

Kofax Mobile ID Verification

ID Verification and Facial Recognition Administrator's Guide

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The logo for KOFAX, consisting of the word "KOFAX" in a bold, blue, sans-serif font.

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Preface

This guide includes the information you need to get up to speed with your application.

Training

Kofax offers both classroom and computer-based training that will help you make the most of your Kofax Capture solution. Visit the Kofax website at www.kofax.com for complete details about the available training options and schedules.

Getting help with Kofax products

The [Kofax Knowledge Base](#) repository contains articles that are updated on a regular basis to keep you informed about Kofax products. We encourage you to use the Knowledge Base to obtain answers to your product questions.

To access the Kofax Knowledge Base, go to the Kofax [website](#) and select **Support** on the home page.

Note The Kofax Knowledge Base is optimized for use with Google Chrome, Mozilla Firefox or Microsoft Edge.

The Kofax Knowledge Base provides:

- Powerful search capabilities to help you quickly locate the information you need.
Type your search terms or phrase into the **Search** box, and then click the search icon.
- Product information, configuration details and documentation, including release news.
Scroll through the Kofax Knowledge Base home page to locate a product family. Then click a product family name to view a list of related articles. Please note that some product families require a valid Kofax Portal login to view related articles.
- Access to the Kofax Customer Portal (for eligible customers).
Click the **Customer Support** link at the top of the page, and then click **Log in to the Customer Portal**.
- Access to the Kofax Partner Portal (for eligible partners).
Click the **Partner Support** link at the top of the page, and then click **Log in to the Partner Portal**.
- Access to Kofax support commitments, lifecycle policies, electronic fulfillment details, and self-service tools.
Scroll to the **General Support** section, click **Support Details**, and then select the appropriate tab.

Related documentation

In addition to this guide, refer to the following documentation:

- *Kofax TotalAgility Administrator's Guide*: Contains essential information about installing and configuring Kofax TotalAgility.
- *Kofax Mobile SDK Developer's Guide*: Contains essential information about installing and configuring the Kofax Mobile SDK.
- *Kofax Mobile ID Extracted Field Tables*: This is an HTML document with a complete listing of all currently supported ID fields by region and by country.

Product documentation

By default, the product documentation is available online. However, if necessary, you can also download the documentation to use offline.

Default online documentation

The product documentation is available at the following location.

https://docshield.kofax.com/Portal/Products/en_US/KMC/3.5.0-cs5i340uk7/KMID.htm

Configure offline documentation

To access the documentation offline, download the following files:

- KofaxMobileIDDocumentation-2.5.0_EN.zip
- KofaxMobileIDVerificationDocumentation_2.5.0_EN.zip

Download these files from the [Kofax Fulfillment Site](#) and extract it on a local drive available to your users.

The compressed files include the `print` folder that contains all guides, such as the Installation Guide and the Administrator's Guide. The `KofaxMobileIDDocumentation-2.5.0_EN.zip` file also contains a `help` folder with API references.

Chapter 1

ID Verification

This section focuses on the ID Verification product. For facial recognition see [ID Facial Recognition](#).

ID Verification overview

- You can verify IDs used for extraction so the user can be confident about using the extraction ID information in their business processes.
- The verification results are returned as separate fields as part of Kofax Mobile ID Capture's JSON response.
- The ID verification feature is enabled through a specific license ID that must be available on the Kofax license server.
- Forensic analysis of the format is performed and security features of the ID document are checked.
- Even though ID verification tests can be performed on front images only, it is strongly recommended that both front and back images of the ID be used for ID verification.
- ID extraction is performed using Kofax technology. The ID verification tests are performed only when ID extraction is successful.
- At-least 500 DPI images are recommended for ID verification tests.
- ID verification only supports JPEG and PNG images.

Limited vs full support for verification

ID tamper tests have configurable thresholds for various algorithms that run during tamper checks. Generally the recommended out of the box thresholds are applicable to all regions, but some may require tuning based on customer samples. The United States, Canada, South America, and Australia are fully supported out of the box with no tuning required.

