



# **Experian Normal Search V2 SOAP API**

Version: 2.17





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# 1. Change Control

Version	Date	Status	Change Description	
0.1	12/06/2014	Initial	Document Initiation	
0.2	21/08/2014	Update	Update Base64 section	
0.3	23/02/2016	Update	Added PDF2 options	
0.4	31/03/2017	Update	Updated description notes for RetData parameter.	
0.5	15/05/2017	Update	Updated the resultType to include PDF2	
0.6	09/10/2017	Update	Included CDATA tag for pTransaction	
0.7	13/03/2018	Update	Updated error - 125 to match the system return from "Address1 cannot be bigger than 25 characters." to "Address1 cannot be bigger than 40 characters."	
0.8	25/05/2018	Update	Updated the resultType to include PDF3, XPDF3 and JPDF3 the new summative report.	
0.9	15/10/2018	Update	Removal of Compuscan Accounts and Loan data block (when CS_Data is selected), due to the Compuscan Accounts and Loan data block that no longer returns.	
0.10	13/02/2018	Update	Updated the resultType to include PDF4/XPDF4/JPDF4	
0.11	30/04/2019	Update	New Error Code -168 "ClientRef cannot be bigger than 20 characters"	
2.12	19/11/2019	Update	Increase the Forename and Surname field length from 15 to 35	
2.13	31/08/2021	Update	-169 - Surname length exceeds 35 characters170 - Forename length exceeds 35 characters.	
2.14	19/01/2022	Update	Updated Input Request with: Pinpoint Params custom input fields ClientRef custom input field Enquirer custom input fields Updated Error Codes from -172 to -177	
2.15	24/08/2022	Update	Removed unsupported result types MHT,HTML and XPDF	
2.16	23/03/2023	Update	Rectified typo from pTransactions to pTransaction	
2.17	30/10/2023	Update	Updated to the Teraco URL Domain	



# 2. Definitions

Term	Definition
NormalV2_Search	Define the Enquiry Search Type.
Codix	Rules based on credit bureau data applied to specific value-added product\s.
Compuscore	A score allocated per Consumer ranging from 480 to 710
Consumer	A unique individual



#### 3. Introduction

Since Experian's acquisition of Compuscan in 2019, Experian now holds two consumer bureau databases.

- The Experian database (legacy Experian consumer data)
- The Experian Sigma database (currently legacy Compuscan consumer data).

The Experian Sigma database is currently evolving and will serve as our future converged consumer information bureau database by combining the best of both.

This web service is provided by Experian to allow a 3<sup>rd</sup> party integrator to perform a Consumer Credit Check. This document defines the technical components required to implement the Normal Search V2 SOAP web service.

#### Notes:

To obtain the above-mentioned Consumer Credit Check report you will have to:

be a valid Credit Check user

The Credit report layout is divided into the following selectable data blocks:

- Public Domain data block default
  - o CPA and NLR Account data block (when CPA Plus NLR Data is selected)
- Codix rules can be provided but are dependent on:
  - If it was setup by Experian
  - o Compuscore
- Compuscore information can be provided but will be dependent on:
  - o CPA and NLR Accounts information (CPA\_Plus\_NLR\_Data) and
  - Compuscan Accounts and Loan Information (CS\_Data)

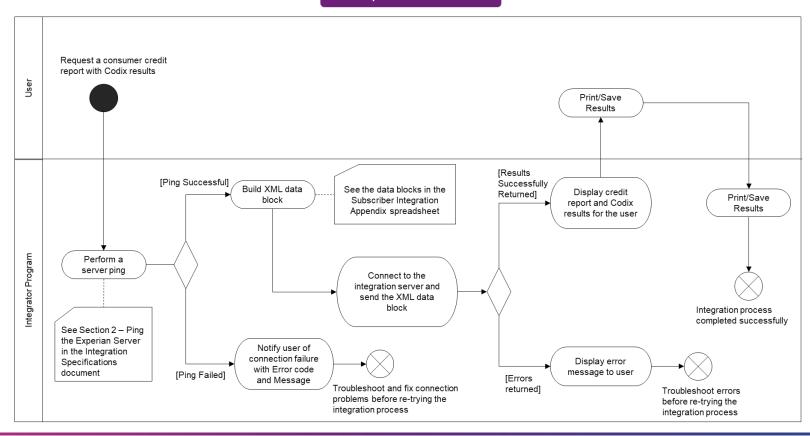
This is not a free service and all searches must be considered billable. To activate the service please contact Experian Integration for more information.



