MG Interview: Presage Software

by Richard Rouse III

Though many Macintosh gaming enthusiasts complain that most of the games which make it to their computer are DOS ports, most overlook the ports which are actually really well done. The majority of these quality conversions were developed by the San Rafael California based company, Presage Software.   Presage was key in the development of what many consider the best arcade game on any computer, Prince of Persia for the Macintosh.   Other conversions to their credit include Lemmings, Might and Magic III, and The Incredible Machine.   With Flashback and Breakthru for the Macintosh to be released soon, it turns out that Presage will now be moving to doing their own original games, the first being Lode Runner: The Legend Returns, an updated version of the Doug Smith mega-classic for the Apple II.   To get the full story on Presage, IMG spoke first with Dane Bigham, Director of Development.   Later on we talked to Jake Hoelter, the director and principle designer of the new Lode Runner.

IMG: How did Presage software first get started?

Bigham: First we were a partnership of some programmers who had all worked together in the past at Broderbund.   I was co-designer and original programmer of Where in the World is Carmen Sandiego on the Apple II.   I left Broderbund after three years- it was about time, nothing exciting was going on there, and I didn't want to sit around doing Carmen ports.   I would have made a lot more money if I had stayed doing ports in order to get royalties off of all the derivatives.

After doing some good work together, such as BannerMania, PrintArtist, and Prince of Persia for the Macintosh, the partnership needed someone to watch and build the business.   So we brought on Bill Holt as President and we incorporated.   It's been uphill ever since with our development and experience talent and Bill's marketing and management experience.   The original founders were me, Scott Shumway (Carmen Sandiego ports, Prince of Persia port), Steve Ohmert (Animate!, Ancient Art of War ports), Ed Murphy (PrintArtist, Backyard), and Bill Holt.

IMG: As director of development at Presage, do you still do any coding?

Bigham: I stopped programming about a year ago- I'd been programming all those years, when we were smaller.   But now I'm no longer in the critical path, although I do a little bit here and there: I can't help it.   I do miss it a bit.   My roll now is turning out to be less Director of Development, but I'm becoming Director of Designs, a sort of Creative Director. Which is great.   I just haven't picked a title for it yet.

IMG: So, you enjoy leaving all the drudgery of programming to someone else?

Bigham: It's not really drudgery: I love it.   I was not enjoying it when I had a lot of other responsibilities also.   I wasn't really able to focus for many days in a row.   And that's where you get most of your enjoyment from programming: you get in that flow where you live and breath it, and it's wonderful.   It's a total high, it's totally great and all that. But it was getting to be less fun, since I couldn't concentrate on it.

IMG: Why has Presage up to now spent most of its time doing ports of other people's games?

Bigham: We spent a lot of time doing ports in the beginning because we didn't have an art or music department.   However, Presage has always been involved with original product. I'm happy to tell you that Presage now has more original products in the works than ports. Actually, we don't have any ports planned past the ones that are finishing up now.

IMG: Is there any single product that Presage is most proud of?

Bigham: Presage is still very proud of Prince of Persia for the Macintosh.   We spent a lot of time enhancing the graphics and music.   When I first saw Prince on the Apple II, I borrowed a friend's Apple and played Prince to the end in about a week.   Then I called Jordan Mechner and insisted that he let us do the Mac version.   It was a long haul because we first put our Mac technology into place with Prince.   But it was worth it.

IMG: So Presage was responsible for the very distinct, beautiful art that was in Prince for the Macintosh?

Bigham: We didn't have an art department at the time, and we had to pay someone at Broderbund to do the art, actually, since it was our responsibility to do the whole thing.   We had some art in place, but Jordan wanted to do a really fancy job on the art.   More than we had planned on originally.   So we ended up paying part of it, and Jordan paid part of it. They took some of the graphics from an NEC version in Japan, which was in eight color believe it or not, and it actually looked pretty good once it was touched up for the Mac.   And then all the character art was redone for the Mac by Broderbund.

IMG: Do you think the publishing of Prince for the Macintosh encouraged Jordan to do Prince II?

Bigham: I think the product's success encouraged him to do a second one.   The product was successful before the Mac version came out, even though it was pretty blah VGA graphics on the PC version.   It was still successful because it's a cool game.   He did it originally on the Apple II, and it did well for an Apple II game at the time, I think.   It was already successful, but it wasn't quite as big of a hit.   I think the Mac version helped solidify its success, since we all did a very good job of upgrading it.   Broderbund decided that it looked good enough that when they launched the Mac version and they did that box.   That was new at the time, the odd shaped box.   I was quite impressed.

IMG: How involved was Jordan in the Macintosh conversion?

