| Centernaam | Kostenplaats | Beschrijving | JUN2005 | | | JUL2005 | | | AUG | | | |
|------------------------------------|-------------------|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | | | Eenheden | Middelen | Personeel | Totaal | Eenheden | Middelen | Personeel | Totaal | Eenheden | Middelen |
| KBC H DIR.ICT ONTW. PROCESMANAGEM. | Kopie, Fax en MFT | 5007F1-Fax toestel (comm.inbegr.) | 4,00 | €152,88 | €5,38 | €158,08 | 5,00 | €214,44 | €6,72 | €221,16 | 3,00 | €128,86 |
| | | 5007MS1 Hoogspanning MR_2aandstid3 | 6,00 | €1.211,01 | €81,84 | €1.292,85 | 6,00 | €1.360,68 | €81,84 | €1.442,53 | 5,00 | €1.133,96 |
| Lobby | | 500144-01010ten Informatie Dröcker (KID/CIP) | 4,00 | €506,45 | €47,45 | €553,90 | 4,00 | €569,04 | €47,45 | €616,50 | 4,00 | €569,04 |
| | | 500145-0eldautomaat (SEA) | 6,00 | €1.282,03 | €162,20 | €1.444,23 | 6,00 | €1.440,49 | €162,20 | €1.602,68 | 7,00 | €1.680,57 |
| | | 500146-0toringsautomaat (STDA) | 1,00 | €32,09 | €6,65 | €38,75 | 1,00 | €36,06 | €6,65 | €42,71 | 1,00 | €36,06 |
| Mainframe | | 500147-Multi Non Cash (MNC) | 1,00 | €303,23 | €6,48 | €311,71 | 1,00 | €340,71 | €6,48 | €347,19 | 1,00 | €340,71 |
| | | 5000S1-Storage A-platform | 23,89 | €214,35 | €48,85 | €263,20 | 2,53 | €25,69 | €5,21 | €30,90 | 0,02 | €0,23 |
| | | 5000S2-Storage C-platform | 523,38 | €4.736,48 | €1.079,34 | €5.815,82 | 517,20 | €5.258,96 | €1.068,58 | €6.327,54 | 808,01 | €8.216,04 |
| | | 5000S3-Storage D-platform | 165,58 | €1.498,45 | €341,40 | €1.839,91 | 201,74 | €2.051,38 | €416,04 | €2.467,42 | 228,93 | €2.327,86 |
| | | 500001-Batch CPU A-platform | 19.502,84 | €777,61 | €468,06 | €1.245,67 | 2.544,72 | €114,00 | €61,07 | €175,08 | 14,98 | €0,67 |
| | | 500002-Batch CPU C-platform | 502.351,83 | €20.029,77 | €12.056,44 | €32.086,22 | 605.622,90 | €27.131,91 | €14.534,95 | €41.666,86 | 573.109,78 | €25.675,32 |
| | | 500003-Batch CPU D-platform | 351.829,80 | €14.028,16 | €6.443,92 | €22.472,07 | 363.545,14 | €16.288,82 | €6.725,06 | €23.013,91 | 368.315,29 | €16.500,53 |
| | | 500004-IMS CPU1 | 182,76 | €7,77 | €4,37 | €11,84 | 183,67 | €6,88 | €3,60 | €10,57 | 31,64 | €1,41 |

ICT at KBC Group is an independent directorate that works for our banking and insurance business. The business defines which applications need to be developed by ICT and also needs to pay for these services. Via zero cost accounting on a yearly basis we invoice the business with the cost of ICT in a global manner. The business wants a more detailed look at there cost. By using drill-down facilities of ODS we can zoom in to the smallest detail of the cost elements. I have also created a configuration file that contains the report layouts for the different cost locations. This configuration is used

by PROC REPORT and creates detailed reports depending on specific elements.

Objectives

- Provide more transparency on ICT costs
- Avoid faulty interpretation of cost elements like CPU, storage, ...
- Reduce the number of ad hoc questions about details of cost (+/- 150 / month)

Target audience

- Business
- Resource controllers
- Service Delivery Owners. These people are responsible for follow up of ICT services, have direct contact with business lines concerning Service Level Agreements and also communicate with business if there are problems at certain business domains.

Achieved

- Insight in details for adjusting costs
- Information on invoice in one place

RAPITLIST

As I already mentioned before, there are lots of reports and many tables containing very useful information related to ICT services. RapITList provides monthly a consolidated high level management report about this.

