

Sheru's booth.pm avatar guide [WIP]

A beginners guide for people new to VRChat avatars. This guide is specifically geared towards people that have or are about to buy a avatar from the market place called booth.pm I will cover basic roadblocks that a user new to booth.pm might encounter when acquiring and uploading an avatar in this category. *notice* This guide is slowly being converted from a google doc to the VRCLibrary format. My apologies for the slow progress.

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What is booth.pm and for who is this guide?

What is booth.pm?

Booth.pm is a Japanese website where independent professionals can distribute their creations. These creations vary wildly. But they mostly focus on things like bags, clothing, acrylic stands, 3d models, jewelry, music, stickers and art. In a setting that most people would categorize as “homemade”.

In 2023 this market ballooned to a small powerhouse, generating 21 million dollars in revenue just on 3D assets alone.

Since booth.pm is a Japanese website, the content tends to be focused on the Japanese speaking market. The people selling their products usually don't speak English and can be limited in their ability to write English. Those that sell 3D models specifically for VRChat will assume you have some basic understanding of Unity, VRChat and/or be able to comprehend Japanese.

Over the past years I have met some people in VRChat that were disappointed with their first time purchase or at least had a hard time getting their 3D asset/avatar to work.

This was for me the reason to make this guide so you don't need to pull hairs out of your head or clash with a language barrier to get basic questions answered.

This guide is will cover:

- Advice on deciphering Japanese text.
- Zip file code page issues.
- VRChat Creator Companion (VCC) - WiP
- Unity installation.
- What version of SDK to use.
- Additional shaders and scripts.
- Dynamic bone shenanigans. (not done yet)
- Unity basics.
- Photoshop basics. (not done yet)

This guide will not cover:

- Complex Unity/Udon.
- Uploading avatars with Quest compatibility. (requested feature)
- Blender/Maya/3D modeling.
- Making adjustments to UV/Masks.
- SDK 2 to 3 conversions.

The goal of this guide

With this guide you should be able to successfully upload most avatars you can buy from booth.pm

But before you even buy an avatar on booth.pm you need to become aware of certain hidden costs, efforts and VRChat requirements that we will cover in the next chapter.

Hidden costs, efforts and requirements

Hidden costs

Some avatars/items on booth.pm require you to already possess certain things. For example, a base model, paid scripts and/or programs like Photoshop to make full use of all the features that are offered.

This can add up quite a bit if it's your first initial purchase. For example you buy a simple avatar for ¥1500 (about 15 dollars) and then realize in order to make full use of the avatar, you need the dynamic bones script. But that's gonna set you back another 20 dollars so the total initial cost is more like 35 dollars.

Be sure to check this before blindly slamming the buy button.

Also keep in mind that most booth stores don't do refunds since the buyer receives goods that can't be returned.

Hidden efforts

The content sold contains mostly Japanese, like certain settings in Japanese avatars are in Japanese. Things like tags, descriptions, file names, annotations... there is a high chance it's all in Japanese. This can be a real head scratcher if you try to find or change something.

Most Japanese users that distribute their items/models on booth.pm barely speak English. They will do their best to communicate with you, but this won't guarantee that it will solve your issue. If communication is a problem you might need to do quite a bit of research, use translation tools, read this guide, learn Japanese or ask someone who can speak and/or write Japanese to help you out or communicate on your behalf.

VRChat requirements

Of course VRChat has its own requirements you need to comply with.

You need a VRChat account (not a Steam/Oculus/Viveport account version!) and need to comply

with the VRChat Content Gating system before you can upload an avatar.

It perhaps sounds logical, but it's not the first time I helped someone and then realize that this person can't even upload an avatar because the above requirements are not met yet.

Please look up <https://help.vrchat.com/> if you have any questions about this.

With all this out of the way, let's start!

The language barrier

Almost all 3D model items from booth.pm will have their basic requirements listed on their item store page. And to no one's surprise these are usually written down in Japanese.

