Subject: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by reducedAircraftFactory on Fri, 15 Feb 2013 06:11:10 GMT View Forum Message <> Reply to Message

I understand from reading these forums that Shapeways maintains a flag on each version of each design that says that the design has printed successfully in the past. On the face of it, this seems like a wonderful idea, because it should give the designer some confidence that -- after ordering a successful test print for himself or herself -- that customers who subsequently order the same print will not get the dreaded "Could Not Be Printed" message. Such messages are an embarrassment to the designer and a hassle and potential cost to the customer, should they have to pay additional shipping to re-fill the failed part of their order.

However, it's not working out that way...in fact it's having the opposite effect. I'll explain, from my perspective...

I (and others, judging by the threads) have seen a lot of cases where designs that have successfully printed before are later rejected. I understand the reasons, and several times there are places where I pushed the tolerances too far and corrections should be made. (Scale modelers tend to really want to push the limits to keep things proportional.) I'm not here to debate that...there are other threads on the subject. But in practice, the has-been-printed flag is doing nothing to reassure me that a design that printed once, or even twice or three times, won't be rejected tomorrow. It happens too frequently.

On the other side, I'm reluctant to change any design for which the flag has been set, because it will mean that my model will be subject to increased scrutiny the next time it is printed. In fact, to be a responsible designer, I almost feel like I should pull a design off the market every time I make a change -- even if it's one that I know will make the model more printable -- until I've had a chance to order the revised copy and be sure it can print at least once. Because, while I may have fixed a printability problem on the left side of the model, there might be something found on the right side during the "increased scrutiny, because it's never printed before" check. So the has-been-printed flag actually forces me to think twice about changing any previously-printed design, even in areas I know are "iffy".

So.. in a strange way... a concept that should be making me feel more confident about my model's ability to print is doing nothing for my confidence, while making me reluctant to fix known problems.

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by stonysmith on Fri, 15 Feb 2013 08:49:55 GMT

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There is in reality, no such flag currently. It is still only a suggestion, and it's proposal is specifically to address some of the issues you raise.

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by UniverseBecoming on Fri, 15 Feb 2013 09:20:21 GMT View Forum Message <> Reply to Message

Good point. Regardless of an actual flag or not, I know I'm not going to touch something that MAYYYYYYY be printable, since it's printed successfully before. Considering the hours that need to go into making revisions, I don't want to even BREATH wrong in that direction for fear of getting another rejection.

Also, a lot of misunderstanding is in the air about these rejections and all kinds of problems are being caused, some of which I can't even talk about without causing more controversy. What may help is to actually document, with photographs for example, how a print failed so that there isn't so much negativity in the air.

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by Dragoman on Fri. 15 Feb 2013 11:53:45 GMT View Forum Message <> Reply to Message

Shapeways normally does send pictures to the designer pointing out where the problem is.

It depends on how you work and what the exact problem is with an item. But I rarely need more than half an hour (if that) to repair a design.

What can be a nuisance is that sometimes only some of the problems are pointed out and, on re-submission, the next set of problems comes up.

After some experience, I also haven't had cases where a change to a file made things worse.

But I see all this as a normal part of the development process as long as this happens with test prints.

To me, the real problem is when a rejection happens after a successful test print and maybe even after several sales went through. I don't want my (and Shapeways' customers) to run into this trouble.

Greetings Dragoman

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by Youknowwho4eva on Fri, 15 Feb 2013 13:56:13 GMT View Forum Message <> Reply to Message

Dragoman wrote on Fri, 15 February 2013 11:53What can be a nuisance is that sometimes only some of the problems are pointed out and, on re-submission, the next set of problems comes up.

This is a problem, I've personally brought up. And is in the works for being fixed. Right now, when the checker finds an issue, they stop looking for other issues. But this should be fixed soon, along with all rejection after printing and hopefully rejections should be a lot quicker.

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by UniverseBecoming on Fri, 15 Feb 2013 15:20:02 GMT View Forum Message <> Reply to Message

Dragoman wrote on Fri, 15 February 2013 11:53Shapeways normally does send pictures to the designer pointing out where the problem is.

It depends on how you work and what the exact problem is with an item. But I rarely need more than half an hour (if that) to repair a design.

I've now have about 200 hours of corrections into this one after about five rejections. The last stated the details are too small for silver glossy. I am now looking for alternative means to have it produced.

If your using parametric modeling software I could see how one could make changes quickly, but I use polygonal modeling software, which slows the process of making changes quite a bit for me. Had Shapeways sent and image showing me how the design failed to be produced in silver glossy perhaps I would have continued working on it, cuz then I could have seen what needed to be

enlarged and in what way.

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by Youknowwho4eva on Fri, 15 Feb 2013 15:41:36 GMT View Forum Message <> Reply to Message

Not sure of the scale of your image, but it looks like details on the compass and square would not last in polishing. I'd order in non-polished so that you can hand polish it to the level you want. Option two would be to see if you can find a jeweler that can cast it for you. Then you could get it printed in FUD so you'll have the highest level of detail. It appears it should be easy to make a mold of.

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by UniverseBecoming on Fri, 15 Feb 2013 15:55:54 GMT View Forum Message <> Reply to Message

It's 50.8 mm square. If I were just making this for myself I would order it in silver, but what my goal was for this was to have Shapeways do all of the steps of manufacturing and then I'd sell it directly from Shapeways, ergo wanting it done in silver glossy.

It's no big deal, I have other items I'll be selling directly from Shapeways eventually.

Though I've known of Shapeways for years, and have been following the progress of Shapeways over the years, I am just just now getting started using the services of Shapeways. So I'm still learning.