Objectives

- Monthly reports on resource consumption (mostly mainframe related)
- Synthesis of applicative and technical trend reporting
- Signal functionalities for optimizing resource consumption, indicating possibilities for cost reduction

Target audience

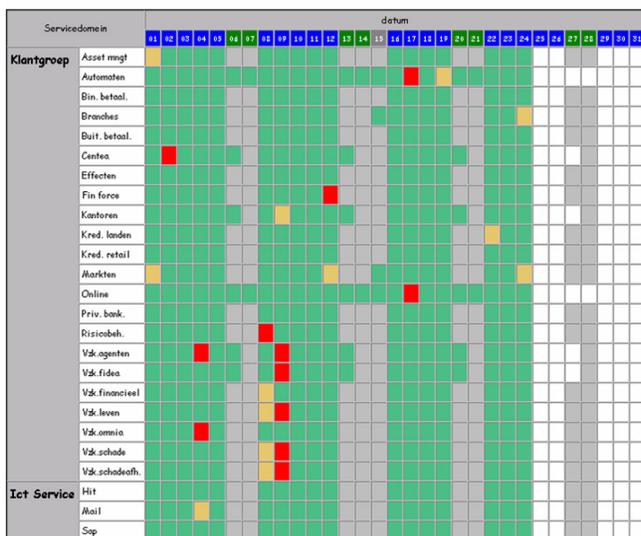
- ICT management
- Head system managers
- Capacity planners

Achieved

- Dramatic cost reduction by lower storage consumption, lower CPU utilization, optimized IMS applications
- Optimized mainframe sysplex

SLM REPORTING

Dit zijn onze resultaten voor augustus 2005.



Service Level Rapportering
 Servicedomein: Buitenlands betalingsverkeer
 Periode: DECEMBER 2005

| | Vaststelling | Baseline (SLA) | Service Indicator | Evolutie |
|--|--------------|----------------|-------------------|----------|
| CALL INCIDENT MANAGEMENT | | | | |
| Calls | | | | |
| Aantal calls | 141 | 200 | ● | |
| Calls onmiddellijk resolved | 97.16% | 75.00% | ● | |
| Gemiddelde doorlooptijd calls | 0:00:00 | 5:00:00 | ● | |
| Incidenten | | | | |
| Aantal incidenten | 272 | 700 | ● | |
| Aantal incidenten met prioriteit 1 en 2 | 0 | 0 | ● | |
| Aantal incidenten met prioriteit 3 | 2 | 10 | ● | |
| Aantal incidenten met prioriteit 4, 5 en 6 | 268 | 690 | ● | |
| Gemiddelde doorlooptijd incidenten prio. 1 en 2 | 0:00:00 | 4:00:00 | ● | |
| Gemiddelde doorlooptijd incidenten prioriteit 3 | 35:24:00 | 10:00:00 | ● | |
| Gemiddelde doorlooptijd incidenten prio. 4, 5 en 6 | 5:02:19 | 50:00:00 | ● | |
| BALANCED SCORE CARD | | | | |
| Processen | 1 | 2 | ● | |

Service Level Management is a very important process at KBC Group. We want to be able to visualize the quality of delivered service towards management and ICT staff to create awareness on the added value of well-managed ICT services to the business.

The report on the left side shows a daily overview of ICT services categorized by different "Service domains" and per "Customer group".

The other report is a monthly service report per service domain containing figures about Call & Incident Management

and about system availability.

Objectives

- Daily service report
- Monthly overview of the quality of service delivery for the different service domains
- Specific business SLA reports

Target audience

- SLA client groups
- Service Delivery Owners
- ICT management
- ICT staff

Achieved

- Insight in delivered quality
- Improved quality of service

KNOWLEDGE DATABASE

At KBC Group, we use an Integrated Knowledge Database concerning our banking and insurance activities. All our employees at headquarter and local offices can consult this database in case of problems with business issues and rules. The communication department maintains this database. They are interested in usage statistics for the web interface and for dynamic excel export.

Objectives

- Usage statistics of the Knowledge Database

Target audience

- Managers of the communication department responsible for maintaining the database.