Translation

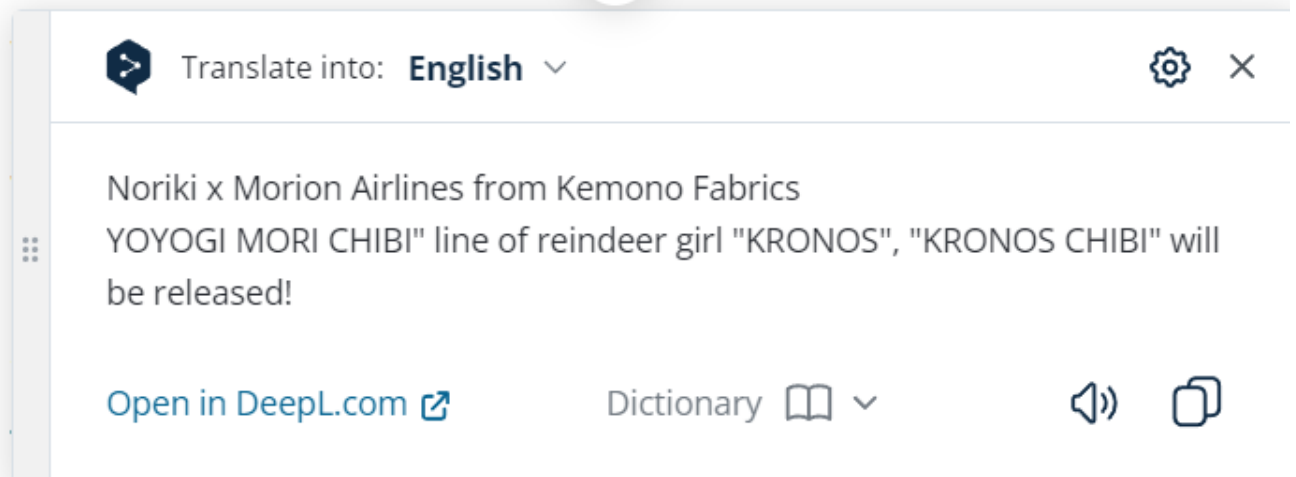
Since learning Japanese is not covered in this guide, I will present the second best option and that is to use a translation tool.

I recommend using <https://deepl.com> as the default translation tool. From personal experiences, Google Translate has too many issues with grasping the correct context. For situations like translating pieces of text from a website or a program like Discord, DeepL can be used very effectively and for free.

Example of the DeepL translation tool with the Chrome plug-in

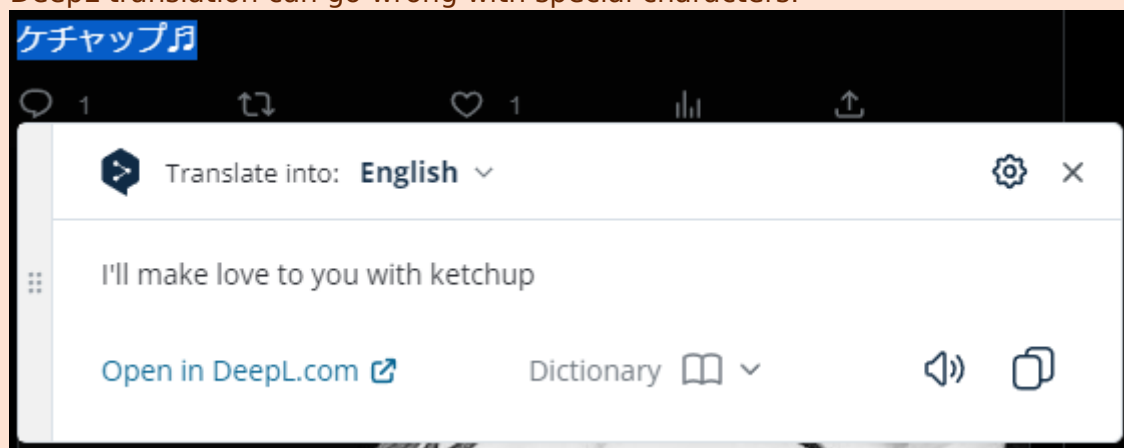


ケモノファブリックより典樹 x モリオン航空で制作している
トナカイの少女『KRONOS』の「YOYOGI MORI CHIBI」ライン、『KRONOS
CHIBI』発売予定です！



The only downside to DeepL would be that at moments it is too enthusiastic with trying to grasp the context. This sometimes causes it to leave out sentences with crucial information. Another less important issue is that it relies heavily on punctuation, but this is not always adhered to in normal Japanese writing. And probably due to this, it also has a hard time dealing with special characters. I highly recommend to exclude (sanitize) any special characters like emoji and musical notes from the translation input. And also make sure that when sentences are broken up without punctuation, that it might be a good idea to break those lines of text on to a new paragraph.

DeepL translation can go wrong with special characters.



Always be weary of the accuracy of the translation.

Luckily most requirements are tend to be mentioned with their official English name. Things like the name of the shader or a specific script like Dynamic Bones. If shaders and/or scripts are not mentioned then there is a chance they are not needed or are included with the package.