Other regions are supported in a limited fashion and may require samples to be provided to Kofax for tuning. Future software updates will expand the list of fully supported regions.

Configuration

After installing Mobile ID Verification, follow these steps to configure the system.

First use

Before using the system for the first time, do the following:

1. Change the default system password.
2. Create a Merchant, Branch, and Administrative user.

Changing the default system account

To change the default system account, do the following:

1. Open the Verification application in a web browser.
For the URL, enter the fully qualified hostname, such as `https://<fully qualified hostname>`. The Login page appears.
2. On the logon page, enter the credentials for the default account:
 - User name: `admin@authid.co`
 - Password: `Auth123`

Click **Login**.

3. Click the **Super Admins** tab.
4. Click **Add new Super Admin**.
5. Enter the required information and uncheck **Password Change Required**.
The **Login Email** is the username used to log on.
6. Click **Submit**.
7. Click **Account Activation Link**.
8. Enter values for the security questions and click **Save**.
9. Enter your password and click **Continue**.
10. Click the **login** link.
11. Click **Logout** in the top right corner.
12. Enter the credentials of the user you just created and click **Login**.
13. Click the **Super Admins** tab.
14. Click **Edit** next to the **System Administrator** user.
15. Click **Deactivate** to disable the default account.

Creating a merchant, branch, and administrative user

1. Open the Verification application in a web browser.
For the URL, enter the fully qualified hostname, such as `https://<fully qualified hostname>`. The Login page appears.
2. On the logon page, enter the credentials for the super admin you defined in the previous section.

3. Create a new merchant user.
 - a. Click the **Merchants** tab.
 - b. Click **Add New Merchant**.
 - c. Enter details in the required fields related to your organization and click **Submit**.
 - d. Once successfully submitted, click **Back**.
4. Create a new branch.
 - a. Click the red **Branches** button in the **Action** column for the Merchant you created in the previous step.
 - b. Click **Add New Branch**.
 - c. Enter details in the required fields related to your organization.
 - d. Click the circular Generate icon next to both the **Account Access Key** and **Account Secret Token** fields.

Important Make a note of these values because they will be needed later during configuration.
 - e. Click **Submit**.
 - f. Once successfully submitted, click **Back**.
5. Create a new admin user.
 - a. Click the green **Admins** button in the **Action** column for the branch you created in the previous step.
 - b. Click **Add New User**.
 - c. Enter details for the administration user and click **Submit**.
 - d. Click on the link in the **Account Activation Link** field.
 - e. Enter values for the security questions and click **Save**.
 - f. Enter the password in the **Password** and **Confirm Password** fields and click **Continue**.

Important Make a note of these values because they will be needed later during configuration.

Configuring Data Purge settings

Configure the optional Data Purge settings as follows:

1. Browse to the Verification application (e.g., `https://<fully qualified hostname>`).
2. Click the **Merchants** tab.
3. Click the Admins button under the Action column.
4. Click **Add New Merchant Admin**.
5. Complete the form and ensure the "Password Change Required" checkbox is checked.
6. Click **Submit** and browse to the Account Activation Link.
7. Complete the Security Questions form and the Account Activation Create Password form.

8. Navigate back to the login page and login as the merchant admin that was created in the previous steps.
9. Click the **Settings** button.
10. Click on the **Data Purge Settings** tab.
11. Enter the desired settings and click the **Submit** button. Note: The initial data purge may be delayed by up to 12 hours from the scheduled start date.

Configuration with Real-Time Transformation Interface

1. Installation of Kofax Mobile ID Capture

Note If you have already installed the package during Mobile ID installation or configuration, you may skip this step.

