



OPTIMIZED BULK PRINTING FOR E-GOVERNMENT

Reference Project



OPTIMIZING MAINFRAME- AND SERVER-BASED PRINT OUTPUT FOR MUNICIPALITIES

The Kommunale Informationsverarbeitung Reutlingen-Ulm IT provider helps its clients – approx. 360 counties, cities and municipalities in the German state of Baden-Wuerttemberg – reduce their annual paper consumption by several million pages thanks to solutions based on Beta Systems technology. The migration from the previous Beta 93 mainframe output management and archiving system to Beta UX for the open systems world was carried out in the background without disrupting user activity.

Lacking specialist personnel and big money, municipalities can rarely afford to implement modern software that supports citizen-friendly, paper-saving workflows in municipal offices. This is where IT companies such as Kommunale Informationsverarbeitung Reutlingen-Ulm enter the picture. The municipal regional data center obtains software from the Datenzentrale Baden-Wuerttemberg IT provider, which it installs and adapts to its IT infrastructure. It then makes the functions of the specialist procedures available

to the 364 municipalities and district administrations in the 13 eastern Baden-Wuerttemberg counties it serves, while also handling all data management tasks, such as printing and enveloping bulk mailings.

The first IBM mainframe was set up at KIRU's Reutlingen site in 1974. Back then, most software programs for public administration were still developed based on the IBM mainframe. Complementing products, Control-M and Control-D, were used for tasks including list and report storage as well as for scheduling. In 2003, the provider decided to switch to the respective Beta 93 and Beta 92 products from Beta Systems. Gerd Bözle, in charge of print management at KIRU: "At the time, the Stuttgart-based regional data center was already employing Beta 93. There has been a trend in our state to consolidate the data center landscape for many years. Therefore, for considerations of conformity – and because of attractive pricing – we decided to make Beta Systems our supplier of software tools that complement the mainframe. The Beta Systems products allowed us to archive job logs right alongside lists."

THE USER

Kommunale Informationsverarbeitung
Reutlingen-Ulm Cooperating Association

The municipal regional data center KIRU, organized as a cooperating association, has been offering IT solutions and services for municipal governments with an emphasis on public bodies for over 40 years. Their business strategy rooted in traditional values combined with a strong regional focus on southwest Baden-Wuerttemberg is a guarantor for close customer relations. As a customer-oriented organization, KIRU acts on the basis of clearly defined business targets. Services tailored to the specific needs of municipalities, appropriate data privacy and data security measures, as well as highly integrated and high-availability solutions are at the heart of the business model. The resource expenditure required to maintain the comprehensive solution offering is continuously being monitored, which is made possible thanks to a product-driven organizational structure that unambiguously assigns responsibilities for products and costs based on clearly defined business processes.

SECTOR

IT services

CHALLENGE

After having decided to transition from the mainframe to a client-server architecture for municipal specialist applications, KIRU was in need of a Unix/Windows output management system that seamlessly delivers the functions previously executed on

a z/OS-based solution. In order to reduce printing volumes and help customers move to paper-free workflows, the IT service provider was furthermore on the lookout for a web-based technology that supports user-friendly document access throughout the administrative organization.

PRODUCTS EMPLOYED

Beta UX
Web Enabler

BENEFITS OF THE BETA SYSTEMS SOLUTION

The technical operations department greatly benefits from Beta UX and its functions for sorting, bundling and dispatching the diverse, high-volume output generated in the various specialist applications to KIRU's clients in neat and easy-to-handle packages. Cost of bulk mailings are also minimized thanks to optimized franking. Moreover, by combining the output management solution with Beta Web Enabler, printing costs are reduced substantially because processors gain online access to lists and documents from within their specialist applications, empowering them to view detailed information right in the browser.

KEY FIGURES

Annual volume of outgoing documents
processed with Beta UX: **60 million**

Daily calls to Web Enabler: **4,000 to 5,000**

Reduction of printing volume thanks
to output management: **Two thirds**

Changeover to Client-Server Architectures

A strict and exclusive focus on the mainframe is no longer the accepted standard in public IT landscapes. This is why Datenzentrale Baden-Wuerttemberg delivers most of their tools as Java applications designed for operation on Unix/Linux or Microsoft servers, while traditional Cobol and Assembler applications are on the decline – not just for practical but also for financial reasons, because licenses for IBM dialog applications have always been on the expensive side. Moreover, server applications often have a more modern look & feel, even though IBM has made some ground in recent years.

For KIRU these reasons led to their decision in 2012 to successively reduce mainframe applications and gradually shift to the client/server platform. Development and operations will equally benefit from working in a single system world over the long term. Before

specialist procedure. This enables processors to quickly retrieve any document via the new interface, conveniently view it in the browser and draw on various search functions. Peter-Georg Herkommer, responsible for application management at KIRU, included the expiration date into the list naming scheme, which facilitates the timely deletion of Beta 93 documents. Even automatic list deletion after expiration of the retention period is possible.

