



S P A C E M A N A G E M E N T a t F r a n k f u r t A i r p o r t

The Fraport AG real estate portfolio contains 35,000 rental units in 350 buildings. For area and lease management, Fraport uses a solution that combines the Bentley's ActiveAsset Planner™ with an SAP interface, the document management system Bentley® ProjectWise® and MicroStation® as the CAD foundation.

Note: This article has been translated from German—some changes were made for clarity. Every effort was made to keep its original context. In original form, it appeared as “Flaechen management am Frankfurt Flughafen” by Robert Altmannshoter in Der Facility Manager January/February 2002.

Fraport's goals for its computer-aided facility management system (CAFM) were to provide a tool for space administration and ease the management of all associated documents. “We took the first step about three years ago,” recalls Thomas Schulz, who is responsible for the system administration of all facility management tools in the real estate and facility management department. SAP R/2—a lease management system—existed at that time, but it did not support graphics. With a portfolio of 35,000 lease units in 350 buildings, Fraport AG had a large amount of required graphic data alone. “Of approximately 28,000 rent units, we have completed the survey for graphic information,” says Schulz. The remainder can be explained as buildings that have been constructed by Fraport AG (or in earlier days, Frankfurt Airport AG), that were then transferred in their entirety as long-term leases or comparable forms of contract to Lufthansa AG.

One of the basic requirements for the CAFM deployment was for plans and documents to be managed together, due to the tight relationship that exists between area management and the management of the associated documents. The organization

SUMMARY

Organization

Fraport AG

Vertical Market

Platform

Location

Frankfurt, Germany

Project Objectives

- Implement a facility management system for plans, leases and other documents associated with 35,000 rental units in 350 buildings
- Provide document management tools, and access to space plans, across multiple departments

Fast Facts

- Fraport chose Bentley Facilities Planner (formerly ActiveAsset Planner) as its space management solution, and had a Bentley development partner create a custom interface between Facilities Planner and Fraport's SAP system.
- Bentley ProjectWise allows easy administration of access rights, so data can be shared securely across departments.
- Improved data accuracy showed Fraport where renters were being undercharged for space.
- Fraport is now using its real estate more efficiently, after the new system helped identify underutilized space.

Bentley Products Used

- Bentley Facilities Planner (formerly ActiveAsset Planner)
- Bentley ProjectWise
- MicroStation

also required that the system chosen be compatible with MicroStation. “We have used MicroStation since 1989,” comments Schulz. “And have created a massive dataset that we would like to continue to use.” A third stipulation required full integration with the original SAP R/2 data—to avoid redundant data. Currently, the data is available in SAP R/3.

Bad experience at RFP

Above these basic requirements, Fraport AG—together with all parties involved—created an extensive requirements specification for the future CAFM and document management system. This requirements specification was the basis for an RFP, which led to bids ranging between DM500,000 and 2.5 Million DM. However, Schulz and colleagues realized that no single product would satisfy their specific needs. Worse, some of the systems offered weren’t targeted at space management at all, but were really pure document management systems. “Around the same time, Bentley released its TeamMate product, the predecessor to ProjectWise, and at a price of DM 900 per seat. So we purchased a few licenses to gauge how much it covered our needs.” TeamMate met 90% of Fraport’s requirements out of the box. Following an enterprise-wide roll out of TeamMate, the decision to add ActiveAsset Planner as the solution for space management was then almost a given. “ActiveAsset Planner was the only system that allowed us to work in a single database,” explains Schulz. “That was a very important selection criteria for us.”



Photo: Fraport AG

In addition, the training needs were minimal. “For the 140 document management seats, I did the training myself,” says Schulz. “I now have a colleague who has been trained so that she can relieve me to some extent. In any case, we need on average just twenty minutes for the introduction.” Training for drawing processing was equally simple. “We don’t need MicroStation experts. In our environment, these are regular draftsmen with basic MicroStation knowledge,” explains Schulz. For the normal day-to-day operation, the training is about five days maximum. At that point, creating queries and simple reports is no problem for the employees.” Advanced reports and systems administration training, however, is provided by Bentley. The cooperation between the developers at Bentley and Fraport has been close since the organization’s rollout of ActiveAsset Planner. “Bentley appreciates our loyalty and supports us with the migration to newer versions that we request and test in production straight away,” comments Schulz.

SAP Interface

For the link to SAP, Fraport commissioned the development of a custom interface between SAP R/3 RE and ActiveAsset Planner, which was developed in less than three months by Inpuncto GmbH, a Bentley development partner from Stuttgart. This online interface prevents Fraport from storing redundant data, as SAP directly accesses the current graphic data in the database, and in the reverse direction can make commercial data accessible that is important for use in ActiveAsset Planner.



Photo: Fraport AG

Until now, the data in ActiveAsset Planner—in combination with the commercially oriented information in SAP—was used exclusively for lease and space management. This will soon change, however. “Caused by organizational changes in the company, all departments that have dealings with the operation of the facilities are being brought together under one roof,” explains Schulz. “This will naturally impact the facilities software environment. Several departments such as maintenance and cleaning use their own systems that will be replaced over time with ActiveAsset Planner. Currently, there’s a plethora of software tools, ranging from Excel listings via key management systems to specialized tools for ICT infrastructure management. That’s why we’re currently developing a requirements specification for Bentley that allows ActiveAsset Planner to cover the needs of our colleagues.”

Reduced detail

Schulz and his colleagues need only basic data granularity. ActiveAsset Planner is used as graphic support for space management; the drawings don’t contain any clear definitions for site, building, floor, room, usage classification and functional area. “A functional area could, for instance, be the area in front of a check-in counter in the terminal building that’s part of the overall room and that we rent out to airline companies.” Schulz’s team’s core business is to provide the architectural basedata to the SAP system, and to all other departments involved in real estate management. When the ICT people require information, they



get the latest plans, but they have to add the ICT components to the drawings themselves. Similarly, the cleaning department has to enter the type of floor covering used and the cleaning agreement with the external cleaning vendor into the document management database. This requires very strict definitions on the access rights to the database, which is where Bentley ProjectWise comes into play. According to Schulz, administrating access rights with Bentley ProjectWise is easy to organize. “The user management in Bentley ProjectWise allows us to detail read and write privileges on the document level, and working inside workflows and workflow states is no problem,” he explains.

File management departments always start with a floorplan, attached reference file and level links, as well as architectural

information. If someone using ActiveAsset Planner uses this file, he or she cannot change the architectural information; this information can only be edited by the CAD department. The ActiveAsset Planner file only contains the area shapes that can be linked online to the leases and spaces in SAP, respectively. Other departments get their



own specific empty file to which they can reference the appropriate information. This, according to Schulz, is a key advantage of ActiveAsset Planner, as assets are not placed in the drawing physically, which prevents the drawings from being manipulated. Instead, assets are placed on a level in a reference file. The graphic asset symbol is linked to a table in the database that holds all the asset attributes and is temporarily displayed. Through this reference file technique, ActiveAsset Planner can hold just the area shapes in the MicroStation files, which is essential for exact measurement and the rent charge-backs in SAP.



Photo: Fraport AG

Savings for the lessee

The introduction of the space management system led to some interesting results, especially with the space data capture for the rent charge back, as Schulz admits, "Repeatedly, we have had to adapt

lease contracts, as space data is now more accurate than in the past. In most cases, the lease holders benefited from the increase in accuracy. Also, Fraport is now using its real estate more efficiently, as numerous rooms in many of our buildings were without a clear use classification. In some cases, as much as 10% of the rooms were unassigned that we can properly classify now and include in our space management."

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