MG Interview: Bungie Software

by Tuncer Deniz

Bungie Software's latest offering, Marathon, is taking the Macintosh game market by storm. Announced at Macworld San Francisco over a year ago, Marathon went through a turbulent development cycle with many re-writes and delays but not many could argue about its end result. Inside Mac Games recently talked to Alexander Seropian, Bungie Software's President, and Jason Jones, Lead Programmer and the mastermind behind Marathon.

IMG: Pathways had manual look-up copy protection but Marathon doesn't. What made you change your mind?

Seropian: Yea, Pathways was a little bit annoying. Copy protection is an issue that is heavily debated online as to whether you buy something you have to unlock it everytime you want to use it. Marathon was a much easier call, there are a couple of factors that went into our decision. One, is that it's a network game and we can protect it with serial numbers. I don't think anyone would argue that its a hindrance for the user because it's a blind look up, so that gives us a little protection there. And also, because we really didn't have time (laughing). Not that we were really planning on doing it. I think the general consciences around here was we didn't want to do it. We knew we were going to sell a lot of Marathon anyways...so basically that's why it's not there.

IMG: Looking back, do you think the leaked beta hurt your company and do you plan on doing anything different with your next game to prevent this from this happening again?

Seropian: Ah, the Leaked Beta! It really wasn't all that devastating, it was very annoying. There was a serious lack of professionalism on some people's part that caused that to happen. The real result, though, was probably positive. We had a lot potential customers dying to have a look at Marathon, and the beta did provide that. Although it completely didn't do it on our terms or our schedule and it didn't show them what we wanted them to see, which was bad. If you look at the demo versus what the beta looks like, you can tell. The demo is fairly polished compared to the beta.

We're definitely going to do things differently next time. Whenever we release betas now we'll have the user's name hardcoded in it, and that should prevent people from spreading it around.

IMG: At Macworld Boston (in early August) you told people Marathon would ship in 2 weeks and that you were just waiting on the boxes. So what happened?

Seropian: Well, software production is much more of an art than a science. At the time we were at Macworld our box was in production and we were actually planning to ship the product in 2 weeks. We certainly had no interest in lying to our customers and getting people annoyed at us (the end result). But as I said, software being an art and not a science, it's very hard to predict when things will get finished.

There were a couple of factors that made Marathon take a lot longer than we thought it would. We realized that there were a few things we could do to make Marathon a lot more enjoyable for everyone. This included restructuring a little bit the way the game works to make the one player levels more interesting. We really didn't realize this until we started play testing the one player levels, which was left to do before we shipped, which was a two week process. Once we started doing that we realized that we can change things this way to make a better product. And since we did that, we had to re-do all the one player levels which takes a long time. So really that's what delayed the release of the game.

IMG: The Marathon box is quiet a piece of work. How important do you think an attractive game box is to the success of a product?

Seropian: Extremely. When you buy software, it's really two things. There's the intellectual property, which is the real value of the software. But in the real world, you just can't go around selling a disk despite how good the game might be.

Computer games have two incarnations, there's the physical media, which is the packaging, manual, and kind of the experience. And then there's the intellectual property, which is the game itself. We value each incarnation of our product as equally important. It definitely pays off in the end because a lot of customers go to stores not knowing what they want and having an attractive package makes a big difference.

IMG: You've taken a lot of hits on the online services about the delays in shipping Marathon, the box fiasco, and other gripes people have. Would you say that's a sign of growing pains your company is going through?

Seropian: Well, the demand and excitement for Marathon was more than we could handle, that's obvious. We were set up pretty much to handle the kind of demand we had for Pathways, but the customer demand for Marathon is ten-fold than it was for Pathways. It was a little bit too much for us to handle, so there's been delays as a result.

We've been producing about 3,000 units a day from our warehouse and that's not enough to meet our initial demand. So we're hiring more people, we've got a new assembly house online, and we are growing. It hurts in some respects but we can't complain.

IMG: What did you learn most about Pathways and how did you incorporate that into Marathon.