Bigham: He wasn't very actively involved on a day-to-day or a week-to-week basis.   But he was involved.   I mean, we worked for him, not for Broderbund.   He wasn't local, and there were lots of aspects of it that took a lot of time and work, so there wasn't anything to review on a week-to-week basis.   But he was definitely involved in decisions like the graphics, and the sound, and looking at it from time to time.

IMG: He hasn't commissioned you guys to port Karateka to the Mac, by any chance...

Bigham: (Laughter)   Well, no.   I don't think he's commissioned anyone for that, yet.   But you can always take a look at it on Stop the Madness.   Jordan does stuff with style, like nobody else does.   I mean he picks a look and a style that is very classic and compelling. And I think Karateka shows that, and Prince certainly shows that.   I know what he's working on now, I haven't seen any graphics, but I'm sure it will be cool.   He's a very good designer.

IMG: When doing a conversion, how does Presage work with the original developer?

Bigham: We work without clients in many different ways.   Some clients we hardly ever hear from.   Others meet with us once a week if we're doing an original.   For a port we get all the source code, original art files and music/sound files and we take it from there.   But at the same time, we keep our clients highly informed.   It starts with a good plan, what we call a Technical Specification.   That document outlines in great detail all the work involved in each milestone.   It's our bible.

We never make game play changes on ports.   We do always add all the touches to a port that make it great.   We make the interface more Mac like.   We touch-up, or re-do graphics if they were lo-res.   The music is always better on the Mac - we use digitized instruments with MIDI - our Music department is great.

IMG: What are some of the biggest problems porting over a game?

Bigham: If the game was originally lo-res or 16-color, graphics speed is the main issue. Then fitting it on the fewest diskettes.   But CD-ROM is what all my clients are going to now. Some code is layered well, some isn't.   Making a non-event driven program (DOS) into an event-driven one is a challenge.

IMG: Does Presage also do the art for a given port, or is that always supplied from the original company?

Bigham: We have a ten-person art department.   They mostly do our original work, but they also touch-up art in the case of a port.   Often we have to create multiple sets of graphics (16 grayscale, 256 color, black and white, et cetera).

IMG: Why does Presage do so much programming on the Macintosh?

Bigham: We've done so much on the Mac because when we started it had the best graphics and it was a growing market.   We also do a lot of Windows and DOS programming, though. The Mac is a cooler machine because of it's excellent user interface; the PC is cool too because it's a computer, and computers are cool.   Developers tend to stick to the PC because that's where the market is.

IMG: What can you tell us about Flashback?   How did that product come to Presage?

Bigham: It's really close!   We're almost done.   We were trying to be done for Macworld, but it was two months ahead of schedule.   We're in the process of putting in the music now. Macplay came to us.   They sent us the Sega cart, and asked us if we were interested in it. We jumped all over it because it's got the rotoscoped look like Prince and it's a great game. As soon as we saw it, everybody liked it and we were all over it.   Sometimes a client brings us something and we say, "Yeah, sure, we'll work on that."   And I find somebody here who's interested in it, and they work on it.   But this was one of the ones like Prince and Lode Runner where we said "Yes.   Let's do it."

We have our primary Mac dude on that, Scott Shumway, who did Prince of Persia and Lemmings.   He's given it the same kind of care he's given everything else.   He's converted it all from Assembly to C, and made sure it all works like the original.   Every time he programs something he redoes his low-level assembly draw code which he did for Prince also.   We use that code in a lot of our products, but he redoes it to fit his products so its absolutely as fast as possible.

IMG: So Flashback should run well even on the low-end color Macintoshes?

Bigham: It should be pretty good.   I was surprised :   he wrote some of the new draw code in C the first time through, and it actually ran pretty well.   It was a little slow, but now that he's rewritten it in assembly and it's a lot faster.   Nowadays, compilers are pretty good so the difference isn't as great, but it's still a significant difference; it's not one you can ignore on a 68030 or 40.

The original game is by the same guys as Out of this World: Delphine.   It has a little bit of that flavor, but the graphical look is very different.   Out of this World was the whole 3D thing, but Flashback is like Prince in that there are three levels on the screen in which the character walks.   But it's all bitmapped graphics.   It's this really cool, futuristic, worn-out world that you're in.   The main character totes a gun instead of sword, and has lots of really great rotoscoped animation where he rolls forward, kneels down, and shoots from there, and rolls back.   He can crouch, and walk with his back to the wall and the gun to his chest. Many, many frames of animation.   And it's almost, almost done.

IMG: How about Breakthru?   What sort of a game is that?