# 4. Workflow diagram

The workflow diagram below is an example of an implementation process to be followed by the integrator when implementing Experian IntegrationX.

#### act Implementation Process





### 5. Credit Check Data Blocks

The following matrix indicates the data blocks to be displayed on a Consumer Credit Check report.

Data No	Data Blocks	Public Domain	Experian Data	CPA and NLR Data	Compuscore	Codix
1	Dispute warning	X	X	X		
2	Enquiry Criteria	X	X	X		
3	Definite Match	Х	Х	X		
4	Possible Matches	Х	Х	X		
6	Fraud Alert	Х	Х	X		
7	Previous Enquiries	Х	Х	X		
8	CS Adverse	Status Codes:	Status Codes:	X		
		W – Written Off Account written off as a bad debt due to non-payment	I – Credit Card Revoked Credit Card Revoked			
		J – Repossession Goods have been repossessed due to non-payment	L – Handed Over Account handed over to attorneys or collection agents			
9	Debt Collections	Х	Х	X		



10	Judgments	Х	X	Х		
11	Administration Orders	Х	X	Х		
12	Directors Information	Х	X	Х		
13	Properties Owned (Deeds)	Х	X	Х		
14	Ownership Details (Deeds)	Х	X	Х		
15	Bond Details (Bond)	Х	X	Х		
16	Addresses	Х	X	Х		
17	Telephone Numbers	Х	X	Х		
18	Employers	Х	X	Х		
19	CS Adverse Details	Х	X	Х		
20	Bonds	Х	X	Х		
21	Compuscore	Х	X	Х	Х	
22	Decision Matrix	Х	X	Х	Х	Х
24	Debt Restructuring	Х	Х	Х		
25	Compuscan Accounts		X			
26	Compuscan Loan History		X			



27	CS CPA Accounts		X	
28	NLR Accounts		X	
29	CS CPA Account Detail		X	
30	NLR Account Detail		Х	



## 6. Service Interface

A SOAP web service interface is provided over a secure https tunnel. This section covers interface methods exposed via the SOAP service.

Connection details	URL
Test Server	https://apis-uat.experian.co.za/NormalSearchService?wsdl
Live Server	https://apis.experian.co.za/NormalSearchService?wsdl

Methods exposed via the web service

Function	Parameter	Туре	Length	Notes	Return
DoNormalEnquiry	pUsrnme	String	100	Experian user name	TransReplyClass
	pPasswrd	String	100	Experian user password	
	pVersion	String	30	Will be used to define the version of the input and output types.  Current version = 1.0	
	pOrigin	String	5	Name of the originating application	
	pOrigin_Version	String	4	Version of originating application	
	pInput_Format	String	4	Input Format: XML	
	pTransaction	String	255	Input string; see Enquiry sections for more details. The input string type is set via the plnputType parameter.	



PingServer	none	-	-	This function	Boolean
				can be used to test if the service is up. If the result is:	
				- True = Service is up	
				- False\timeou t = Service is not up or cannot be reached.	
TransReplyClass	pTransactionCompleted	Boolean	-	This parameter is used to indicate the outcome of the request:	Boolean
				- True = Successful	
				<ul><li>False = not completed\er ror</li></ul>	
	errorString	String	255	Error description. See error codes for more detail.	String
	errorCode	String	5	Error code. See error codes for more detail.	String
	retData	String	Variable	This parameter will contain the response result of the relevant input request. The string result type is defined by the ResultType within the pTransaction respectively. Refer to page 8 – Enquiry XML node definitions	String



# 7. Enquiry

#### 7.1 Input XML – Enquiry

A XML Enquiry block needs to be created containing the data of the consumer for whom an enquiry\search will be performed. This data block is submitted via **DoNormalEnquiry** method **pTransaction** parameter. No encoding is required. The following block must be compiled and submitted via the pTransaction element using a CData tag.

