

Taking Successful Electronic Fingerprints

Submitting an acceptable set of fingerprints is vital to the security clearance process. Submitting an unacceptable set to OPM may slow down the process or even result in having the investigation returned. This video will provide you with some helpful hints as well as show you common errors that you may encounter while using an electronic fingerprint machine. For specific procedures on your particular fingerprinting system talk to your local Subject Matter Expert (SME) or your system manufacturer.

The first two helpful tips are before you even begin the actual fingerprinting process.

- First make sure that your machine is calibrated correctly. Most machines will let you know when it is in need of calibration. Ask your SME or manufacturer for details on how and when you should re-calibrate your machine.
- Second ensure that you correctly enter all of the required data such as Name, SSN, Date of Birth, SON, SOI, and Place of Birth. Remember: if your subject was born in the United States you must enter their State of Birth. Taking a great set of fingerprints won't mean much if they don't match up with the submitted investigation.

Now before we start taking fingerprints lets take a little Fingerprints 101.

- While no two sets of fingerprints are the same there are three main fingerprint patterns that you will encounter. They are Arches, Loops, and Whorls.
- The primary objective of you, as the fingerprint technician, is to ensure that you capture the center of these patterns when fingerprinting.
- The fingerprint process is made up of two types of fingerprints. The "slaps" and the rolling prints. The slaps are simply when you press the fingers down on the printing surface and capture the image. The rolling prints are simply those where you roll the finger across the printing surface.
- Let's go over some quick tips on how to capture both prints:
 - For your slaps try your best not to exceed a 45 degree angle. Also, make sure that all of the fingers are flat and that the center of the actual print is captured.
 - For your rolling prints ensure that you roll from nail-to-nail and that the finger stays in contact with the surface through the entire roll.
 - Most machines compare the slaps to the rolls to make sure that you are fingerprinting the correct fingers throughout the process. This comparison is sometimes shown as a score and is usually adjustable in the software.

However, keep in mind the lower the acceptable threshold the higher the likelihood of an OPM rejection

Now let's start fingerprinting!!

- Sometimes having helpful items around will ensure a smooth fingerprinting experience for your subject. Some items will help you capture the image such as a small spray bottle filled with water, hand lotion, Ridge Builder, or paper towels. While some will be needed to clean your machine such as glass cleaner or a machine specific cleaning kit. Check with your manufacturer to see if they have suggested items to help you fingerprint and/or clean your particular machine.

Common Errors

Unfortunately not every fingerprint you take is going to be perfect every time. Here are a few common errors that you may encounter as well as some simple fixes.

- Slippage: This can occur if the subject's fingers are too moist or if you rolled the finger too quickly. First try to re-capture the print by slowing down. If you still get the same error simply ask your subject to dry off their fingertips and make another attempt.
- Roll not Wide enough: The usual culprit here is if you accidentally stopped the roll too soon or if the finger being printed lost contact with the surface. Go ahead and make another attempt making sure that you roll nail-to-nail and maintain contact with the printing surface.
- Poor Image Quality: This usually happens when the subject's hands are a little dry or not enough pressure was applied. Try spraying a little water or whatever product your agency may use to add moisture to the subject's hands and apply a little bit more pressure through the roll.
- Incorrect finger: If this error appears just make sure that you are in fact printing the finger that the machine is expecting. If you still get this error sometimes re-taking the slaps will fix this error.
- Poor Minutiae: This is one of the more complicated errors. Usually this happens if you applied too much pressure or the ridges and valleys of the subject are too close for the machine to identify. If you believe that you applied too much pressure then try retaking them with less pressure. If you believe that it's due to the composition of your subject's fingerprints

then try this technique. Spray the subject's fingertip with a little water. Then apply just enough pressure to see the print image. Then roll the finger very slowly. The image will darken through the exposure as opposed to pressure.

- Fingerprint Missing: Make sure that all required fingerprints are taken. If you simply missed the print then go back and take the image. Should your participant be missing a finger speak to your local SME as to how your machine annotates such an instance.

Despite all of your efforts sometimes you may not be able to get an acceptable fingerprint image. If you should continue to receive unacceptable images find out what your agency's policy is before you override the image.

Using these helpful tips can help you to take the best fingerprint images in the least amount of time. Remember:

- Make sure that your machine is properly calibrated
- That all required data has been correctly entered
- And that you have provided all images required
 - All fingers flat for the slaps
 - Nail-to-nail for the rolling prints

Remember all livescan machines may have different specific procedures. Talk to your local SME and/or manufacturer for details about your particular machine.