Mixer John Rodd blended live orchestras with synths and samplers using MOTU Digital Performer for the score to *BladeStorm: The Hundred Years' War*, which Soundelux's Jamie Christopherson composed.

SONIC SOPHISTICATION

Real and synth orchestras add character to video games.

Along with the rise in video game production budgets the last several years has come an increasing sonic sophistication throughout the medium—from sound effects, which are beginning to approach Hollywood standards in some games, to original music, which is also increasingly being influenced by the film industry. No longer the province of simple synth scores or library music, top video games now occasionally hire noted film composers and employ full orchestras, or fashion intriguing hybrid scores combining real musicians with synths and/or samples. The trend is creating a lot of work for composers and engineers, who are taking full advantage of the capabilities and economic advantages of various digital recording and mixing media to craft scores that are having a tremendous impact on the emotional power of the new generation of games.

Take the game *BladeStorm: The Hundred Years' War*, which is set in medieval Europe during Joan of Arc's time, for example. Originally intended to be one of the launch titles of the new Playstation 3 (PS3) format, it is now slated to have a simultaneous release on PS3 and Xbox 360, both of which boast superior 5.1 audio capability and a higher con-

sistent sample rate than earlier formats. The developer, Koei, hired Soundelux's Jamie Christopherson to write more than an hour of music for various cutscenes and gameplay. Christopherson's composing credits include a number of other popular video game titles, including *The Lord of the Rings: The Battle for Middle-earth I* and *II* and *Lost Planet: Extreme Condition*, as well as numerous films and TV movies. Koei wanted the dramatic sweep of orchestral music, but could not commit the resources to record the entire score with live players. In this day and age, that's not a problem.

"Actually, I really only wrote music to one cutscene in this game," says Los Angeles-based Christopherson. "That was the opening movie. Everything else

BY BLAIR JACKSON

Oscar-nominated Hollywood composer John Debney used Digidesign Pro Tools to record live orchestra sessions for the score to *Lair*, adding some synth effects (10 percent, he says) with MOTU Digital Performer and Word Builder, a function in EastWest *Quantum Leap Symphonic Choirs*.

stuff doesn't sound good, though, it can sure kill the sound of the live orchestra. The challenging part is to try and get those to sound like they are coming from the same room at the same time, and that's where a good mixer like John Rodd comes in."

According to Rodd, the synthesizer prerecords from Christopherson's synth and sample libraries came to him in 10 stereo pairs: "Trumpets, overall brass, strings high and low, percussion high and low, organ, harp, and two tracks of various things—including some solo woodwinds he recorded live—and also a rough mix for reference," Rodd says. "The challenges for me were not only to make the hybrid of the orchestra and the synth tracks sound good, but also to make sure there wasn't a huge shift in the tonality of the music when the score shifts to the smaller cues that were synth-only. The good thing is that Jamie is incredibly talented at arranging, writing, and making the very best out the synth tracks—he's great at using his libraries in very clever ways."

"I'm a strong believer that if you use a live orchestra for the beginning parts of a game or film, the player's ear starts to assume that everything is live, and they can become fooled later on when you switch to synths only," Christopherson says. "That being said, the opening movie and startup scene are live orchestra, as well as the end credits."

Almost the entire project was executed using Digital Performer, including Rodd's mix. "Having the ability to mix in Digital Performer was huge timesaver for me," Rodd says. "There were approximately 20 cues, and I was able to mix both stereo and 5.1 simultaneously in Digital Performer. I know a lot of people are more comfortable mixing in the box using [Digidesign] Pro Tools these days, and it is unquestionably powerful, but I've gotten to be pretty darned fast mixing in Digital Performer. Being a longtime user of both Pro Tools and Digital Performer, I can see how each platform has its own strengths and occasional weaknesses.

"To create the 5.1 mix, I used all sorts of different aux sends, reverbs, buses, and panning, and I eventually printed the mix as an audio track back into Digital Performer. To create the stereo fold-down, I used additional buses and aux sends to create the best-sounding stereo mix that I could. When the mix

[was] written first, before the visuals were anywhere near finished. I think eventually they chopped up a bit of my music for some later cutscenes, but I didn't write specifically for those. The interesting way that the music is approached in this game is to have it make grand entrances, depending on which side you are playing for—England or France."

The way Christopherson typically works with orchestral music is to write in MOTU Digital Performer (DP) and mock it up using synths and samplers, trying to make it sound as true to a real orchestra as possible. In this case, about a quarter of the total music was then recorded live in Prague, the Czech Republic,

using a service called *orchestra.net*, which features some of the best players in Eastern Europe but at prices considerably below those of top American or British orchestras. For this session, a 60-piece orchestra was employed. "I used Jamie's prerecorded synth strings and brass and so forth to enhance the live orchestra, to make the 60 players sound more like 90 or 100, to give it a larger-than-life, almost hyper-real orchestral sound," says Los Angeles-based veteran orchestral scoring mixer John Rodd.