- a. Extract `KofaxIdentity-Verification-2.x.ZIP` (where `x` is the current version number) to a folder of your choice. All instructions and examples in this guide assume the folder name is `C:\MobileIDCapture`.
- b. Modify the Real-Time Transformation Interface `Web.config` file to include the mapping for the Kofax Mobile ID Capture project, referencing `KofaxMobileIDCapture.fpr` as the project, `IPProfile_MobileIDCapture_ID.txt` as the image processing profile, and set the `separateExtractionProcessPool` option to `TRUE` as shown in the example below. Both `KofaxMobileIDCapture.fpr` and `IPProfile_MobileIDCapture_ID.txt` are in the `C:\MobileIDCapture\KTM Project` folder.

```
<project projectMapping="MobileIDCapture"
  projectFile="C:\MobileIDCapture\KTM Project\KofaxMobileIDCapture.fpr"
  ipProfile="C:\MobileIDCapture\KTM Project
  \IPProfile_MobileIDCapture_ID.txt"
  processPoolInitialSize="2"
  processPoolThreshold="1"
  separateExtractionProcessPool="true"
  ipOutputFormat="JPG" />
```

2. Configure Script Variables.

- a. Edit the `KofaxMobileIDCapture_ScriptVariables.xml` file located in an existing Mobile ID installation or, for this example, the file path is `C:\MobileIDCapture\KTM Project\KofaxMobileIDCapture_ScriptVariables.xml`.
- b. Configure the Keys in the table below with information you collected earlier during the installation and configuration of Mobile ID Verification as their values.

Key
Verification_Server
Verification_AccessKey
Verification_Token
EnableVerificationDiagnostics

Note Set the `EnableVerificationDiagnostics` value to `"true"` if you need diagnostics, otherwise set to `"false"`.

3. Save the file.

Configuration with Kofax TotalAgility

1. Import the Kofax Mobile ID Capture TotalAgility package.

Note If you have already imported the package during Mobile ID installation or configuration, you may skip this step.

- a. Log in to the TotalAgility Designer.
 - b. Navigate to the **Packages** designer.
 - c. Select **Import Package**.
 - d. Browse to the KofaxMobileIDCapture.zip file.
 - e. Click **Import** to import the package.
2. Configure TotalAgility Server Variables.
 - a. Log in to the TotalAgility Designer.
 - b. Navigate to the **Data** designer.
 - c. Select **Server Variables**.
 - d. Change the Category Filter to **Kofax SMCs\KofaxMobileID**.
 - e. Configure the variables in the table below with information you collected earlier during the installation and configuration of Mobile ID Verification.

Name	ID	Category	Type
Verification_AccessKey	VERIFICATION_ACCESSKEY	KofaxMobileID	String
Verification_Server	VERIFICATION_SERVER	KofaxMobileID	String
Verification_Token	VERIFICATION_TOKEN	KofaxMobileID	String
EnableVerification Diagnostics	ENABLEVERIFICATION DIAGNOSTICS	KofaxMobileID	Bool

Request parameters

Input parameters

The following parameters and their valid values are described below. When using Real-Time Transformation Interface, all parameters must be prefixed with an 'x,' e.g., the `Verification` parameter should be sent to the server as `xVerification`. When using TotalAgility, the parameter names do not require this prefix.

Input Parameter	Description	Default value
<code>Extraction</code>	If false is specified, only authentication will be performed.	True
<code>Verification</code>	If true, verification will be performed.	False

Input Parameter	Description	Default value
ExtractPhotoImage	If true is specified, the head shot from the document is returned in extraction field <code>VerificationPhoto64</code> in response	False
IDSize	If <code>IDSize</code> is not passed as a parameter, classification will be done and will automatically detect the document type. If " ID1" / "ID2" is specified, no classification will be done before passing the document to verification server	empty

Response fields

The below fields will be added to the Kofax Mobile ID Capture 2.x response.

Field Name	Value
VerificationResult	Document verification status (Passed/Failed/Attention/Unknown) This value is a summary of the tests run on the document.
VerificationTransactionID	This is a unique ID generated for the transaction by the verification server. This value can be used to identify transactions.
VerificationPhoto64	The document holder's photo (head shot) found on the document ID. It is in a base64 string format
VerificationReserved	This field is reserved for use by Kofax.
VerificationErrorInfo	Information about errors, if there are any. Example : <pre>{"ResponseType":null,"ResponseCode":null, "StatusCode":null,"ErrorMessage": "License 'Kofax Mobile ID Capture - ID verification' is not available.", "ErrorType":"Error"}</pre>

Example URL Calls

Samples of URL POST requests for the front and back of a driver license are provided in the `Samples` folder where Kofax Mobile ID Capture is installed. These samples are described in this section.