Jones: Besides all the technical stuff I learned from Pathways, I think the most important lesson we learned from Pathways from a development standpoint was that the game started out too hard. It was hard to get into, and it wasn't that interesting in the beginning compared to the end. People that would start out playing would often give up because it was too hard.

What we tried to do in Marathon is a much smaller learning curve. Our game that came out before Pathways, Minotaur, was even worse than Pathways. It took a very long time to get into Minotaur, unless you were part of the D&D crowd who saw its potential immediately.

I realize that we still didn't do as well as we could in Marathon. The first levels in Marathon aren't as good as the later ones, they aren't as well thought out. The geometry isn't as good, they're sort of boring, and the monsters aren't that exciting. Also the writing in the beginning isn't as good as the writing in the end. But I think Marathon is much more open to first time users than Pathways was.

IMG: Looking back now, what do you think of Pathways?

Jones: Yea, I like Pathways. I think we all have a deep affection for it because it was our first successful product. We did so much better with Marathon right now, Marathon so much out classes Pathways on faster machines. On slower machines I think Pathways is definitely better. We love Pathways but we don't want to go play it anymore. We're sick of it, we had to play it 12 hours a day for four days in a row at the trade shows and we've all played it through 4-5 times in the beginning. Yea, we're all pretty much tired of it but it's a great game and it launched the company.

IMG: Can you explain what orthogonal is and how it applies to Marathon?

Jones: Orthogonal means that something joins at a right angle. If you look at Pathways, even though Pathways had rounded corners and it had 45 degree angled walls, its world was essentially orthogonal which meant it was all based on a right angle grid. Orthogonal just means 90 degrees.

That isn't used in Marathon at all because Marathon lets you place walls at whatever angle you want, however long you want. Whereas in Pathways everytime you wanted to have a corner, it had to be 90 degrees, in Marathon you can do whatever you want. You can even make curves if you put a lot of short line segments next to each other.

IMG: What would you say was the most difficult aspect in developing Marathon?

Jones: There were several. If you're talking about the programming, there were several problems including the networking, getting good speed out of the rendering and the texture mapping. There were some parts in Marathon for a while, although I didn't think impossible, I was willing to believe I was not going to be able to solve them in any reasonable amount on time. As it turned out, it all got solved and that's just what happens when you're spending 14 hours a day working on a project, you think it's impossible half the time.

There was a full re-write of the rendering engine right after we got back from Macworld (January 1994). Absolutely nothing remained of the front end of the renderer, the engine that takes the 3-D wireframe of the world and generates enough information to pass it to the texture mapping code to map it. All that got replaced in about a week. Until that happened, I didn't think that was going to be very easy. There were a lot of development problems that were difficult. And you can see it in the game. Anyone who knows anything about programming can look at the game and say, "That's pretty hard." And it is, but it's solvable if you spend enough time working on it.

IMG: I've heard rumors that Marathon would have shipped months ago if it hadn't been for all the wasted hours play-testing net Marathon. Any truth to this?

Jones: Yea, I'm sure there's some truth to it. But also, all that playing that we did helped work out a lot of the bugs. In the shipping version there were some problems, but very few of them. What we ended up after a lot of that testing was a very stable game engine. It's definitely true that we got hooked on the net Marathon early and a lot of the work we did on the game after we started playing net was more biased toward net play than solo play. That definitely did slow down development of the game but it also made the net game a lot better and it also made improvements in the solo game as well. But yes, if we hadn't played the network game so much it probably would have been done a month before the actual release.

IMG: The art in Marathon is dramatically different and much better than in Pathways. What did you do to improve on the art?

Jones: Well, somebody different did the art which means it's a different style, but I agree with you that the art is better. In Pathways we used different techniques and we were going for a different look. Pathways is much more cartoonish, the monsters are very fantastic and ridiculous. In Marathon we tried to go a little bit more for realism and in the projects we work on next I think we'll be going ever farther towards that. Marathon still has a lot of the cartoonish elements of Pathways. You can tell sometimes that the figures were hand drawn, it doesn't look as real as it could. But basically it was a different person with a different style and some different goals. When Reg was working on the art, I was helping him to make it not look like Pathways as much as possible.