"The advantage of blending live and synth orchestras is being able to achieve a more powerful, thick sound," Christopherson says. "If your synth

was approved, I just hit 'record' and printed both mixes back into DP. The final step was to give the completed DP sessions back to Jamie, and at Soundelux, they exported the stereo and 5.1 mixes out of each DP session, and did some music editing and looping for the final delivery for the game." For the choral passages in the game, Christopherson used the EastWest *Quantum Leap Symphonic Choirs* sample library.

"[This library] is quite amazing in the right hands," Rodd says. "It has a choir singing syllables in different pitches, and then a separate application called Word Builder where you phonetically tell it to sing which syllables in what order, and my understanding is that it is a little tricky to get it right. But Jamie 'woodshedded' and spent the time to master Word Builder. Months and months ago, even before *BladeStorm*, when I heard an example of what he was doing using Word Builder, my jaw hit the floor; it was astonishing. With some careful mixing and reverbs and a bit of EQ, the final results of the fake choir are really impressive in *BladeStorm*."

Rodd's reverbs of choice on this project were the Quantec Yardstick 2402, which he describes as "a modern hardware version of their famous old room simulator hardware processor," and various different instantiations of the impulse response software Audio Ease Altiverb. "What I'm going for is to make everything sound bigger, smoother, and more expansive," he says.

Meanwhile, in a different part of Los Angeles, the noted Hollywood composer John Debney, whose resume lists more than 100 feature films and TV shows (including such disparate works as *Sin City*, *Elf*, and *The Passion of the Christ*, which earned him an Oscar nomination), was hired by publisher Sony Computer Entertainment to write a score for developer Factor 5's forthcoming epic dragon fantasy game, *Lair*, for the PS3. This was Debney's first gig in the video game world, although raising three sons who were gamers and playing a few himself through the years gave him a leg up in understanding the demands of the genre.

"It was different, for sure, than working on a film," Debney says. "In general, it was much less well-defined. There weren't a lot of visuals. I'd say, 'Can I see any kind of motion capture?' 'Yeah, in about two months.' In some ways it's harder than film because there aren't as many reference points or a lot of finished material to work with. On the other hand, it's a lot of fun because you'll have a list of characters and their history, and you write music based more on impressions and descriptions, and that's kind of liberating and challenging in a different way. Then, as the renderings come in and the gameplay comes in, it is very rough so you have to know it's going to change quite a bit, so what you write musically will probably have to change, too, somewhat."

The *Lair* score runs through nearly 90 minutes of cutscenes and gameplay. "Sony really stepped up to the plate to get the budget to where it should be for what they wanted," Debney says. "As a result, the score is about 90-percent live orchestra and 10-percent synth. They're

> "The advantage of blending live and synth orchestras is being able to achieve a more powerful, thick sound."
> —Jamie Christopherson

trying to raise the bar, and I guess I benefited from that."

Like Christopherson, Debney likes to do complete synth mock-ups of his orchestral writing, working in Digital Performer, and making revisions to the score as needed along the way. The actual orchestra recordings sessions took place at the famed Abbey Road Studios in London over a few days in early February. It was recorded entirely to Pro Tools. "We weren't working to picture at all, as you would with a film," Debney says. "We had a couple of rehearsals, a couple of takes, and maybe a pickup or two, and that's it—we were flying, because it was so much material to get through, but the musicians are so incredible, they do what they do so easily. We got through about 35 minutes a day, which is really good, especially for a lot of hard music—this is not vanilla, I'll tell you!"

At that point, Debney's job was just about done. "All the music goes over to [Sony's new video game production studios in Los Angeles] and then they put it in the game," he says. "They cut it up and re-configure it in different ways so it fits with the action and the characters in the game. I ended up writing a fairly modular score so they'd have some flexibility. There's some similar material that loops around and changes keys. We also did a breakdown of some of the cues, where we'd go to just strings or just woodwinds, and they have a creative team that then cuts the music up and reassembles it. The music as a whole has a very rhythmic feel, so it'll be easy to cut. They send me mixes as they go, and I can make comments. We have a server, so they send it on AIFF and we pull it down, my assistant burns a CD and I play it in the car and I'll make little notes. It's worked out really well."

Debney, too, used the EastWest *Symphonic Choirs*, with its Word Builder function. "I was really impressed," he says of the sample library. "I think you'd be hard-pressed to figure out that it's a fake choir. That was a lot of fun to work with. But the project in general was fun, too. Something different for me, and definitely a challenge." **mm**