Bigham: It's a simple puzzle game, somewhat in the Tetris genre.   It'll be from Spectrum Holobyte.   It's an easy to learn, long-play puzzle game.   You have this wall of bricks, and you're trying to remove all the bricks, but you can only do it if the two bricks next to each other are the same color.   Some people may not remember, but when you first looked at Tetris you though, yeah, well, that's okay.   But then when you played it, it was very compelling.   This game is like that.   I don't know if it will be as successful as Tetris, but it is definitely addictive and fun.

IMG: Other than Lode Runner: The Legend Returns, anything else on the horizon from Presage?

Bigham: There is one game that nobody will see for a long time because we just wrote the concept for it, but we're getting very good reception to it from publishers.   It is a new genre, it's not Doom, it's not Prince, it's not any of those things.   It's fairly story based, and it's just new... so I can tease you with that.   It should have long play value, it'll change over time. You'll have to keep coming back to your computer to see what's new.   It's really early to be

talking about it a whole lot, but I do want people to know that we're working on new games that are definitely our own.

IMG: How is Lode Runner: The Legend Returns different from its predecessor?

Hoelter: We've expanded on the original design quite a bit, but all the original elements are present.   You can build puzzles with it that are just like the original.   It's the same size board: 28 by 16 tiles.   You've got the Bunglings, now called Mad Monks, running around much the same way they did before, and the gold, and the ladders, and the hand-over-hand bars.   Beyond that, we've added a whole lot of new game elements, including a bunch of tools that you can use.   Such as a jackhammer that lets you dig through the solid bricks, a gas gun that makes the monks dizzy so that you can run by them, and a rope trap; you can set a little loop of rope on the ground and if a monk steps in it he gets strung up and then he's out of commission for the rest of the level.   There are bombs that you use to blow up whole sections of bricks.   We've also allowed more control in the editor.   Just like the original, The Legend Returns has a level editor.   Now you have a lot more control over some of the game elements, such as where the exit is.   Now it's not always at the top of the screen.   Some of the exits have keys, so you can make the player have to go find a key before they can exit.   You can control where the monks reappear in the level.   Another step up, of course, is all the graphics, music, and sound, which are all totally new.   The graphics were all drawn at the full 640 by 400 in 256 colors, though there is a 16 grayscale graphics set, so it should be great for Powerbooks.

The new game has ten different worlds that you go through, each with their own painted background.   The graphics really add a lot to it.   Rather than just throwing out another new puzzle game, we wanted it to have a lot of atmosphere.   So with both the music and the art, we tried to create a whole feeling to the game, Prince of Persia being one of my real inspirations: it's a game which quite effectively creates an atmosphere.   Making the graphics in Lode Runner have a unique style was hard to do, in part, because the characters are so small.   Everybody's always asking for larger characters, but that really would change the game a lot.   Changing character size is more a question of a design.

There's   also a two player mode in the new version; though there was a rumor of network play, The Legend Returns will only be multi-player for two players on one machine.

IMG: Why did you decide against network play?

Hoelter: We'd still love to do it, actually.   It's mainly a time issue.   Again, we spent so much time putting in the new game elements, it became a trade off to get the game done on time. I'm a huge fan of network games, Minotaur being one of my all time favorites.   The market's still really not all that huge for networked games.   For Lode Runner II, one of the things I would really like to concentrate on is the multi-player aspect.

IMG: There will be a part two, then?   Is there anything definitely planned?

Hoelter: Well, no.   Just that we're probably going to do it, unless this one turns out to be a bomb.   I want to concentrate on the multi-player features, because I think that those are the most fun games, the games that you play with other people.   That's always a lot more interesting that playing against the computer.   I want to expand it in that direction, but part two is really wide open.   We've got a lot of ideas, but we're not quite sure what we'll do. With the first one, I wanted to be careful not to change the design radically.   I wanted to add

a lot of stuff to it, but I wanted it to be very much Lode Runner.   So that if you remembered the original, you immediately recognize this one.   Though with all the new graphics, well, you probably won't, until you sit down and play.

IMG: What's the music track like?

Hoelter: The music is...   How to describe it...   It's a lot of marimba and drumming.   It's got an ethnic feel to it.   Again, I wanted to give it a real feel, so we went with a style that's more unique, and a little exotic feeling.   So that it wouldn't be just your average rock soundtrack or something.   The stuff that I gave to the musician, stuff like Peter Gabriel's Passion, I said that was sort of the direction we wanted the music to take.   We didn't want it to sound exactly like that, but something a little exotic, yet still upbeat.

IMG: So how did you wind up with this project?

Hoelter: Presage had the opportunity to develop Lode Runner because Doug Smith - the original designer of Lode Runner - and Dane are good friends. Dane did the Commodore 64 port of the original Lode Runner while he was at Broderbund. When Doug's original deal with Broderbund ended last year, Doug gave Dane a call. As I understand it, Broderbund decided they didn't want to do anything more with Lode Runner. So we got it.