Licensing/Legal

this section is nominated for a rewrite

It's very likely there will also be instructions regarding how you may use the avatar. A lot of creators do not want their avatar to be used in a certain commercial setting. And you can be quite sure that it is not allowed to redistribute the avatar. If your looking for an avatar form a Japanese creator that you can distribute on your own behalf then I recommend to read more about that in the section "Cultural barrier".

If you still want to use it for a commercial setting then I highly recommend to get in contact with someone that can read/write Japanese very well and have them contact the creator on your behalf.

Many avatar creators also have limitations in what context you can use the avatar, examples like: for political, religious and/or sexual situations are usually not allowed. Or the creator expects you to use common sense.

The contents of the license might sound silly to you, but I still highly recommend to comply with it. The copyright issue in Japan is a hot potato, and sadly many people in Japan do not enjoy the same protection from the law as a lot of western users do.

Failing to comply with a license may result in a host of issues that are beyond the scope of this manual.

Cultural barrier

And that brings us to the cultural barrier.

Over my time in VRChat for the past three years, I have spoken with several users that contacted creators on booth.pm with requests and commissions. A lot of times the interactions are described as alien from both the customer perspective as well as the avatar creator perspective. (still requesting more information and examples for this)

What I have seen so far is that quite a few of the popular avatar creators are professional model creators, they make VRChat avatars for fun to practice their craft and/or earn a bit of money on the side. When they are approached for a commission then this usually takes place inside VRChat and/or they are introduced by someone they know. The official communication for the project then usually takes place in private on Twitter messages, booth messages, e-mail or on discord.

Depending on the user's wishes, an expected price point will be decided. This is calculated based on key factors like "Is good concept art available?", "time scheduling" and "difficulty of the project".

Requests like "Make a replica of a certain copyrighted character (without the rights)", "requests to make something way below the bar of what the creator is capable to do" or "I don't have any concept art, but it must look cool" will usually get instantly rejected.

It is also very possible that the creator for their real job actually works on a project that is related to what you're requesting. In those situations the creator might decide that based on "conflict of interest" it will not accept the job.

Some customers are also really surprised about the large price tags that Japanese creators put on their work. From scratch projects that are provided with original concept art can easily go up from 1500 to 3500 USD. (citation needed)

Japanese creators also have a dilemma they worry about a lot. Things like:

- If the customer can't communicate in Japanese, can I then understand and interpret the wishes of the customer correctly?
- Will the customer understand my standpoints when we encounter a problem in the project?

In these situations Japanese people tend to avoid confrontation. Even though the offer from the customer might be financially attractive, in the end it is possible the request will be refused.

What you need to know about Zip files

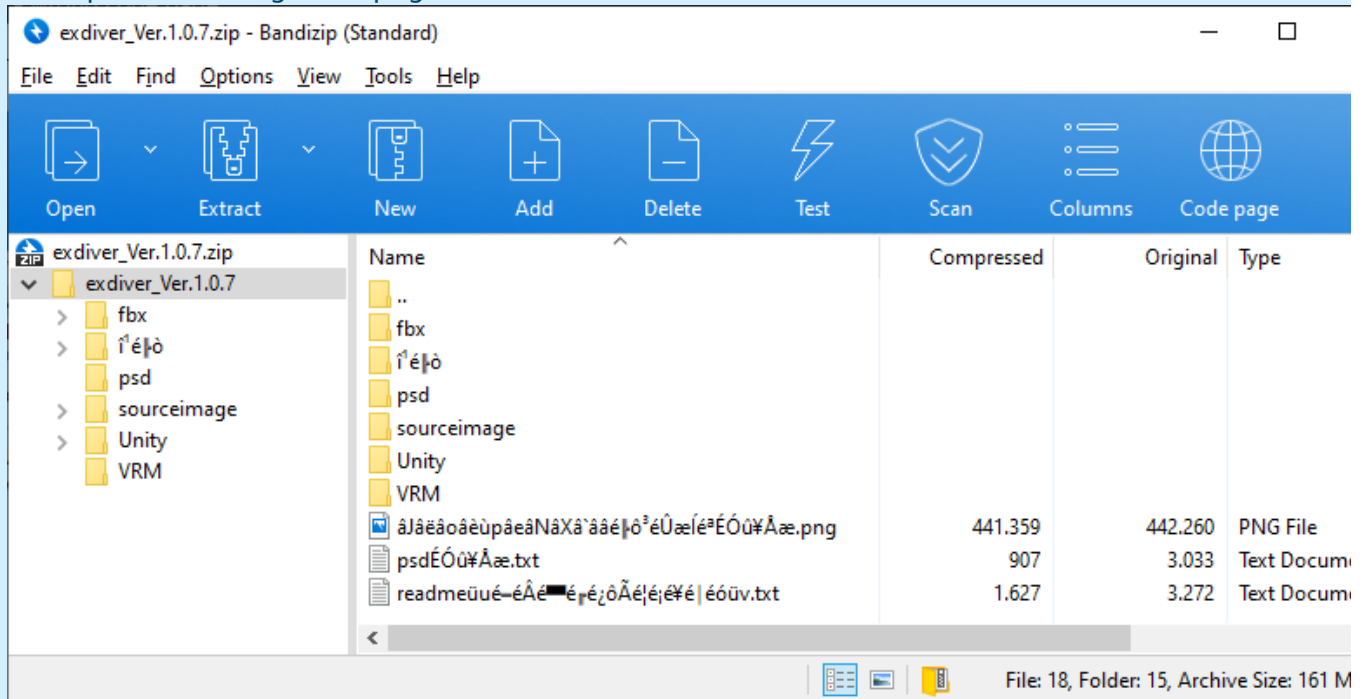
Deciphering the store page might not provide all the necessary information. The next logical step would be to look for a readme file in the downloaded zip file, but this is where we potentially encounter our first serious roadblock. This is usually the first point that people are starting to get really confused about their purchase.

