# Tyler Intelligent Services OData Web Service v5 API

ENDPOINT: /OCRWeb/v5/

Version: 2023.2

The TIS web service is used for OCR processing and automated redaction of documents.

## /\$metadata

#### GET /\$metadata

Fetch the webservice's XML schema. Includes entity types, enum types, complex types, and actions, including the RedactionTarget enum whose values are used in calls to <u>CalculateRedactions</u> and for caller-assigned <u>OCRSource</u> Forms.

#### **Parameters**

None

#### Responses

Code	Description	Type	Schema
200	Fetched schema	XML	Data types and actions available
Error	Details in error	json	Error

# /Documents

#### POST /Documents

Add new entity to Documents

#### Parameters

Name	Located In	Туре			
Document	body	Docum	ent		
Responses <b>Code</b>	Description	Туре	Schema		
201	Created entity	json	<u>Document</u>		
Error	Details in error	json	<u>Error</u>		

# /Documents('{DocumentNumber}')

### GET /Documents('{DocumentNumber}')

Get entity from Documents by key

#### Parameters

Name	Located In	Description	Required	Type
DocumentNumber	path	key	Yes	string

#### Responses

Code	Description	Type	Schema
200	Retrieved entity	json	<u>Document</u>
Error	Details in error	ison	Error

## /Documents('{DocumentNumber}')/OCRWeb.Scan

## POST /Documents('{DocumentNumber}')/OCRWeb.Scan

Run OCR scanning over document content.

#### Parameters

Name	Located In	Description	Required	Type	Schema
DocumentNumber	path	key	Yes	string	
body	body	OCR Engine	No	json	OCREngine
Responses Code	Description	Туре	Schema		
200	Success	json	ScanResponse		
Error	Details in error	ison	Error		

# $/ Documents ('\{DocumentNumber\}')/ OCRWeb. ScanAndRedact$

### POST /Documents('{DocumentNumber}')/OCRWeb.ScanAndRedact

This call is not currently supported in v5. Please use Scan, CalculateRedactions, and ApplyRedactions in that order to achieve the same effect.

## /Documents('{DocumentNumber}')/OCRWeb.CalculateRedactions

#### POST /Documents('{DocumentNumber}')/OCRWeb.CalculateRedactions

Generate redaction data based on OCR results.

#### **Parameters**

Name	Located In	Description	Required	Туре	Schema
DocumentNumber	path	key	Yes	string	
Body	body	Data types	Yes	json	RedactionTargets

#### Responses

Code	Description	Туре
200	Success	boolean if the document's redactions were modified by this action
Error	Details in error	Error

# Launching the TCM Viewer

The URL to launch a session of the TCM Viewer has the following structure:

#### {url}/viewer/index.html?query={encoded query parameter}

The guery parameter must be base64 encoded and then URL encoded. It follows this structure:

TCMRedactionMode|TCMDELIM|{JWT}|TCMDELIM|{DocumentNumber}

The **JWT** (JSON Web Token) must be <u>requested separately</u>. It is valid for 60 minutes, after which any unsaved changes will be lost and the viewer should be relaunched with a new token.

The **DocumentNumber** is caller-assigned during document creation (POST /Documents).

# Launching the Redaction Viewer

The URL to launch a session of the Redaction Viewer has the following structure:

#### {base url}/redactionviewer/login?token={JWT}

The **base url** contains everything up to and including the port number within the URL, but does not contain any path information (e.g. **https://example.com:1234**).

The **JWT** (JSON Web Token) must be <u>requested separately</u>. It is valid for 60 minutes, after which any unsaved changes will be lost and the viewer should be relaunched with a new token. If the user is

actively using the viewer, the token will be automatically refreshed, extending the 60 minute timeframe. The token must be requested with the Document Number (caller-assigned during document creation [POST /Documents]), as the redaction viewer will use the Document Number present within the token.

# Tyler Web Service Security API

Endpoint: /Security/v1/

### /GenerateJwt

#### POST /GenerateJwt

Fetch a JWT (JSON Web Token) to open the TCM viewer.

