Lukas (00:00):

Well, thanks for joining everybody. Today, we're going to talk about RunScript and how you can use RunScript to create PDFs online using InDesign and InDesign Server. So we'll explain all about how this works and some of the underlying technologies. We'll give you some examples and show some demos. But first, just a little intro, so I'm sure you're familiar with Zoom, but please stay muted during the presentation. We will have Q&A at the end. Feel free to unmute at that point, ask any questions or you could post in the chat and we will get to that. And we will send out this recording via email within a day.

(00:49):

So I'm Lukas Kaefer, I'm the Marketing Manager, and we also have Caleb Clauset with us who's our VP Product, and he's going to help me answer any technical questions that come up. So thanks Caleb for joining. A little bit about Typefi. So we're a software company based in Australia and founded in 2001, and we have a few products here, and they're all about helping you publish faster and do more with the resources you have. We have an automated publishing software for InDesign that's really, really powerful for longer complex documents. It'll do about a thousand pages an hour. It can handle tables, figures, indexes, references, really anything you might come across, the system can handle it and automate it and do all the composition and pagination. We have an editorial software for Microsoft Word called Typefi Orion that helps you clean up documents and you can actually export to XML as well from Word.

(01:58):

We have a few InDesign plugins and then we also have RunScript obviously, and we're going to talk about that right now. So we'll go through a couple of maybe common problems that RunScript solves. We'll talk about some of the technologies and the capabilities of RunScript and then I'll show you how it works and give you a look under the hood and then we'll take questions. So kicking off with some problems. So probably the most common thing we hear from people is that publishing takes too long. And the reason for that is because you have all these repetitive manual tasks in there, part of these workflows, and that's where the time gets lost, especially if you're having to update a document really regularly, or you have multiple versions of a document for maybe different stakeholders or different languages, or you're doing a really high volume of one-offs.

(02:58):

If there's manual work involved, it's going to be a little bit slow and the solution is to automate it, and you can use RunScript for that. Now you might be saying, well, we would love to, but the automation costs too much. And in a lot of cases that is true. Professional automation tools are expensive. Something like InDesign Server has a pretty expensive annual licence. Any type of hardware IT management cost is going to come into play with running a server. And maybe outsourcing is another option, maybe to automation, but that's expensive too and there's tonnes of headaches involved with that. So not a great solution. But the real solution here is RunScript because it's inexpensive, there's no annual licence, most jobs cost 20 cents. In terms of consistency, RunScript can really help you force consistency because it's template based. If you're trying to maintain your branding and you're working across teams with multiple stakeholders, it can be a battle because you've got different people.

(04:05):

Errors come in when there's manual work, you have to review everything. And so the solution is to use templates and to use them to do automation with RunScript. So you can create those templates yourself. It's very straightforward. Any designer could do it. It's pretty much straight up InDesign and you control all the design. No one can touch that. Finally, integration. Very easy with RunScript because we manage everything. We manage the infrastructure, the hardware. There's nothing for you to do in terms of servers or maintenance or upkeep. We do all of that and you just run your jobs via API. So with that, I'm going to go into the demo portion. So first thing I'm going to do is pull up InDesign and my code editor. Now on the left you see an InDesign document. This is just a plain old InDesign document that we've created.

(05:05):

It's a employee of the month certificate. And what I want to show you now is a little bit of InDesign scripting because scripting is really the underlying core technology of RunScript, and InDesign is the reason we're able to do this. InDesign is the most scriptable Adobe programme. They have this really robust ecosystem around it and essentially anything you could do over here in this physical interface, all these buttons and menus, all these things can actually be accomplished using scripts if you know how to write them. Full disclosure, I did not write this. One of our engineers did. But essentially this is a simple script that is going to change the name in the document without me actually touching the document. So there's a few pieces to this. Essentially you just have to put some syntax in and it's going to replace that syntax with a name.

(06:04):

So if I put the syntax into this name spot here, and then I go back to the code editor and I will just basically run this script locally. When I click Main, watch that name on the InDesign document, it changed to my name, which I had hardcoded in here. So this is kind of the core. You can go as far as you want with this, as much knowledge as you have. You can, like I said, pretty much do anything in InDesign with scripting. Now you can use RunScript to do this in the cloud, and that's really the value of RunScript. So here I have basically an app that we wrote to run that script in the cloud. And you're basically, anything you're doing in the cloud, you have to have those files stored somewhere. So we're using Amazon S3 storage. You could use Google's cloud storage, Microsoft Azure cloud storage.