Achieved

- Optimization of search functions by expanding synonyms
- Use of index pages
- Cleanup of unused information

| Obs | Pad | Naam | CID | ROOTCID | Aantal opvragingen | Gemidd antwoord |
|-----|---|--|------------------|----------------------------------|--------------------|-----------------|
| 1 | /CBC/Nouvelles/Général/mappen | UTWin | 0900aef8036e057 | 0900aef8036e055 | 192297 | 0.00.0 |
| 2 | /Tarievenbank_(BOS)5000_Kredieten/5100_Tarieven/mappen | 5120-KBC-Woningkredieten | 0900aef806ab8c5 | 0900aef806ab8c6 | 103023 | 0.00.0 |
| 3 | /Tarievenbank_(BOS)5000_Kredieten/5100_Tarieven/mappen/mappen | 5127-Start- en delegatietarief en intern tarief voor KBC-Woningkredieten | 0900aef806ab8b6 | 0900aef806ab8c6 | 102370 | 0.00.0 |
| 4 | /Tarievenbank_(BOS)5000_Kredieten/5100_Tarieven/mappen/mappen/mappen | Overzicht interne kostprijzen voor KBC-Woningkredieten (reële tarieven) | 0900aef806ab8b5 | 0900aef806ab8c6 | 88048 | 0.00.0 |
| 5 | /Tarievenbank_(BOS)5000_Kredieten/5100_Tarieven/mappen/mappen/mappen/mappen | Interne kostprijzen voor de aankoop van een onroerend en herfinanciering | 0900aef806ab8b3 | 0900aef806ab8c6 | 85324 | 0.00.0 |
| 6 | /Tarievenbank_(BOS)5000_Kredieten/5100_Tarieven/mappen/mappen | 5127-DELEGATIE-INTERN TARIEF | 0900aef8012ff1b | 0900aef8012ff28 | 57554 | 0.00.0 |
| 7 | /Tarievenbank_(BOS)1000 Rentiedragende producten/1400 KBC-Termijndeposito, KBC-Terminrekening, KBC-Kapitaalsaberekening/mappen/mappen | 1411-Externe rentevoeten KBC-Deposito | 0900aef8001f2fa7 | 0900aef8001f2fa2 | 57365 | 0.00.0 |

CONCLUSION

The mission and goal of CST ICT Service Reporting at KBC Group is to provide ICT staff and management an easy, intuitive and user friendly reporting environment. By setting up the RapiTweb portal, implemented by using SAS/IntrNet on mainframe, we achieved in a major manner this target. The portal provides every ICT staff member, from top management to programmer, with the necessary information to optimize his or her job.

Most of the mentioned reports are implemented using PROC REPORT, PROC GCHART, PROC PRINT, PROC TABULATE, PROC GPLOT and DATA STEP processing. ODS HTML is also intensively used for creating HTML, RTF, EXCEL and PDF files.

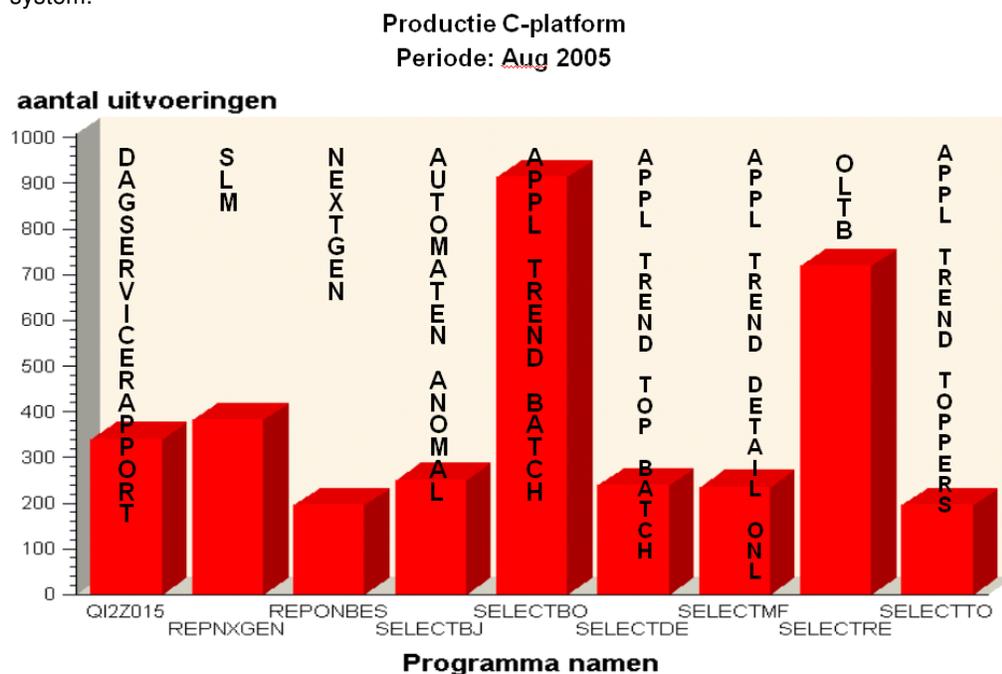
Almost every report provides drill-down possibilities, implemented via web links. Be aware to avoid static link definitions of web server paths and use always relative paths.

