Reference Project

Items GmbH

DoXite Application for SAP IS-U Document Output

About items GmbH

Items GmbH (http://www.itemsnet.de) is an IT service company born out of the IT departments of several utility suppliers (energy and water) in Germany. Its headquarters in Münster, Nordrhein Westfalen, has been based since its founding in 1999 on the premises of the Stadtwerke Münster – or Münster City Utility Supply Company. It employs around 240 highly qualified IT and related staff at 6 various sites around Germany.

Items manage the SAP and peripheral systems (e.g. electronic document archives) that these utility companies require to conduct their daily business with hundreds of thousands of end-users, both commercial and private household customers. It provides both hardware, software systems and IT expertise to handle the vast amounts of data required by their end users.

Customer Requirements

As part of a major project in the modernisation of SAP systems in order to meet the requirements of new legislation, several Utility Companies entered into an agreement to purchase an innovative solution from items GmbH. The project, known as Billing4US was to be implemented at four major Energy Companies.

Utility Companies in Germany traditionally need to produce highly complex end customer documents such as contracts for the supply of energy, invoices with various forms of energy (electricity, gas, heating) and/or water and the formatting of such complex documents in SAP is both time and cost intensive.

To reduce the overall costs and time-scales of implementing the documents with SAP tools, items chose the external DoXite document output system from DETEC GmbH, partly as this was the new generation of product and natural successor to their existing solution, LaserSoft, also from DETEC.

Released from the requirement to format huge volumes of data, the SAP systems "export" the data required for customer documents in the Raw Data Interface (RDI) format, a standard interface in SAP specifically for the purpose of transferring document formatting tasks to an external system.

The DoXite formatting system has the advantage that it employs a graphically based design and management tool, rather than having to program document layouting requirements. This GUI approach is supplemented with the integration with the Python scripting language, which allows user-specific extensions or requirements to be addressed.

Frau Carla Welpmann leads the team of technicians responsible for the output of formatted documents from the SAP systems and on the recommendation of a leading team member, mainly responsibility for the application DoXite software in the department, David Clews from clSysTech was invited to Münster to discuss a co-operation to improve the efficiency of the DoXite implementation and development.

Achievements

Initially a 3 day intensive Python for DoXite training course was conducted at the items offices in Münster. It had already become apparent to items, that the Python extension for DoXite would play a significant role in the overall solution for their end customers.

However it was quickly realised that the first priority for items was to address problems in the application of the DoXite software that were leading to substantial delays in the overall project implementation. Although one end customer was using the DoXite engine in production, the addition of a second user site was becoming more and more problematic.

It became clear very early, that the way in which the DoXite document layout projects were being created and managed was causing severe bottlenecks. Although DoXite itself provides little means for separating several different projects when using the DoXite Windows Print Processor, software was developed by clSysTech to separate the existing end user project from the new projects in Kassel.

Separating the "environments" for the end customers meant that changes in document formatting or system configurations for the new end user and second site could no longer have any affect on the existing, productive system. This immediately helped to ease at least one of the development bottlenecks.

A further re-organisation of the DoXite projects and optimisation of project layouts brought much more clarity to the document layout designs and improved efficiency and performance of the solution in production.

At the same time, as the second implementation was running behind schedule, a good deal of project development was carried out by clSysTech alongside the existing items DoXite application development staff. At the time, a third implementation had also been started and needed attention; hence the additional DoXite development know-how and resources were critical to the success of the items projects.

A further challenge was the introduction of new DoXite software versions, which would affect all existing customers, as they were all using the same print servers. A means needed to be found to test new DoXite versions against existing applications

and compare the results with existing output, to ensure no new software faults or modifications could affect running systems. A Quality Assurance (QA) process was defined and implemented, allowing items to check whether new versions of DoXite have any affect on existing document output. In fact, items were able to detect changes in the DoXite software that caused minor differences – generally improvements – in the layout of output documents, for example, automatic page breaks being made just a fraction of a millimetre lower on the output page.

As an additional benefit, clSysTech was able to develop tools to assist in the management of the DoXite systems. This co-operation has led to the creation of a new software tool, DoXTK (DoXite Toolkit), which includes features that are not provided by DETEC in the DoXite solution, but which are extremely useful in the everyday use of the DoXite software. These features originate directly from experience gained in the actual usage of the DoXite system for the creation of complex business documents.

Finally, the use of the Python scripting language to augment the GUI application tools was, as had been expected, essential to the successful implementation of many complex document layouts. The expertise provided by clSysTech in implementing such Python scripts and in further coaching items technicians in the possibilities of the "PyDoXite" extension played a major role in the overall success of the projects.

Summary

By the time the third project went live in mid-November 2011, confidence in the DoXite product and its ability to meet the complex requirements of the Utilities market had returned.

Items had achieved two further Billing4US implementations during 2011, supported by the DoXite document formatting software, and are now looking confidently to the implementation of their fourth major customer in 2012.

Working with both the items technical staff and the on-site with end users in the offices of the utility companies, clSysTech provided DoXite resources, technical know-how and consultancy throughout 2011 and will continue in 2012 as the partner of choice for DoXite related services.

Contact Information

If you would like to know more about this project and how items, clSysTech and the application of the DoXite software enhanced the business of several major utility companies in Germany, please feel free to contact the persons below.

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