(07:13):

You just have to authenticate and then you grab those files that you have stored there in the cloud, you run your script and you get the output returned to you. And so I'll show you how that looks. So just a little bit of technical stuff going on here in the background. But now that I have that running, if I open this up, this is our little web app using that exact same script and we can create that in the cloud. So I'm just going to put some random number in there, test name something, I'll click generate, give it a couple seconds. And here's our certificate. Same script, did the same, essentially the same exact thing, but it's now done it here in the cloud.

(08:08):

Now you might be saying, oh wow, that's really cool, but that's like a toy example. You've replaced one line of text, and you're right, this is a very simple example just to kind of show you what we're talking about. You can take this, as I said, as far as you want to go. So let's go back to InDesign. We've got another example here. Well, let me go back to, yes, here we go. Okay, so we've got another example here. This is a common, we have customers who use RunScript to do this exact thing. This is a real estate flyer.

(08:44):

A real estate agent is going to use something like this to market a property that they're trying to sell. So this template might be used by everyone at the agency, but obviously the details are going to change and you can automate that using RunScript. Now, these images, all this information about the property, these are the things we want to change. And one of the best ways you can do that in InDesign is you can use Data Merge. Now, Data Merge essentially is going to take data from a CSV file, which I have here. And these are all pieces of info that are in this document. We've got the images. How many bathrooms are there? All of that's in that CSV. And I basically just set that up by going to the Data Merge window, finding that file, all those fields come in. Now you see that, and I'll just go through and say, okay, that's the price. This is the house image, that's the floor plan, et cetera. And when I'm done, it's going to look like this. It's going to look very bare and blank, but this is going to enable us to replace everything in here where we've put these placeholders.

(10:03):

So to do that, I'm going to use RunScript. And again, just need to do a little quick technical part here. Now, again, I've written, or my team has written an app to do this, and it's essentially the same as what I showed you before. We're authenticating, we're grabbing files from our S3 storage, and we're doing the Data Merge and returning that file to the user. So I am going to run this using RunScript in my terminal here, and I'm just going to say run house one, and we'll just give it a second. And there you go. There's our completed PDF. And I can do another one just to prove to you that this is real. I can run it again and replace in some different content. Run it again, give it a second. There you go. Here's our second home. Different price, different images, different floor plan. All the details are different, but as you see the template, the design is exactly the same. So that is essentially RunScript.

(11:33):

Let's just see, did I miss anything? I don't believe I did. But yeah, that's basically RunScript. You can use it to run these scripts in the cloud and automate PDF creation. You could take this Data Merge example, and you could build this into some of backend system or a database where you could pick on the fly, say, oh, I want to generate a flyer for this one or that one. You could create a little user interface like we did for the first example, and have fields. You could have dropdowns, you could have a way for people to upload files to create a PDF using RunScript. So again, it's really as far as you want to go with this and the resources or the knowledge that you have to write these scripts. But again, we have resources to help you write those and get started. And you can actually get started for free, and you can do that on the RunScript website. I'll post that link in a second. We'll give you $50 in free credit when you sign up so you can get started. Test your jobs. We have free example code. I'll post some links to that as well.

(12:50):

And yeah, it's your oyster to kind of make what you want and do what you want. We've just kind of given you this way to use it and you can build out whatever you like really. So to recap, it's fast. Whoops. It's fast. It's low cost. The outputs are extremely high quality using InDesign Server. It's an industry standard. There's no annual licence or contract, and there's no hardware to manage either. So a lot of benefits, a lot of good reasons to use RunScript. So with that, I'm just going to leave this up on the screen, with that, that is my demo, so I did that pretty quick. So all right, if anyone has any questions, please feel free to unmute or post in the chat.

Caleb (13:53):

I think one of the things that when you think about how this can integrate on your side, because you're connecting to your own repository for your images, your templates, your fonts, all of that stays on your side. We have no insight into how you're using script. It all remains private on your side. And when you think about licencing costs and whatnot for your fonts, again, you're just providing your own fonts. They're loaded temporarily with InDesign Server for the duration of your job, and then they're removed because they never actually leave your source. So there's some nice advantages there to be able to run this in a really lightweight sort of, well, I mean there's no management aspect at all required for it. So here's a question for you. Are you currently using InDesign Server? Have you thought about using InDesign Server as a composition or output engine? Are you using something else right now? And what was your interest in joining this webinar in the first place?