#### **Fields**

Name	Located In	Descri	ption	Required	Туре	Schema
Body	body	Action	parameters	Yes	json	GenerateJwtRequest
Responses <b>Code</b>	Description	Туре	Schema	Description		
200	Success	string		JWT encoded a	as string	
Error	Details in error	json	Error			

# Asynchronous API calls

All asynchronous API calls related to a document should include the X-Async-Scope header, populated with the document number. This helps the service know when it can safely discard old async results.

Async call results are stored for up to five minutes, counting from the completion of the work and notifying the callback URL (if one was provided). It is strongly recommended that callers check for results no less often than every three minutes, to ensure that call results are not lost due to the timeout.

Results are also discarded if a new request with the same value in the X-Async-Scope header is received.

Once the results for an async call have been discarded, they cannot be recovered. A new request would need to be submitted.

In order to request a call be processed asynchronously, you can include the **Prefer: respond-async** header in the initial request. You may also include a **Prefer: wait=** header, providing the number of

seconds that you would like to wait before switching to asynchronous polling for the completion of the request following the equals sign. If the request returns 202, your request for asynchronous processing has been accepted, and the response header will include a **Location**: header, containing the polling URL you can use to check the status and results of the async call. Note: you may still receive a different response code, indicating that your request was still processed synchronously, which should be handled as a standard synchronous API call.

Making an authenticated GET request to the polling URL provided in the initial response will return either a 202 status code, indicating that your request is still being processed and that you can continue to poll for results, or the response of the asynchronous operation (such as a 200 status code, or a 4XX/5XX error code; as well as the response body, equivalent to a synchronous response). You should use the same polling URL for all future polling requests – a new polling URL will not be provided.

Asynchronous API calls are available for Scan, Calculate Redactions, and Apply Redactions API calls.

# **Definitions**

#### Document

A document contains the data for a single file, which may have any number of pages. Please note that as a media stream, the Data property cannot be retrieved or set in conjunction with anything else, when using OData 4.0. In order to update this property, issue a PUT request to the media edit URL (see http://docs.oasis-open.org/odata/odata/v4.0/errata03/os/complete/part1-protocol/odata-v4.0-errata03-os-part1-protocol-complete.html#\_Toc453752305) of the Data property with an appropriate Content-Type header and the binary data in the body. At this time only two document formats are supported: TIFF (image/tiff) and PDF (application/pdf). Conversely, to retrieve the current contents, issue a GET request to the same URL.

Field Name	Туре	Read- Only	Nullable	Description
DocumentNumber	string	false	false	Uniquely identifies the document which contains this page (caller-assigned)
DocumentType	string	false	false	Must match a defined IDoc type
Data	string	true	true	Image data
Redacted Data	string	true	true	Image data after applying redactions
PDFAOutputRequested	boolean	false	true	Uses tri-state logic: true/false force PDF/A output to be enabled or disabled, respectively; null will attempt to auto-detect and preserve the PDF/A status
MinorDOB	string collection	false	true	Contains known minor dates of birth. See http://docs.oasis-

				open.org/odata/odata/v4.0/errata03/os/complete/part1-protocol/odata-v4.0-errata03-os-part1-protocol-complete.html#_Toc453752306. Can be accessed with calls to /Documents('{DocumentNumber}')/MinorDOB.
IsDocumentPDFA	boolean	false	true	Indicates whether the document is a PDF/A (if known)
ApplyRedactionsWarnings	string collection	true	true	Contains any warning messages generated during ApplyRedactions calls
Redactions	Redaction collection	true	true	Contains any redactions generated by a <u>CalculateRedactions</u> call and not yet consumed by an <u>ApplyRedactions</u> call
Minor	HumanName Collection	false	true	Contains known minor names. See http://docs.oasis- open.org/odata/odata/v4.0/errata03/os/complete/part1- protocol/odata-v4.0-errata03-os-part1-protocol- complete.html#_Toc453752306. Can be accessed and updated with calls to /Documents('{DocumentNumber}')/Minor
MinorAddress	Address collection	false	true	Contains known minor addresses. See http://docs.oasis- open.org/odata/odata/v4.0/errata03/os/complete/part1- protocol/odata-v4.0-errata03-os-part1-protocol- complete.html#_Toc453752306. Can be accessed and updated with calls to /Documents('{DocumentNumber}')/MinorAddress
OcrData	string collection	true	true	Contains OCR data by page

# Redaction

A Redaction contains the data for a single overlay redaction.

