Industry: Finance
Geography: Austria

"Bacula has enabled us to increase the reliability of our mission-critical backup environment, while reducing costs by a factor of ten. Bacula Systems support is outstanding".

Klaus Horak, head of BE3SM, WAVE Solutions (a subsidiary of Bank Austria)

Bank Austria
With a balance sheet total of 228.6 billion Euros and market share between 20% and 65%, Bank Austria is the largest bank in Austria by a large margin. 82% of the regions’ large-scale enterprises and 62% of medium-sized enterprises use Bank Austria. In Austria itself, the bank has a network of more than 360 offices and employs more than 11,000 coworkers. Bank Austria is part of the Unicredit Group, which has the largest network in central and Eastern Europe with 27 million customers. Wave Solutions, a subsidiary of Bank Austria, operates the data for the bank’s treasury, running a 24 X 5 operation. In total, Wave has around 600 employees.

The Challenge
Bank Austria / WAVE originally used Legato on Solaris for backup. With the full hardware solution that they were using at that time, it used to take up to a whole day to do a backup. Bank Austria decided therefore that consolidating backup jobs into an enterprise-class tape library was required, but their current software supplier then demanded a license for the entire library - which would cost around 250K Euros - when only 20-30 slots out of 200 would actually be used for the systems in question (Solaris). It was at this point that finding another software solution was considered.

“Bank Austria needed a scalable solution at an attractive price that performed in the same class – or better - than an enterprise-level proprietary solution”

Klaus Horak, head of BE3SM
The Goal

In WAVE’s IT environment, cost was not the only consideration: Klaus Horak, head of BE3SM said “we need to be able to upgrade our OS systems quickly and easily, and Open Source applications are generally very tolerant of that. We were also looking for an opportunity to reduce dependencies on third parties”.

The bank found that there were other Open Source solutions available, but their feature list was not nearly strong enough for Bank Austria’s demanding requirements. These other applications could only perform actions like TAR or Dump, and were not nearly sophisticated enough to handle tape changes. Klaus remarked: “For example, it’s not efficient for the backup to have to stop at 300 Gigs, as is the case with one product, if 700 Gigs need backing up - because then tape and time is wasted.”

Said Klaus: “Bank Austria needed a scalable solution at an attractive price that performed in the same class – or better - than an enterprise-level proprietary solution”.

The Solution

The complete evaluation process took 3-4 months. But early on during the appraisal of Bacula, the Wave technicians became confident that it was without doubt the best solution, finding the Bacula application mature, well-proven, and with a large user base.

“The fact that we could access and look into Bacula’s code ourselves whenever we wanted quickly brought us a high level of confidence with the quality of the product”, said Martin Angebrandt, Senior System Manager. “With Bacula, it’s relatively easy to split libraries, and this was one of our main intentions, because smaller libraries cost less to backup. So we were able to reduce costs in hardware too, by taking advantage of Bacula’s configuration capabilities”.

Martin added: “Kern, Bacula’s lead developer, is a very honest and down-to-earth man who tells it like it is - there’s no embellishment of the facts with him. We also found Bacula’s documentation to be extremely good, far better even than most proprietary solutions. Our more experienced sys-admin staff especially appreciated the impressive extensibility of Bacula’s architecture, together with the fact that there are no hidden, ugly surprises lurking inside the software. For the less experienced sys-administrators amongst us, they appreciated the fact that Bacula is simple to use and clean to set up”.

Bacula: The heterogeneous network backup and recovery platform

www.baculasystems.com
"Bacula is the only Open Source solution that could give us the demanding levels of performance we require. Our cost savings have been huge"

The Decision

In Bacula, the database is crucial, because its methodology operates by looking up each file. "Bank Austria’s database (PostgreSQL) is around 100GB in size. We are really happy with the performance of the system - the database files are extremely fast. When the system is tuned correctly, each file look-up is very fast, and performance is very rewarding. And because Bacula is so flexible from a cross-platform point-of-view, it’s possible to first choose the best-performing hardware available and then to confidently install Bacula over it, with no worries" said Klaus.

As the evaluation period came to an end, WAVE made a final and definite decision to rely on Bacula Systems for their backup solution.

The Results

"With Bacula, we are not dependent on some far-away helpdesk in another continent, which could take hours to respond. Bacula’s support is very responsive. Our solution represents a highly tested and proven PostgreSQL setup that works extremely effectively. WAVE actually has the ability to perform in-house tests and benchmarks: "we take that kind of thing very seriously", Martin said. So we have been able to test Bacula and benchmark it. It comfortably passed all our requirements. Bacula has done a great job for us".

Martin added: "Bacula also allows us to do configuration checks, and checksum checks, and this enables us to guarantee data integrity. It also means we can meet international regulations for required checks. We have found the Bacula software’s modular architecture to be very solid, and the actual code is of really high quality. We especially appreciated Bacula’s design and modern, advanced conceptual qualities. Much additional possible functionality is built in as a foundation but not always fully implemented, and this brings a great flexibility. We have found that robotics is well integrated into the software and tape handling is comprehensive in features. Bacula has a real community behind it, and a proper development program for its project. Having access to the open code is also a great confidence-booster, it’s often nice to know that things could be fixed directly by the bank itself if anything urgent came up".

Klaus said "The support we have received from Bacula has been perfect. Simply put: Bacula is the only Open Source solution that could give us the demanding levels of performance we require. Our cost savings have been huge".