Real-Time Transformation Interface

The Real-Time Transformation Interface sample requires the following:

- Kofax Transformation Modules 6.0.2.0 or later is installed.

- Real-Time Transformation Interface is configured at `http://localhost/MobileSDK`.
- The Transformation project is mapped as IDCapture.
- Verification is installed and configured.

RequestURL

`http://<servername>/mobilesdk/api/IDCapture`

Request Headers

```
Accept: application/json
Content-Type: multipart/form-data; boundary=-----acebdf13572468
```

Request Body

Open RTTI_Request_Ver.txt from the Samples folder.

Response Body

Open RTTI_Response_Ver.txt from the Samples folder.

Kofax TotalAgility for verification

Note The request body and request response may take a moment to open.

Request URL

`http://<servername>/TotalAgility/Services/SDK/JobService.svc/json/
CreateJobSyncWithDocuments.`

Request Headers

```
Accept: application/json
Host: <servername>
Content-Type: application/json
```

Request Body

Open KTA_Request_Ver.txt from the Samples folder.

Response

Open KTA_Response_Ver.txt from the Samples folder.

Chapter 2

ID Facial Recognition

This section focuses on the facial recognition product. For ID verification see [ID Verification](#).

Facial recognition overview

Facial recognition is performed to establish and validate that the person capturing the ID is the real owner of the ID.

The user will submit a selfie portrait image to be compared to the image photograph extracted from the users ID card. The maximum number of facial recognition attempts is 3. This value is not configurable.

Note Use of this feature requires a separate Kofax License.

Configuration

To perform facial recognition, the following software must be configured.

Configuration with Real-Time Transformation Interface

Installation of Kofax Mobile ID Capture: There is no need to install any package as you have already installed the necessary package during the Kofax Mobile ID Verification installation.

Configuration with Kofax TotalAgility

Follow the instructions in this section to use Kofax Mobile ID Capture Facial Recognition with Kofax TotalAgility. The TotalAgility package includes a process map that can be used to perform facial recognition.

1. Log in to the TotalAgility designer.
2. Navigate to the Packages designer.
3. Select Import Package.
4. Browse to the `KofaxMIDFacialRecognition.zip` file.
5. Click Import to import the package.

Request parameters

The following parameters and their valid values are described below. When using Real-Time Transformation Interface, all parameters must be prefixed with an 'x,' e.g., the `TransactionId` parameter should be sent to the server as `xTransactionId`. When using TotalAgility, the parameter names do not require this prefix.

Input Parameter	Value
<code>IdType</code>	Selfie (This parameter is required for Real-Time Transformation Interface only.)
<code>TransactionId</code>	This is the parameter your mobile application can use to pass the transaction ID to ensure Selfie Match functionality is performed.
<code>LivenessSelfie</code>	<p>True or False</p> <p>If the <code>LivenessSelfie</code> value is true, the image sent will be verified against all selfies present for the specified transaction ID. If any of these verifications fail, the overall result is a failure in the response.</p> <p>If the <code>LivenessSelfie</code> value is false, the image sent will be verified against the head shot from the document for the specified transaction ID.</p> <p>The default value is false.</p>

Response fields

The following fields are returned as the selfie response:

Field Name	Value
<code>FRMatchResult</code>	Shows the result after matching the two images (Passed/Failed/Attention)
<code>FRMatchScore</code>	Shows the score after matching the two images.
<code>FRTransactionID</code>	Transaction ID, which was sent in request.
<code>FRReserved</code>	Reserved for Kofax use.
<code>FRErrorInfo</code>	<p>Information about errors if there are any.</p> <p>Example :</p> <pre>{ "ResponseType":null, "ResponseCode":null, "StatusCode":null, "ErrorMessage": "License 'Kofax Mobile ID Capture - Facial Recognition' is not available.", "ErrorType":"Error"}</pre>

Thresholds configuration

The following thresholds can be configured at merchant level in Verification application Server. Click the Edit button on the Merchants screen to get to the screen to configure thresholds.