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by Youknowwho4eva on Fri, 15 Feb 2013 15:58:35 GMT View Forum Message <> Reply to Message

I've been around 3-1/2 years now, and I'm still learning . Don't get discouraged, and save your model. What's not possible today, may be possible in the future.

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by UniverseBecoming on Fri, 15 Feb 2013 16:02:03 GMT View Forum Message <> Reply to Message

SO TRUE! Advancements are coming at a dizzying pace when it comes to 3D printing. I can't wait to see what's coming next!

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by reducedAircraftFactory on Sat, 16 Feb 2013 01:41:49 GMT View Forum Message <> Reply to Message

Well, I know that they sometimes look at some form of print count, but I'm not sure how often or regularly that is done.

Let me spin my original post, then...if a "Has Printed Successfully" flag is instituted, but it isn't followed pretty closely by the operators, it may lead to the counterproductive effect I mentioned. So we may be better off living without it than having it there but ineffectual.

You really want to get to the point that a designer has a pretty good certainty that something that survived a test print will continue to be printable, with occasional (understandable) exceptions. I yield the floor to other threads for detailed discussion on that topic.

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by stannum on Sat, 16 Feb 2013 04:45:34 GMT View Forum Message <> Reply to Message

The flag has been implemented already. It seems models are rechecked by hand anyway. Procedures for "show the broken model so designer knows what is going on" or "tell designer how many reprints needed, just after they are done, instead of in next order" seem to be still on the air.

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by Bathsheba on Sun, 17 Feb 2013 05:23:06 GMT View Forum Message <> Reply to Message

Still making those mistakes here.

It's a pity your design is difficult to produce, Universe. And I feel you that you have a lot of time in it. Then again those details are awfully small, and yeah lost-wax with mass finishing isn't going to

be the best fit for this design. It's more of a jewelry manufacturing issue than a 3D printing one...sometimes the reason nobody's doing a certain kind of work isn't that they didn't yet tumble to your brilliant idea, but that it's actually impractical. It's a world of hurt when your beautiful project hits that wall, and then again it's not anyone's responsibility to keep you from it.

I recently had a guy tour my studio, and I'm explaining this thing and that thing, and he looked at me at one point and said, all you have in here is failed projects. It was true. I have walls full of shelves full of stuff that didn't work out. Some of them may yet, and I guess I had to do them all to get the few that did do okay, but it still feels lousy. Every time.

Even for such a complex design, and I'm a very slow worker myself, 200 hours seems like an awful lot. Maybe explore some different software....?

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by UniverseBecoming on Sun, 17 Feb 2013 07:09:24 GMT View Forum Message <> Reply to Message

Yeah I'm currently negotiating with some jewelry casting companies. Problem was, this was my first attempt at designing something for 3D printing. I didn't look into it at all, I just started creating it without ever even considering if it could be printed or not. Now, several months later and a whole lot of learning about the design rules, I think I could do it again and not get a rejection.

The main thing that I learned the hard way was, when making jewelery, your doing your construction in CAD as though looking under a microscope! I have decades of experience with CAD, but never designed anything tiny, only big stuff. So that caught me by surprise.

Yes I am very very VERYYY slow when I work. I can spend months on some of my creations. Problem with me is, I am an extreme perfectionist. When it comes to art, something that might take someone an hour might take me 10 hours. That and in this case, completely redoing the filigree and olive branches for this design set me back quite a bit. Which is fine, I learned, and nothing I have created since has been rejected, cuz I now know the design rules.

It would be nice to see what is worn away on this as a result of finishing. It may even compliment the design if a remnant of the structure were to remain being that the whole of Freemasonry is ancient and it may give a worn ancient look to it.

Another thing I'm looking into is doing my own casting. I have all of the equipment minus a vacuum / centrifugal casting machine. I am looking into acquiring this equipment at this time. Though I don't mind paying extra to have Shapeways do all the work. Cuz I'm lazy!

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by Bathsheba on Mon, 18 Feb 2013 06:45:58 GMT View Forum Message <> Reply to Message

UniverseBecoming wrote on Sun, 17 February 2013 07:09The main thing that I learned the hard way was, when making jewelery, your doing your construction in CAD as though looking under a microscope! I have decades of experience with CAD, but never designed anything tiny, only big stuff. So that caught me by surprise.

Oh yeah. For a few years around 2001 I ran a Solidscape machine as a service bureau, and everybody's first model was something that looked amazing on a 20" monitor and was nowhere near printable.

Quote:Another thing I'm looking into is doing my own casting. I have all of the equipment minus a vacuum / centrifugal casting machine. I am looking into acquiring this equipment at this time. Though I don't mind paying extra to have Shapeways do all the work. Cuz I'm lazy!

Laziness is a virtue, ask any programmer.

I don't know about now, it's many years since I subbed out any jewelry casting, but that used to be one of life's little bargains: if you could bring decent waxes it was ridiculously cheap to get rough castings.

What I never managed to source was decent finishing. Casting houses didn't get that you can't finish my stuff the same as a normal ring, and weren't interested in getting paid extra to give it more attention. They'd just whack off the sprues and overtumble everything. I'm OK having some silvers on Shapeways, where there's no downside for me and customers are making their own decisions about the material, but I don't like it enough to front money for inventory and have it on my own site.

Quote: I have one of your necklaces! Thanks!

Subject: Re: The "Has Printed Successfully" Flag is Currently Counterproductive Posted by UniverseBecoming on Mon, 18 Feb 2013 11:26:30 GMT View Forum Message <> Reply to Message

[quote Oh yeah. For a few years around 2001 I ran a Solidscape machine as a service bureau, and everybody's first model was something that looked amazing on a 20" monitor and was nowhere near printable. [/quote]

I'm glad to hear that I'm not the only one who got caught by this one!