IMG: Are you planning on porting Marathon to any other platform.

Jones: Well,I can't talk about that. Obviously it would be a great opportunity, especially with the new Sega Saturn and Sony PSX. We'll see.

IMG: Will Bungie release a level editor?

Jones: No, we're not going to release the tools we wrote to develop Marathon. I'm helping several people on the Internet work on level editors, I'm giving them code and help. Right now I'm actually more interested in the physics model which no one has written an editor for. It's really cool and in the short term more interesting than the level editor. But I'm doing my best to get a level editor out in the public domain.

IMG: Why do you think people are so attracted to first person perspective shoot'em up games like Marathon?

Jones: I think what's appealing about games like this is that anyone can sit down and see the gun being held out in front of their face and see the guys running around in the world. It doesn't look just like the real world, but it's a metaphor that they can easily understand. They can say "Oh, OK, I can shoot that guy, right?" and they shoot him and he dies and they're into it. It takes 3 seconds for most people to figure out what the game is about, so it has an enormously wide appeal.

It's much different than a game like a flight sim that takes more time to get into or a side-scrolling arcade game that's much more Nintendoish, a lot of people don't get into that. But with the first person texture-map games, you can identify with it easily.

IMG: Do you think a few years from now we'll still be playing games like Marathon and DOOM or is this just a craze?

Jones: Yes, I think it's a fad. You are going to see a bunch of these games come out on the PC and Mac. But they are definitely going to stay, they are definitely cool but people are going to get tired of them and something new will come out. But I don't think you can beat their simplicity, I think they'll be around for a while.

IMG: What's missing in the release of Marathon that you plan on incorporating in future versions of Marathon?

Jones: There's some networking stuff that we didn't get to because we realized that we had to finish the solo game. There's a lot of net stuff. We wanted to have games like Tag, King of the Hill, stuff like that. For example, designate one guy as It and you only get points for killing him so everybody is trying to kill this one guy and all he gets points for is escaping for a certain amount of time. Another one would be King of the Hill, where there's some big pedestal in the middle of some room and if you spend the longest time in a 10 minute game on top of that pedestal you win.

Some of the writing was a little rougher than we would have liked, the story didn't progress in a couple of parts as well as we would have liked. And some of the maps, especially in the beginning weren't great. We learned so much in the later stages of using the map editor that we really wanted to go back and change some of the first maps but there was no time to do that.

In the second game we're going to pay a lot more attention to the art because we know it can be approved. We're going to be moving to 16 and 24 bit color source art. There are definitely a lot of things.

IMG: When can we expect the ARA patch?

Jones: The ARA patch is almost done. There's going to be one patch that will fix the known bugs in the release version. Everything is done but ARA which is in testing, but it should be out soon.

IMG: How does Marathon compare to DOOM?

Jones: DOOM probably has better graphics, but we have a better physics model, I think. Our networking is a lot more fun. DOOM is probably faster because of the PC hardware and has more of an arcade feel to it than Marathon does because of the story we have in the game.

IMG: Why aren't there any secret codes or many secret doors in Marathon?

Jones: There are no secret codes in Marathon. Why? Well, for example, if you're stuck on G4 Sunbathing and you're trying to find the switch to get off the level and if you know you can just type control-aslag three times to get 3 times health and get the Rocket Launcher, it becomes really tempting to do that everytime. Marathon actually has built-in cheating, you can always switch the difficulty levels.

But I didn't want to give people an easy way out. If you have that in the back of your mind, the game actually plays different. I'm sure some people don't like that but I really wanted to give people the opportunity to be a little bit more honest when they were playing the game.

There are a lot of secret doors, there are a whole bunch of secret terminals, secret weapons caches, stuff like that. I've actually been surprised, very few people on the Internet have

found any of them. On the last level there's a message from us and a secret save terminal which I don't think people have found yet.

There is one bug in the game which is kind of a secret Vid-Master cheat that you can even use in the game network game. It was just an oversight.

IMG: So what's the cheat?

Jones: I'm not going to tell you (laughing), because you (pointing to me) can use it in the network game.