Code page shenanigans

As some will know, the written language in most Asian countries is completely different from western countries. To make this work on a computer it will need a different underlying code page to deal with all the extra characters. This means that if your computer is not set up for the correct code page, it might not display everything correctly. (this explanation is oversimplified)

If you open a zip file that contains Japanese text, there is a pretty big chance that it will look like a pile of garbled unreadable characters. Some folders and files might also be missing. This does not mean that the zip file is broken, it simply uses the wrong code page to display the content of the zip file.

Example of a wrong code page



But a lot of people will think "oh, can't read the contents, but the files are fine right?" and continue extracting the zip file and start using them in Unity. Well, this is the point where it can go seriously wrong. I don't understand the exact science behind it, but I have seen cases where this codepage issue keeps following you even inside unitypackage files.

There are many ways to get around this, but IMHO the easiest way to solve this with the least amount of intrusion is to have a zip file manager that allows you to change the code page.

For this I personally recommend the free to use program Bandizip.

You can download it for free here : <https://www.bandisoft.com/bandizip/>

When you open a zip file with Bandizip you can change the code page with the "code page" button at the top right to the correct code page. After that you can extract the contents as intended.

For people that use Winrar version 5.4 or higher, you can use the keyboard shortcut Ctrl + E and select the correct language.

Keep in mind that not all zip file managers have built in support for this.

Warning!

If you extract the contents of a zip file with the wrong code page and you import these files into Unity, then the avatar might not function correctly and/or generate errors when trying to upload. Errors can appear that indicate files are missing and/or parts of your avatar are not displaying correctly. It is also possible that the avatar is showing incorrect stats that do not comply with what is advertised on the booth page.