The matrix below defines the Enquiry XML node definitions

Field Name	Туре	Size	Required	Comments
CS_Data	Text	1	Yes	Y = yes, N = no
CPA_Plus_NLR_Data	Text	1	Yes	Y = yes, N = no
Deeds_Data	Text	1	Yes	Y = yes, N = no
Directors_Data	Text	1	Yes	Y = yes, N = no
Identity_number	Text	13	Yes	Or passport number
Surname	Text	35	Yes	
Forename	Text	35	Yes	
Forename2	Text	35	No	
Forename3	Text	35	No	
Gender	Text	1	Yes	M = Male, F = Female
Passport_flag	Text	1	Yes	Y = Yes, N = No
DateOfBirth	Number	8	Yes	The date of birth year cannot be >= than the current year. Format. YYYYMMDD
Address1	Text	25	Yes	
Address2	Text	25	Yes	
Address3	Text	25	No	
Address4	Text	25	No	
PostalCode	Text	5	Yes	
HomeTelCode	Text	7	No	



	1			
HomeTelNo	Text	13	No	
WorkTelCode	Text	7	No	
WorkTelNo	Text	13	No	
CellTelNo	Text	13	No	
ResultType	Text	4	Yes	XML,JSON PDF2, XPDF2, JPDF2, PDF3, XPDF3, JPDF3, PDF4, XPDF4, JPDF4
RunCodix	Text	1	Yes	Y = yes, N = no
CodixParams	-	-	-	See Example of XML Enquiry file
PARAMS	-	-	-	Repeating Element
PARAM_NAME	Text	50	Yes	One Param = pNetSalary
PARAM_VALUE	Number	10	Yes	Value must be limited to 2 Decimals
PinPointParams	-	-	-	See Example of XML Enquiry
PARAMS	-	-	-	Repeating Element
PARAM_NAME	Text	40	Yes	One Param = VehicleManufacturer
PARAM_VALUE	Text	40	Yes	Toyota
Adrs_Mandatory	Text	1	Yes	Y = Yes, N = No
Enq_Purpose	Number	2	Yes	See Enquiry Purposes List of Valid Values
Run_CompuScore	Text	1	Yes	Y = Yes, N = No
ClientConsent	Text	1	Yes	Y = Yes, N = No
ClientRef	Text	20	Yes	Unique Client Reference
Enquirer	-	-	-	See Example of XML Enquiry
EnquirerName	Text	50	Yes	The enquirer name / branch to be displayed in the previous enquiry section of a report/output
EnquirerContact	Text	35	Yes	The enquirer contact person to be displayed in the previous enquiry section of a report/output



EnquirerTel	Text	20	Yes	The enquirer telephone number to be displayed in the previous enquiry section of a report/output
-------------	------	----	-----	--

Example of XML Enquiry.

```
<pTransaction>
      <![CDATA[
              <Transactions>
                     <Search_Criteria>
                            <CS_Data>Y</CS_Data>
                           <CPA_Plus_NLR_Data>Y</CPA_Plus_NLR_Data>
                            <Deeds_Data>N</Deeds_Data>
                            <Directors_Data>N</Directors_Data>
                           <Identity_number>8209147250087</ldentity_number>
                           <Surname>Doe</Surname>
                            <Forename>John</Forename>
                           <Forename2></Forename2>
                           <Forename3></Forename3>
                            <Gender>M</Gender>
                           <Passport_flag>N</Passport_flag>
                           <DateOfBirth>19820914</DateOfBirth>
                            <Address1>10 Mars Street</Address1>
                            <Address2>Mars</Address2>
                            <Address3></Address3>
                            <Address4></Address4>
                           <PostalCode>1234</PostalCode>
                           <HomeTelCode></HomeTelCode>
                           <HomeTelNo></HomeTelNo>
                            <WorkTelCode></WorkTelCode>
                           <WorkTelNo></WorkTelNo>
                           <CellTelNo></CellTelNo>
                           <ResultType>XPDF2</ResultType>
                           <RunCodix>N</RunCodix>
                            <CodixParams>
                                  <PARAMS>
                                           <PARAM_NAME></PARAM_NAME>
                                           <PARAM_VALUE></PARAM_VALUE>
                                   </PARAMS>
                            </CodixParams>
                             <PinPointParams>
                                  <PARAMS>
                                           <PARAM_NAME></PARAM_NAME>
                                           <PARAM_VALUE></PARAM_VALUE>
                                   </PARAMS>
                            </PinPointParams>
                              <Adrs_Mandatory>Y</Adrs_Mandatory>
                              <Enq_Purpose>12</Enq_Purpose>
                              <Run_CompuScore>Y</Run_CompuScore>
                              <ClientConsent>Y</ClientConsent>
                              <ClientRef>12345</ClientRef>
                            <Enquirer>
                                    <EnquirerName>ABCTest</EnquirerName>
                                    <EnquirerContact>MrTest</EnquirerContact>
                                   <EnquirerTel>(021) 123 4567</EnquirerTel>
                             </Enquirer>
                   </Search_Criteria>
           </Transactions>]]></pTransaction>
```