Audience (15:17):

Hi there, can you hear me?

Caleb (15:19):

Yes.

Lukas (15:20):

Yep.

Audience (15:20):
Hey, great. I was having a lot of trouble here with the microphone. I think we're there. Good.

Lukas (15:26):
No worries.

Audience (15:27):
Yeah, great stuff. Thank you very much. We use, currently we use InDesign for manual typesetting for complicated documents. We have an automated cloud solution that does the same using, but not using InDesign Server. We, and that's okay. That's okay up to a certain size of documents, I'm thinking like 30 pages or 50 pages. We have extensive scripts that run on that service to create these documents. The issue we're having is that typesetting is hard. So for example, in your example, you're putting in placeholders, you're filling them in with data and so on, but sometimes the data is going to spill onto the next page or something like that. And then you've got to make sure that you're balancing columns nicely or whatever. So on our current automated solution, we are doing something like a hundred passes to produce a PDF. What I mean by that is we are looking, we're putting the data in, we're creating a PDF in the cloud. We're looking at that, where, how many pages and what is spilled over and things like that. And then we're changing some stuff and we're regenerating and we're literally having to take at a hundred goes to get a 30 page document straight.
(17:13):
And it's hard and it's time consuming. So my question is, on RunScript, can you put the data in? Can you check whether things have fallen over onto a different page? Can you rerun it? And things like that, because we have to tweak font sizes, we have to tweak Q and O letter spacing and things like that to close up some stuff or expand some stuff and so on. Things we do manually in InDesign, but it's the iterative nature. Can you do that on RunScript, do you think?

Caleb (17:51):
Yeah, absolutely. I mean, I think the key thing here is that that RunScript is, it's a kit. So this is if you were into restoring cars, RunScript is just the engine. It's not everything else. It's not the transmission, it's not all the steering controls and the radio, all that sort of stuff. It's just the engine. And so the script, like what Lukas had shown earlier, there's a script that was written in InDesign's scripting model to do the replacement for the employee of the month, or there was a different script that handled the Data Merge. And so for doing that on-the-fly analysis of your content to do quality control checks, that would have to be built into the actual script itself. Now, I know this particular topic for this webinar is on RunScript, which is about a "bring your own" sort of commands to tell the engine what to do.
(19:24):
Typefi also has a fully automatic composition platform that's just called Typefi. It's what I learned on when I first started with Typefi 20 years ago. And that system has a lot of automatic stuff built into it so that as you're doing long documents that you can have it do the analysis and say, okay, this content doesn't fit on this page, I need to automatically add another page to it. That other page I add to it needs to be of this parent page style. So you can automatically set up the threading. You can have events even within our automation to pause and modify the layout. For example, one of the things that I remember from that original story I told of where we're using InDesign desktop as if it was a server, that was with Lonely Planet Travel. And so we would lay out the entire 1400 page book in a matter of minutes.
(20:41):

We took an eight week production process and collapse it down into an afternoon. And one of the things that in those travel guides, they would have these little small sidebar boxes that had a specific length that couldn't be longer than X. And so we had scripts that were made as part of the overall solution so that when we laid out a page before it moved on, look to see if there are any sidebar boxes that were overset. And if they were overset, we could do step one, step two, step three. If those didn't fix it, here's step four, step five. And so you can create sort of cascading rules in that system. So it may be that we should have a follow-up conversation about how you might actually be more interested in the Typefi composition server as opposed to RunScript.

Audience (21:43):
But that's not using Adobe and the Adobe engine, yeah?

Caleb (21:48):
It is using Adobe InDesign Server. Yeah. Yeah.

Audience (21:51):
Does it work in the cloud platform?

Caleb (21:54):
It does.

Audience (21:56):
Okay. Okay. Yeah. Sounds interesting.

Caleb (22:00):
Awesome.

Audience (22:00):
Sounds very interesting. Okay.

Caleb (22:03):
Awesome. All right. Thank you so much.

Audience (22:08):
Thanks.

Lukas (22:08):
Thanks guys. Have a good day.