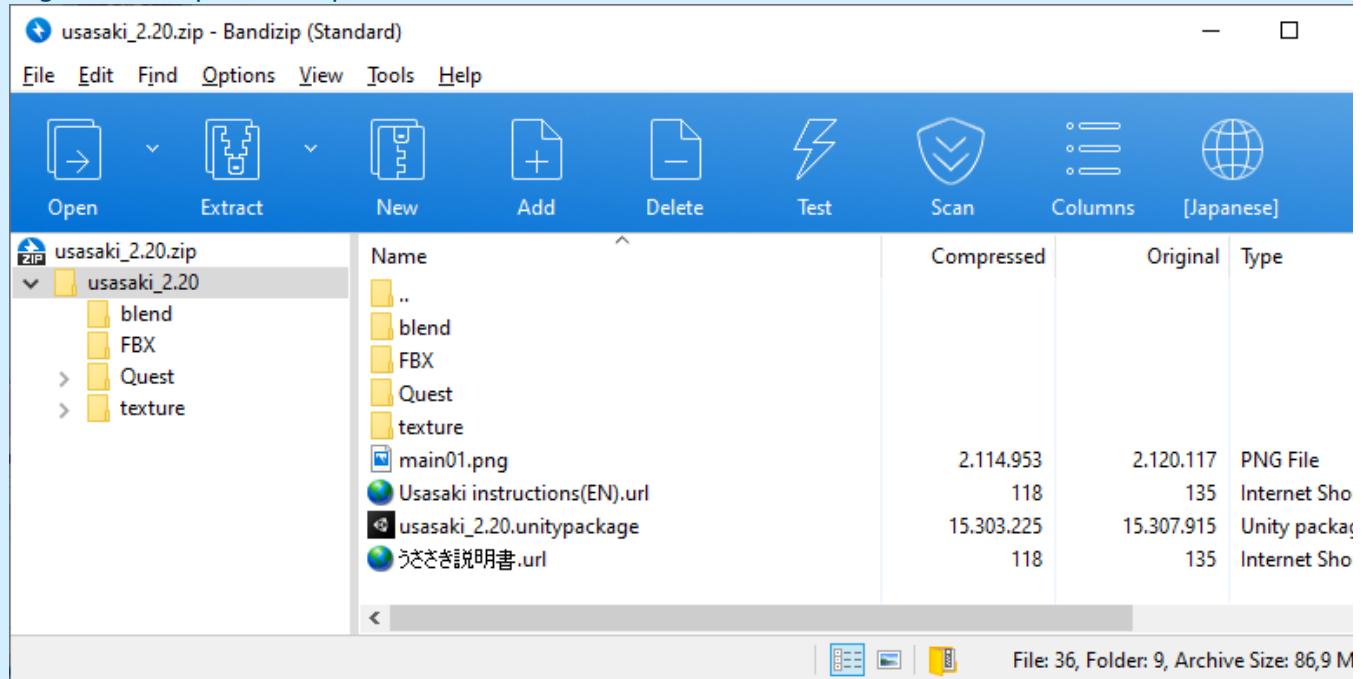
Before you ask for help in these situations, please make sure you extracted your zip file

correctly!

Unexpected files

There is currently no universal standard on how to distribute an avatar for VRChat. I have seen projects come in all sizes and shapes. What I consider the gold standard is a zip file that contains several folders that are containing things like textures, PSD, FBX/Blender/VRM files, usually in the root a readme file or a URL to instructions and a unity package file.

A good example of a zip file



This is however not always the case.

It is possible that only a unitypackage is provided with no extra information or files. This is not really the ideal situation, especially the lack of resources to modify textures and mesh files can be disappointing. And without a readme file you will need to look up the booth website every time you forgot what shader to use since a readme file will usually tell you what shader you need.

But before you get too disappointed, make sure to check the content of the unitypackage file. It is possible that additional files like blender/FBX and PSD files are included in there.

If they are included with the unitypackage file then you will be able to find these files in the project folder after you imported them to your Unity project. This can potentially bloat the size of your project folder, but for some creators this workflow makes sense to have the files there.

What else do you need?

Avatar requirements

This part is obsolete and currently being rewrite due to the introduction of VCC
For more information, please visit <https://vcc.docs.vrchat.com/>

When looking in the readme file and the description on booth.pm store page, you will be looking for things the avatar project requires, items like these shaders [lilToonShader](#), [PoiyomiToonShader](#), [UnityChanToonShader](#), [ArkToonShader](#), [JewelryShader](#), and scripts like Dynamic Bones and SDK version.

SDK version

SDK is usually very straightforward, if it only says SDK then they mean SDK2 and otherwise they will specifically mention SDK3. Please be aware that SDK2 is considered obsolete and will no longer be maintained for features. SDK files can be downloaded for free from the [VRChat website](#).

Shaders

Shaders can usually be found on booth.pm or [GitHub](#). If you can't find the shader because the website/project no longer exists then always double check if the shader is included with the package. Google can also be a great help to find a specific shader.

Dynamic bones

Dynamic bones is a separate package from the [unity store website](#). You can buy this for +/- 20 dollars. If you are stuck on a budget then it's worth waiting and keeping an eye on it as it often goes on sale with a neat 50% discount.

Once you own dynamic bones, you can apply it to any unity project you want. Including your own projects when you perhaps make your own avatar in the future. There are also plenty of guides on YouTube that will help you add dynamic bones to avatars that don't use Dynamic Bones.

NOTICE!!!

Please be aware that Physic Bones has been released, this feature is provided by VRChat for free and is included with the current version of SDK3. This replaces Dynamic Bones!

The sole reason you would still need Dynamic Bones is when you want to import an old avatar with Dynamic Bones and convert them to Physic Bones. This conversion can't be done without the Dynamic Bones package.