#### **Business Rules:**

- When a Codix result is requested by setting the <RunCodix> flag to "Y", the CS\_Data flag must be set to "Y". If the Codix rules include results from the NLR, then the CPA\_Plus\_NLR\_Data flag must also be set to "Y".
- The <RunCodix> element will only run Codix if it is set to "Y" and the branch is activated for Codix at Experian Head Office.
- Certain Codix rules might require extra parameters to be sent through, this is what the <CodixParams> element is for, but if there is no extra parameters to send through, then this element must be left out of the file.
- For Codix to run, Run\_CompuScore must be 'Y', CS\_Data must be 'Y', CPA\_Plus\_NLR\_Data must be 'Y' and of course RunCodix must be 'Y'
- The <Enq\_Purpose> field's list of valid input data can be found in Enquiry Purpose Section.
- The <Deeds\_Data> and <Directors\_Data> flags is used to indicate if the respective data blocks
  must be returned. Your branch will have to be activated to receive these blocks when the flags
  are set to "Y".

#### 7.2 Output type - Enquiry Result

A result is received via the *TransReplyClass retData* parameter. In the event of an error the *TransactionCompleted* will be set to False and the corresponding *errorCode* and *errorString* will be returned. If set to True the *retData* parameter will contain a Base64 encoded string. See section on Encoding and Decoding form more information.

The results will be returned in the format as specified via<ResultType> element as shown in the above Enquiry XML. For available result types please see the section below.

#### **Result Types:**

The following result types are supported:

Result Type	File Name Format
XML	Enq_IDNumber_EnquiryIDxml
JSON	Enq_IDNumber_EnquiryIDjson
XPDF2	Enq_IDNumber_EnquiryIDpdf & .xml
JPDF2	Enq_IDNumber_EnquiryIDpdf & .json
PDF2	Enq_IDNumber_EnquiryIDpdf
PDF3	Enq_IDNumber_EnquiryIDpdf
XPDF3	Enq_IDNumber_EnquiryIDpdf & .xml
JDPF3	Enq_IDNumber_EnquiryIDpdf & .json



PDF4	Enq_IDNumber_EnquiryIDpdf
XPDF4	Enq_IDNumber_EnquiryIDpdf & .xml
JPDF4	Enq_IDNumber_EnquiryIDpdf & .json

#### **Consumer Credit Check Report sections:**

- Public Domain data block default
- CPA and NLR Account data block (when CPA\_Plus\_NLR\_Data is selected)
- Compuscan Accounts and Loan data block (when CS\_Data is selected) **Codix** rules can be provide but is dependent on:
  - If it was setup by Experian
  - Compuscore

**Compuscore** information can be provided but will be dependent on:

- o CPA and NLR Accounts information (CPA\_Plus\_NLR\_Data) and
- Compuscan Accounts and Loan Information (CS\_Data)



## 7.3 Enquiry Purpose

The following section can be used to define the Purpose of the XML enquiry

<Enq\_Purpose>12</Enq\_Purpose>

Value	Description
1	Fraud Investigation
2	Fraud Prevention
3	Employment
4	Book Assessment
5	Credit Limit
6	Insurance Application
7	Education / Employment
8	Unclaimed Funds
9	Tracing
10	Score Development
11	Affordability Assessment
12	Credit Assessment
13	Debt Review
14	Marketing Services
15	Debt Collection
16	Account Management
17	Credit Ombud Enquiry
18	Consumer Enquiry
19	Other



# 8. Error Codes

The following error codes are returned by this service.