“The mainframe world has become more compact and better integrates and orchestrates its individual components. An RACF implementation is in place for each mainframe application. And we are performing separate authorization management for Beta UX as well as for other applications. The world has become more complex, but then again modern structures come at a price,” says Peter-Georg Herkommer.

We count about 4,000 to 5,000 page calls via Web Enabler each day. Each processor who views a list or document on screen generally no longer needs to print this information.

Andreas Pudel,
Server Management KIRU



the final decision was made, the company meticulously calculated the cost impact of the changeover, because system support in a client-server environment requires a bigger administrative effort.

From Beta 93 Straight to Beta UX

At the mainframe was phased out after 18 December 2015, and today 60 percent of the systems are run on Windows, the remainder on Linux. Owing to the good performance of Beta 93 on the mainframe, the operator opted for the Beta UX output management solution, which is the Unix/Linux version of the former application. The migration process from Beta 93 to Beta UX was carried out in parallel to ongoing operations over a two-year period. The lists and reports generated by all new applications executed on the client/server platform are transferred to the new output management system: an impressive 60 million output documents in 2015.

The files archived in Beta 93 were not transferred to Beta UX but instead migrated to a file system. Users can access both systems with the browser-based Beta Web Enabler until the end of the statutory retention period. Legacy lists and notifications from Beta 93 were subdivided according to years and months as well as by

First Sorting then Printing and Dispatching Printing Stacks

Beta UX greatly supports technical workflows in the data center as it separates lists, bundles them and optimizes printing stacks. It is closely integrated by delivering complementing applications from Doc 1 for form processing and from Docbridge for enriching output documents with additional information.

The divv.Ordnungswidrigkeiten (network for processing administrative offences) specialist procedure, for instance, creates a daily volume of between 30-40,000 print documents of various types for each client (each municipality): This includes payment slips for claiming fines, overdue notices, enforcement orders and questionnaires for witnesses. The same kind of process exists for the waste management unit to manage waste disposal fees, as well as for the other specialist procedures. “Rather than simply transferring each generated document to the municipality, Beta UX bundles the output from the various procedures. This means that the administration of each specialist department is delivered precisely one package,” explains Gerd Bözle.

Previously, notices were printed right away and then sent to the customer. If a processor entered the wrong fees, we had to scrap the entire batch. Now that the processors can use the Web Enabler to access the specialist procedure output and verify the data, we benefit from extensive savings in terms of printing and paper costs.

Peter-Georg Herkommer
Application Management
KIRU



“Previously, notices were printed right away and then sent to the customer,” remembers Peter-Georg Herkommer, continuing, “so if a processor entered the wrong fees, we had to scrap the entire batch. Now that the processors can use the Web Enabler to access the specialist procedure output, we benefit from extensive savings in terms of printing and paper costs.” This kind of check is not performed for every print run, but it is generally limited to special runs, such as election notices or tax liability assessments.

2,500 Web Enabler Users in the Municipal Government

Beta UX allows KIRU to map the authorization scheme of any department. 2,500 individual users have been set up to access the output management system via Web Enabler, allowing for concurrent viewing of lists. There are small municipalities with a staff of only three persons, each of which is authorized to view almost all applications using the Web Enabler. The larger a municipality, the smaller the scope of each person’s role and responsibilities, resulting in a larger number of different access rights. Andreas Pudel, who is in charge of KIRU’s servers, puts it like this: “We count about 4,000 to 5,000 calls via Web Enabler each day. Each processor who views a list or document on screen generally no longer needs to print this information. Or if, for example, only a specific detail in a list comprising 12,000 pages is needed, the various search options enable staff to quickly locate the desired page and print that one only.”

Back when the mainframe was still in operation, output management based on Beta 93 and the complementing Web Enabler already helped to reduce the printing volume. For instance, the number of host-based single-page printouts declined from 9.5 million in 2010 to 3.2 million in 2013, and continuous printouts dropped from 18 to 7 million. The cost savings resulting from reduced printing allow KIRU to keep their service fees stable, to the benefit of their customers. In addition to optimizing data center print management operations at the IT service provider, the Beta Systems products also offer functions for implementing eGovernment, thus enabling modern access to the clients’ documents.

Avoiding Large-Volume Misprints

In February 2016, just before the upcoming state election, Beta UX received four million ballot notices within just a few days, both as a list and a report in AFP format. The output management system packaged the notices for approx. 40 clients, creating bundles of 2.5 gigabytes each. The communal staff was able to use the Web Enabler to view the printouts and check them for errors. The Web Enabler visualization tool thus enables KIRU to easily view contents that only they are allowed to see in keeping with all relevant security regulations. This level of production monitoring by the customer helps to avoid misprints since the notices are only passed on to the printing and enveloping line at the Ulm data center site after the information has been verified based on the dual control principle.

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Gerd Bölzle

Print Management KIRU

