Handling the IT needs of an enterprise is a difficult job in itself. Adding in the complexities of an entire city’s IT hardware and software approval process, however, accounts for a good deal of extra challenges to be tackled. To simplify its IT purchasing system, the City of Stuttgart, Germany—with the support of the software provider Weigle-Wilczek in Esslingen, Germany and Eclipse—chose to put their trust in open source solutions to fulfill the needs of its organization.

The City of Stuttgart has about 600,000 inhabitants. A total of 12,000 people are employed by the city’s administration, 6,000 of which are using computer workstations. Within Stuttgart’s IT infrastructure, all of these computer users submit purchase requests to 17 managers who are responsible for the supply of hardware, software, and consulting services.

Before considering WeigleWilczek’s Open IT solution, which is based on Eclipse RCP, JBoss, and PostgreSQL, Stuttgart’s IT department was using a paper-based system to process requests and track purchase orders. However, with an IT budget of $6 million, the City decided to replace this procedure with an electronic document system.

That was when they were introduced to WeigleWilczek’s Open IT. Open IT is a workflow solution that supports decision making processes in public administration by breaking the jobs down into logical steps. The application’s underlying idea is to optimize the administrative process by enhancing transparency and reducing the number of traditional records required in the course of an approval process. Paper-based files are now being replaced by electronic documents.

“The Eclipse RCP makes the entire process intuitive and the application easy to use. In the past, requests took three to four weeks to work their way through the organization. Now, the process takes two to three days.”

Open IT allows us to speed up the decision-making process for hardware, software and support,” says Mr. Walter Pfeifer one of the City of Stuttgart’s IT project leaders. “If some-one in our organization needs something, they call one of our administrators. These administrators use Open IT to choose the product or support issue from a database. Once the selection is made and discussed by the managers, it enters an electronic workflow. The Eclipse RCP makes sure, the entire process is intuitive and the application easy to use. In the past, requests took three to four weeks to work their way through the organization. Now, the whole process takes no more than two to three days.”

Eclipse RCP was used to achieve specialized views and customizable perspectives for different user groups, individual filters and sorting for users, as well as storing (on shutdown) and retrieving (on startup) the client-status. Open IT uses Eclipse RCP to provide a user permission-based GUI that holds a dedicated view into each document and decision, depending on the individuals’ authorizations. In addition, it features certified electronic signatures, ensuring that decisions can be tracked down to their source. According to Weigle, Eclipse RCP’s upgradeable environment yet is another benefit; it allows both Weigle Wilczek and the City of Stuttgart to quickly push out fixes and new versions of the OpenIT system transparently to the end user.

“The idea behind Open IT is to help decision makers in public administration”, Weigle says. “Regardless of an application’s features, it’s useless...
without an intuitive means of navigating the toolset. Eclipse RCP helped us to develop an enterprise-class front end that made our custom application look like a shrink-wrapped product. It enabled us to provide the functionality the City of Stuttgart needed to reduce their workload, without incurring a lengthy learning curve inherent in many systems."

In the context of its embedment in the City of Stuttgart’s IT landscape, it was indispensable for Open IT to comply with given federal standards for government applications. These standards hold recommendations for the development of new IT systems within the public sector and depict the compliant three-tier architecture. It specifies the types of databases, middleware, and front ends available. “In principle, the standards focus on web applications but they also make a lot of suggestions with regards to rich clients,” Weigle says. “Our architecture is based on J2EE, and an open source database like PostgreSQL makes it very easy to use RCP as a front end and still be in accordance with the standard.”

The next step in the partnership between WeigleWilczek and the City of Stuttgart envisions the development of customized reporting and analysis tools. In this connection, WeigleWilczek is currently evaluating the Eclipse BIRT (Business Intelligence and Reporting Tools) system to fit the city’s executives with enhanced transparency and allow the controllers and potential investigators to conduct efficient data mining regarding procurement practices and history. BIRT features core reporting characteristics such as report layout, data access, and scripting.

Pfeifer is highly pleased with the performance of Open IT and looks forward to making further use of open source solutions in the future. “The application’s cost-value ratio is impressive and the system is very stable,” he says. “We intend to apply open source technology to streamline administration processes in other departments throughout our town. We haven’t had any problems at run time and we’ve created many new systems that allow us to process our IT duties much more efficiently.”

An overview of the decisions, content, and structure of a proposal in Open IT.