

## **Important Notes about Futronic SDK**

Dear customers and developers,

Please note that Futronic changed the image processing algorithm when upgrading from SDK 3.0 to SDK 3.5 to improve the fingerprint recognition accuracy. And we call them the following:

Previous – It is used in SDK version 3.0 or before

Current – It is used in SDK version 3.5 or after which provides better recognition accuracy

Image processing is to generate minutiae (fingerprint template) from a bitmap fingerprint image which is done during both fingerprint registration and fingerprint recognition.

If “Previous” is used to generate fingerprint template of a user, it must also be used for fingerprint recognition of the same user. This is the same for “Current”. That is, “Previous” and “Current” are not compatible. So it is necessary apply the right image processing algorithm in a fingerprint recognition system if you are upgrading from SDK 3.0(or before) to SDK 3.5(or after).

Both “Previous” and “Current” are included in SDK version 3.5 or after for users who are upgrading from SDK 3.0(or before) to SDK 3.5(or after).

### **During fingerprint recognition:**

For SDK3.5 or after, users can select the image processing version using the following SDK function:

[FTRSetParam \(FTR\\_PARAM\\_VERSION, value\)](#), based on the following considerations:

1. FTR\_VERSION\_CURRENT: This is the “Current” image processing, it should be used if all fingerprint templates in the database are generated by only using SDK 3.5 or after
2. FTR\_VERSION\_PREVIOUS: This is the “Previous” image processing, this value should be used if all fingerprint templates in the database are generated by only using SDK 3.0 or before.
3. FTR\_VERSION\_COMPATIBLE: The combined version, both “Previous” and “Current” image processing are done. This value should be used if fingerprint templates in the database are generated by using both SDK 3.0 or before and SDK 3.5 or after. Then during fingerprint recognition, “Previous” will be matched with fingerprint templates generated by SDK 3.0 or before and “Current” will be matched with fingerprint templates generated by SDK 3.5 or after. It is to make sure that there will not be fingerprint recognition error for database that is a mixture of fingerprint templates generated by both SDK3.0 or before and SDK 3.5 or after. If you are upgrading from SDK 3.0(or before) to SDK 3.5(or after), please use this value.

### **During fingerprint registration:**

For SDK 3.5 or after, FTR\_VERSION\_CURRENT is used by default. If necessary, it can also be set to FTR\_VERSION\_PREVIOUS. However, if it is set to FTR\_VERSION\_COMPATIBLE, it will still do FTR\_VERSION\_CURRENT because there is only ONE fingerprint template and only ONE image processing algorithm is used to generate it.

Please contact Futronic if there is any question about this image processing version change. Thank you for using Futronic products.

Best regards  
Futronic Support team  
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