Name	Туре	Nullable	Description
PageNumber	integer	false	Page number on which
			this redaction occurs
Region	Region	false	Coordinates and scale
			of the redaction
OCRSources	OCRSource collection	true	Set of OCR sources
			which triggered this
			redaction
User	string	false	ID of the user who
			created this redaction
Date	string	false	Time at which this
			redaction was created
AnnotationId	string	false	Unique identifier of the
			redaction

### RedactionTargets

RedactionTargets is an object containing a list of string values representing the data types which should be targeted for redaction. Use the following format in the HTTP body of a CalculateRedaction request: { "RedactionTargets": [ "redactionTarget1", "redactionTarget2" ] }

To programmatically fetch a list of available targets, send a <u>GET to /\$metadata</u>. The valid redaction targets correspond to the names of the members of the enum type RedactionTarget, which may include the following:

- AccountNumber
- CreditCard
- DriversLicense
- GovernmentId
- Passport
- SocialSecurityNumber
- TaxDocument
- MinorName
- MinorDOB

## **OCREngine**

OCREngine is an object containing a string with the desired OCR engine to use when performing OCR on a document. Use the following format in the body of a Scan request:

{ "OcrEngine": "GoogleVision" }

To programmatically fetch a list of available engines, send a <u>GET to /\$metadata</u>. The valid engines correspond to the names of the members of the enum type OcrEngine, which may include the following:

- GoogleVision
- PremierOcr

#### **OCRSource**

#### Fields

Name	Type	Nullable	Description
Form	string	false	The redaction target (OCR form or Named Entity Recognition
			model) that generated the redaction or which should be associated
			with it. The value MUST be a valid redaction target, smart form, or
			be "MetadataFields".
Field	string	false	OCR field which generated the associated redaction

# Region

Name	Туре	Nullable	Description
Base	<u>Point</u>	false	Upper-left corner of
			the redaction

Extent	<u>Point</u>	false	Lower-right corner of
			the redaction
CoordinateScale	<u>CoordinateScale</u>	false	DPI of the redaction

# Point

## Fields

Name	Туре	Nullable	Description	
type	string	false	Must be equal to the string "Point"	
Coordinates	integer array	false	Must contain two values representing the x and y	
			coordinates. May contain a .0 decimal, e.g. [40.0, 150.0]	

# CoordinateScale

## Fields

Name	Туре	Nullable	Description
Х	integer	false	Horizontal DPI
Υ	integer	false	Vertical DPI

# HumanName

## Fields

Name	Туре	Nullable
FirstName	string	false
MiddleInitial	string	false
LastName	string	false
Suffix	string	false

# Address

## Fields

Name	Туре	Nullable
Address1	string	true
Address2	string	true
City	string	true
State	string	true
Zip	string	true

# Error

Name Type Description
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code	string	Machine-readable sub-status
		for the HTTP error code of the
		response
message	string	Human-readable, language-
		dependent error message
target	string	Target of the particular error,
		for example the name of the
		property in error
details	json	List of error details
innererror	json	The structure of this object is
		service-specific

# ScanResponse

## Fields

Name	Туре	Description
OcrModified	boolean	If the document's OCR data was
		modified by this action
FailedPages	integer collection	Page indices that could not be
		OCRed (1-based index)

# GenerateJwtRequest

## Fields

Name	Туре	Schema	Description
Туре	string		Must be the string literal
			"editRedactions"
Scope	json	<u>GenerateJwtRequestScope</u>	
AuditId	string		caller-specified for
			auditing purposes

# ${\it Generate Jwt Request Scope}$

Name	Туре	Description
DocumentNumber	string	Caller-assigned during
		Document creation

# Release Notes

2023.2

No API changes

2023.1

Increased file size limit from 50MB to 512MB

2022.4

No API changes

2022.3

Initial release of OCRWeb v5