Some remarks on the use of PROC REPORT and PROC TABULATE:

- PROC REPORT is a very powerful reporting tool because of compute facilities but can in my opinion not be used for dashboard reporting with row and column dimensions where columns need to be values rather than variable names.
- To avoid this disadvantage, we used PROC TABULATE for dashboard reporting, but this procedure misses compute facilities.

My proposition to SAS is to create a new procedure PROC TABREP that will combine the advantages of PROC REPORT and PROC TABULATE.

We have also collected SAS/IntrNet measures so that we can report on usage statistics of our dynamic reporting system.



ACKNOWLEDGMENTS

Many thanks to all my colleagues of CST who have created all different reports in our dynamic reporting environment, without their corporation, this paper would not be possible.

CONTACT INFORMATION

Your comments and questions are valued and encouraged. Contact the author at:

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APPENDIX – GENERIC CODE FOR CREATING DASHBOARDS FOR USE WITH PROC TABULATE

Macro ESRM0215 creates a monthly dashboard matrix

```

%macro esrm0215(toep=, aantcols=, firstmonth=, lastmonth=) /parmbuff;
%global lastday;
proc sql noprint;
  select max(datum) into :lastday
  from day.lastday ;
/*-----
! Number of unique reporting element are created based on # columns and # rows
! for the report and put into an array to build the calendar matrix
.-----*/
proc sql noprint;
  select distinct
  %do i=1 %to &aantcols;
  quote(rcol&i),
  %end;
  count(*)
  into
  %do i=1 %to &aantcols;
  %if &i=1 %then
  %do;
  :col&i separated by ','
  %end;
  %else
  %do;
  , :col&i separated by ','
  %end;
  %end;
  , :aantelem
  from cnfs.fn&toep;
/*-----
! Build calendar matrix based on first and last month
! Calendar matrix is merged with the KPI dataset to color the report
.-----*/
data maand (keep=maand
  %do i=1 %to &aantcols;
  %do;
  rcol&i
  %end;
  %end;
  )
  ;
  %do i=1 %to &aantcols;
  %do;
  array col&i {&aantelem} $100 _temporary_ (&&col&i);
  %end;
  %end;
  aantmaand =intck('month', &firstmonth, &lastmonth)+1;
  maand=&firstmonth;
  do i=1 to aantmaand;
  maand=intnx('month', &firstmonth, i-1);
  do j=1 to dim(col1);
  %do i=1 %to &aantcols;
  %do;
  rcol&i=col&i(j);
  %end;

```

Maandoverzicht SLA B2B

| Service | | | maand | | | | | | | | | | | | | |
|---------|----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|--|
| | | | jan2006 | feb2006 | mrt2006 | apr2006 | mei2006 | jun2006 | jul2006 | aug2006 | sep2006 | okt2006 | nov2006 | dec2006 | | |
| SLA | ISA-INK | MQ-BET | Red | | | | | | | | | | | | | |
| | | C:D-BET | Green | | | | | | | | | | | | | |
| | ISA-UIT | CISL | Red | | | | | | | | | | | | | |
| | | CODA | Green | | | | | | | | | | | | | |
| ONL-BUS | Kritisch | Green | | | | | | | | | | | | | | |
| INFO | ISA-INK | MQ+C:D | Red | | | | | | | | | | | | | |
| | | CISL | Green | | | | | | | | | | | | | |
| | CODA | Green | | | | | | | | | | | | | | |
| | | Prio CODA | Green | | | | | | | | | | | | | |

```

        %end;
        output maand ;
    end;
end;
run;
/*-----
! Join dates with application data base don reporting colums
.-----*/
proc sql;
    create table temp as
    select a.maand,
        %do i=1 %to &aantcols;
            %do;
                a.rcol&i,
            %end;
        %end;
        b.funccact,
        b.funckd
    from maand a,
        cnfs.fn&toep b
    where
        %do i=1 %to &aantcols;
            %if &i=&aantcols %then
                %do;
                    a.rcol&i=b.rcol&i
                %end;
            %else
                %do;
                    a.rcol&i=b.rcol&i and
                %end;
            %end;
        order by maand,
        %do i=1 %to &aantcols;
            %if &i=&aantcols %then
                %do;
                    rcol&i
                %end;
            %else
                %do;
                    rcol&i,
                %end;
            %end;
        ;
quit;
proc sort data=temp out=maand;
    by maand funckd rcol1;
run;
data month.serv&toep;
    merge maand(in=in1) month.serv&toep(in=in2) ;
    by maand funckd rcol1;
    jaar=year(maand);
    if intnx('month',&lastday,0) >= maand & kpi=. then kpi=0;
    if maand < '01apr05'd then kpi=.;
run;
%mend esrm0215;
%esrm0215(aantcols=3,toep=isa0c,firstmonth='01jan05'd,lastmonth='01dec06'd);