1. `FRLowThreshold`
2. `FRMedThreshold`
3. `FRHighThreshold`

The "Selfie Match" result logic is shown below with the thresholds. This logic is implemented in the Verification app server.

If the `FRMatchScore` is less than `FRLowThreshold` then the `FRMatchResult` is Failed.

If the `FRMatchScore` is between `FRLowThreshold` and `FRMedThreshold` then the `FRMatchResult` is Attention.

If the `FRMatchScore` is greater than `FRMedThreshold` then the `FRMatchResult` is Passed.

If any of the "Selfie to Selfie" scores for the specified transaction ID is greater than `FRHighThreshold` then the `FRMatchResult` is Failed. These scores can only be viewed from the Verification application.

Manual review workflow (only for Kofax TotalAgility)

1. Import `KofaxMobileIdFacialRecognitionReview.zip` package into Kofax TotalAgility.
2. Copy `ImageCompare.aspx` to TotalAgility's `Forms` folder.
An example for TotalAgility's `Forms` folder is likely to be `C:\Program Files\Kofax\TotalAgility\Agility.Server.Web\Forms`.
3. Copy `Kofax.Mobile.Id.KTAFFormSelfieResults.dll` to TotalAgility's `bin` folder.
An example for TotalAgility's `bin` folder is likely to be `C:\Program Files\Kofax\TotalAgility\Agility.Server.Web\bin`.
4. Open TotalAgility Designer.
5. Go to **Data**.
6. Go to **Server Variables**.
7. Click on the **Category Filter** drop down list and Select **KofaxMobileId**. Update the `FRReviewer` variable with the username of the Kofax TotalAgility resource to make this user a reviewer. Don't forget to click the check mark or it will not be saved.

Note if you don't find this variable in this category, select **All** in the Category Filter Drop down.

8. Configure the below server variables for Push notification:
 - `Android_PushNotifyServerKey`
 - `IOS_PUSH_IsAPNProduction`
 - `IOS_PUSHCertificateName`

9. Approve or Reject form in Kofax TotalAgility forms.
 - a. Login to the Kofax TotalAgility workspace at `http://<Server>/TotalAgility/Forms/Custom/logon.html` as "FRReviewer" (or the actual username configured in the above server variables).
 - b. Go to **My Activities**.
 - c. Click **Activity**.
 - d. You will see a form with **FR Score**, **FR Result**, **Transaction ID**, **Selfie Image**, and **Head shot image**.
 - e. You can clear or check the **Approve** check box and click the **Complete** button.
 - f. Now, the device will get a push notification with the Approve/Reject information for the transaction ID.

Example URL Calls

Samples of URL POST requests for the front and back of a driver license are provided in the `Samples` folder where Kofax Mobile ID Capture is installed. These samples are described in this section.

Real-Time Transformation Interface

RequestURL

`http://<servername>/mobilesdk/api/IDCapture`

Request Headers

```
Accept: application/json
Content-Type: multipart/form-data; boundary=-----acebdf13572468
```

Request Body

Open `RTTI_Request_FR.txt` from the `Samples` folder.

Response Body

Open `RTTI_Response_FR.txt` from the `Samples` folder.

Kofax TotalAgility

Note The request body and request response may take a moment to open.

Request URL

`http://<servername>/TotalAgility/Services/SDK/JobService.svc/json/CreateJobSyncWithDocuments.`

Request Headers

```
Accept: application/json  
Host: <servername>  
Content-Type: application/json
```

Request Body

Open KTA_Request_FR.txt from the `Samples` folder.

Response

Open KTA_Response_FR.txt from the `Samples` folder.