As for me, I had just finished the Macintosh conversion of Mario Teaches Typing, prior to which I had done Might and Magic III, and I was hoping to do a game next instead of another educational product. I remember sitting in our conference room with most of the partners, looking at the projects that were available.   Dane said, "Well, looks like we're going to have the rights to Lode Runner, is anybody interested in it?"   And it's funny, because I was immediately thinking "Oh, I have GOT to do that."   But I didn't want to step on anybody's toes and jump out there, so I waited, and there was silence at the table for a minute.   And Dane said, "Well, I guess nobody's all that interested.   Maybe we ought to send the whole project up to the office in Seattle..."   So then I finally spoke up: "Oh! I want to do that! Lemme have it!"   But the Seattle office ended being involved anyway - Todd Daggert did the Windows version up there.

IMG: How involved was Doug Smith in the development of The Legend Returns?

Hoelter: Doug visited the office a couple of times while we were working on the project. He answered questions for me about the Bungling/Mad Monk's AI and provided some really good insight into why he did certain things the way he did. For the most part, though, he wasn't very involved with the development.

IMG: I heard there was going to be a CD ROM version too?

Hoelter: For the CD, we're going to have all new music.   In fact, as we speak, our music director is in the studio laying down the tracks with a bunch of live musicians, and we're going to be redoing all the sound, and we'll have them all on there in 16 bit, so that if you've got an AV or a Power Mac or something that can play back 16 bit sound, you'll get really great sound out of it.   That'll be the main added feature of the CD.   Hopefully that should be out of Christmas.

IMG: How did it feel to work on a game that was already so widely loved and respected?

Hoelter: Thrilled and honored. I was in junior high when the original came out, and I played it endlessly. I can only imagine how I would have reacted then if you told me I'd be doing the

sequel someday. There's a little fear knowing that it's so famous; it's a tough act to follow. Right now it's hard to step back and gain perspective because I've been so close to it for so long. However, the reaction so far has been really positive, so I think we have succeeded in maintaining the real fun and addictiveness of the original while adding a lot of neat, new stuff to it. But the market will tell us for certain.

At the Game Developers Conference earlier this year, Doug Smith was down there and we were hanging out with him. And people were just walking up to him and saying "Oh, you're the guy who did Lode Runner. Great game!" And they immediately recognized him, and knew about Lode Runner, and he was constantly saying: "Yeah, well, thanks!" It was kind of fun to stand by the side and watch that, knowing that we're doing another one. Hopefully people will have the same reaction.

There's an interesting little anecdote about the manual for The Legend Returns. I'm very embarrassed by this. The guy who wrote the manual at Dynamix didn't know who I was when he started and he decided to name the Lode Runner character "Jake Peril". It's not in the game anywhere, but it's all through the manual. At first Dynamix told me they weren't going to keep that, but at the last minute they said: "Um, well, we decided to keep that. Do you mind? By the way, the manual has gone to film." Now I'm afraid everyone will think I'm an egomaniac. "Look at that - he named the Lode Runner after himself!" So I'm telling everybody now I'm not responsible. I wouldn't be comfortable taking design credit for the game. In the credits I'm listed as director, and that was really what I did. I organized a lot of good ideas from a lot of people. I had the final say on it, but it was really very much a group effort here at Presage. A lot of talented artists and musicians all contributing ideas to the game, to the look, and the play. I think it's important to funnel all of that through one person so you don't get a mish-mash. If it turns out to be bad, though, all the blame is on me, because I was ultimately responsible.

IMG: How did you first become involved with Presage?

Hoelter: I got involved with the computer game industry because I knew Will Wright, who works at Maxis of course. A friend and I used to go to his house and play with his Apple II. When I went to college, I studied Anthropology. I decided I wasn't going to go into computers. During the summer I needed jobs, and I had that skill from high school, so I kept getting programming work. I worked at Maxis doing tech support for about nine months, pretty much because I knew Will. After graduating I wasn't about to find a job in anthropology, unless I was willing to do the whole academia thing, and I'd had enough of that. I'd always been a big computer game fan, so I decided to look into getting a job doing game programming. Presage had done the Windows conversion of RoboSport for Maxis, so that's how the connection came about. They were still working on Prince of Persia for the Macintosh. Presage was relatively unknown at the time; they were just the five partners. The first thing they gave me was the Might and Magic III conversion for the Mac. Several products later I'm doing Lode Runner. It's really cool because I didn't have a whole long history, and yet they trusted me with the whole design and really left all the decisions up to me too. I love this job. Secretly I enjoy being able to tell other people that I work in the computer game industry; they get all jealous.