```

SAS/IntrNet program that creates the monthly dashboard report

```

proc format ;
  value kpihg
    100000000-high      ="red  "
    0                    ="big  "
    99                   ="ligr"
    .                    ="white";
  value kpihgf
    1000000000-high     ="red  "
    0                    ="big  "
    99                   ="ligr"
    .                    ="white";
  value kpiv
    low-high=" ";
  value $bgcol
    0=' ';
run;
%macro odsaja(webtit=);
%esrmgl03(libn=usrfmt,dsn=esrpt000.dsns.b2b.elb.usrfmt&omgzuil);
%esrmgl03(libn=month,dsn=esrpt000.dsns.b2b.elb.month&omgzuil);
%esrmgl03(libn=conlogco,dsn=esrpt000.dsns.b2b.elb.config&omgzuil);
ods listing close;
ods path work.ststmpl (update)
      conlogco.template (read)
      sashelp.tmplmst (read);
ODS html body=_webout(title="&webtit" url=&_replay) rs=none
  path=&_tmpcat (url=&_replay)
  style=b2b stylesheet
  headtext='<style type="text/css"> a:link {text-decoration: none}
a:active {text-decoration: none} a:visited {text-decoration: none}
a:hover {text-decoration: none} @page {size: portrait; margin: 5%;}
</style>';
%mend odsaja;
%odsaja(webtit=Maandoverzicht SLA B2B);
options nobyline nocenter;
Title "Maandoverzicht SLA B2B #byval(maand)";
proc sort data=month.servisa0c out=servisa0c;
  by descending jaar;
proc tabulate data=servisa0c missing noseps order=data;
  by descending jaar ;
  class maand rcol1 rcol2 rcol3 maand;
  classlev rcol1 / s={font_face="arial" font_size=7pt};
  classlev rcol2 / s=<parent>;
  classlev rcol3 / s=<parent> {background=yellow};
  classlev maand / s={font_size=7pt foreground=white };
  var kpi;
  keylabel sum=' ';
  table rcol1=' ' * rcol2=' ' * rcol3=' ' ,
    maand*kpi=' '*f=kpilnkc.*{s={background=kpihg. just=center}}/
    rts=40 box={label='Service'} misstext=' ' s={cellpadding=3pt};
run;
ods html close;

```

Maandoverzicht SLA B2B

| Service | | | maand | | | | | | | | | | | | | | |
|---------|----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|--|--|
| | | | jan2006 | feb2006 | mrt2006 | apr2006 | mei2006 | jun2006 | jul2006 | aug2006 | sep2006 | okt2006 | nov2006 | dec2006 | | | |
| SLA | ISA-INK | MQ-BET | red | | | | | | | | | | | | | | |
| | | C-D-BET | green | | | | | | | | | | | | | | |
| ISA-UIT | CISL | CISL | red | | | | | | | | | | | | | | |
| | | CODA | green | | | | | | | | | | | | | | |
| | | Prio CODA | green | | | | | | | | | | | | | | |
| ONL-BUS | Kritisch | green | | | | | | | | | | | | | | | |
| INFO | ISA-INK | MQ+C-D | red | | | | | | | | | | | | | | |
| | | CISL | green | | | | | | | | | | | | | | |
| | | Prio CODA | green | | | | | | | | | | | | | | |