Code	Notes
-101	Not all variables filled in.
-102	Problems connection to DB.
-103	Username, Password or Subscriber code invalid.
-104	Branch not switched on for Normal V2 Search
-105	Input Format not supported
-106	Could not decode input JSON object.
-107	Invalid XML!
-108	Problem parsing transaction
-109	Client Consent was not given.
-110	Passport flag can only be Y or N
-111	Gender can only be M or F
-112	Invalid parameters.
-113	DOB must be 8 characters
-114	DOB not a valid date
-115	Not Evo enabled
-116	Branch not switched on to do Deeds Data
-117	Branch not switched on to do Directors Data
-118	Identity number must contain a value
-119	Name must contain a value
-120	Surname must contain a value
-121	Address1 must contain a value
-122	Address2 must contain a value



-123	Postal Code must contain a value
-124	PostalCode longer than 5 digits.
-125	Address1 cannot be bigger than 40 characters.
-126	Address2 cannot be bigger than 25 characters.
-127	Address3 cannot be bigger than 25 characters.
-128	Address4 cannot be bigger than 25 characters.
-129	HomeTelCode cannot be bigger than 7 digits.
-130	HomeTelNo cannot be bigger than 13 digits.
-131	WorkTelCode cannot be bigger than 7 digits.
-132	WorkTelNo cannot be bigger than 13 digits.
-133	CelTelNo cannot be bigger than 16 digits.
-134	Enquiry Purpose can only be a number between 1 and 19
-135	Enquiry Purpose must be a number
-136	Problem locating countryCode
-137	Branch not switched on for CPA and NLR
-138	Cannot run CompuScore as you need to select CS Data and Evo Data flags.
-139	Cannot run CompuScore as you need to select CS Data and CPA Plus NLR Data flags.
-140	Cannot run Compuscore as your branch is not switched on for Compuscore.
-141	Cannot run Codix as you need to select CS Data, Evo Data and CompuScore enquiry flags.
-142	Cannot run Codix as you need to select CS Data, CPA Plus NLR Data and CompuScore enquiry flags.
-143	Cannot run Codix as your branch is not switched on for Codix.
-144	CC Trail branch out of credits
-145	Not CC enabled
-146	The enquiry limit on your branch is finished, please contact Experian to buy more credits



-147	Problems inserting Enquiry
-148	Problem storing Deeds results
-149	Problems generating Deeds results
-150	Problem storing Directors results
-151	Problems generating Directors results
-152	Problems zipping and encoding results
-153	Error getting Enquiry IDs
-154	Error generating results
-155	Problem loading settings
-156	Error compiling Consumer PDF report
-168	ClientRef cannot be bigger than 20 characters
-169	Surname length exceeds 35 characters.
-170	Forename length exceeds 35 characters.
-172	Enquirer Name failed formatting validation.
-173	Enquirer Contact failed formatting validation.
-174	Enquirer Tel failed formatting validation.
-175	Enquirer Name length exceeds 50 characters.
-176	Enquirer Contact length exceeds 35 characters.
-177	Branch not switched on for Dynamic Footprinting
-178	Future Error Code and Descriptions to be catered for in advance
to -800	
-999	Unknown errors
999	OHMHOWH CHOIS



# 9. Appendix 1: Base64

What is Base64: <a href="http://en.wikipedia.org/wiki/Base64">http://en.wikipedia.org/wiki/Base64</a>

What is PK Zip: http://en.wikipedia.org/wiki/PKZIP

Why is Base64 used: This is to ensure that the data remain intact without modification during transport.

#### 9.1 Decoding

- 1. This will typically be done with XML result files received.
- 2. Decode the result string via Base64.
- 3. The decode value will be in a PK zip format.
- 4. To verify that the result is a valid zip file, read the first 2 bytes of the returning stream and ensure that you read the letters "P" and "K". When the length of the returning bytes is less than 5, it is an indication that an error code has been returned. More than 5 bytes indicates that a file has returned containing the requested results.
- 5. Extract the Zip contents to expose the resulting XML block or file.



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