

Integration Specification Document

WATHIQ Services

Version 3.1

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Version	Name	Role	Date	Changes descriptions
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3.1	Abdulrahman S. AlKhalifah	integration	01 Nov. 15	Final
3.1	Abdulrahman S. AlKhalifah	integration	11 Apr. 16	Correction

Document changes History.

Version	Name	Role	Date
3.1	Ahmad A. Al Thumairy	Integration Manager	05 Nov. 15

Document approval History.

Introduction.

WATHIQ services is a web service that's provided and powered by THIQAH business Co. Through WATHIQ services you will be able to verify any commercial record in a real time with the Ministry of Commerce and Industry "MCI" in Saudi Arabia. WATHIQ will provide you with most of the Commercial Record "CR" information for both companies and establishments including the ownerships, managers and partners. WATHIQ services can help you to verify any identification number if he/ she is an owner or partner in any Commercial Record "CR".

Service Operations.

1. Retrieve the Commercial Record “CR” information.

1.1. Brief description.

This service will return most of the Commercial Record “CR” data from the Ministry of Commerce and Industry “MCI”. The service receives the commercial number as an input.

1.2. Service specifications.

Operation name		GetCRDataByCR																																																																																																				
Input																																																																																																						
Field	Datatype	Description			Size	Mandatory																																																																																																
CrNo	String	Commercial record number.			10	True																																																																																																
Output																																																																																																						
Field	Datatype	Description				Mandatory																																																																																																
CrInformation	object	<table><thead><tr><th>Field</th><th>Datatype</th><th>Description</th><th>Size</th><th>Mandatory</th></tr></thead><tbody><tr><td>CR</td><td>string</td><td>Input CR number</td><td>10</td><td>True</td></tr><tr><td>Name</td><td>string</td><td>CR Name</td><td>100</td><td>True</td></tr><tr><td>CRNationalNO</td><td>string</td><td>CR Nationality</td><td>10</td><td>False</td></tr><tr><td>CRLocationID</td><td>int</td><td>CR Issue location code *</td><td>5</td><td>True</td></tr><tr><td>CRLocation</td><td>string</td><td></td><td>50</td><td>True</td></tr><tr><td>CreationDate</td><td>string</td><td>Hijri yyyyMMdd</td><td>8</td><td>True</td></tr><tr><td>ExpiredDate</td><td>string</td><td>Hijri yyyyMMdd</td><td>8</td><td>True</td></tr><tr><td>IsMain</td><td>bool</td><td>Is main CR</td><td>-</td><td>True</td></tr><tr><td>BusType</td><td>string</td><td>CR Business type *</td><td>50</td><td>True</td></tr><tr><td>BusTypeID</td><td>int</td><td>CR Business type code *</td><td>5</td><td>True</td></tr><tr><td>Activities</td><td>string</td><td>CR activates</td><td>360</td><td>False</td></tr><tr><td>Capital</td><td>Double</td><td>CR capital</td><td>20</td><td>False</td></tr><tr><td>Address</td><td>string</td><td>CR address</td><td>100</td><td>False</td></tr><tr><td>POBOX</td><td>string</td><td>CR P.O Box</td><td>10</td><td>False</td></tr><tr><td>ZipCode</td><td>string</td><td>CR ZIP code</td><td>10</td><td>False</td></tr><tr><td>PhoneNumber</td><td>string</td><td>CR contact number</td><td>20</td><td>False</td></tr><tr><td>Fax</td><td>string</td><td>CR fax number</td><td>20</td><td>False</td></tr><tr><td>Status</td><td>string</td><td>CR Status *</td><td>20</td><td>True</td></tr></tbody></table>	Field	Datatype	Description	Size	Mandatory	CR	string	Input CR number	10	True	Name	string	CR Name	100	True	CRNationalNO	string	CR Nationality	10	False	CRLocationID	int	CR Issue location code *	5	True	CRLocation	string		50	True	CreationDate	string	Hijri yyyyMMdd	8	True	ExpiredDate	string	Hijri yyyyMMdd	8	True	IsMain	bool	Is main CR	-	True	BusType	string	CR Business type *	50	True	BusTypeID	int	CR Business type code *	5	True	Activities	string	CR activates	360	False	Capital	Double	CR capital	20	False	Address	string	CR address	100	False	POBOX	string	CR P.O Box	10	False	ZipCode	string	CR ZIP code	10	False	PhoneNumber	string	CR contact number	20	False	Fax	string	CR fax number	20	False	Status	string	CR Status *	20	True					True
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		BusType	string	CR Business type *	50	True																																																																																																
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		Status	string	CR Status *	20	True																																																																																																
* Has a lookup table																																																																																																						

2. Retrieve the Commercial Record “CR” managers.

2.1. Brief description.

The service will return a list of managers for the CR. Each item of the list will return the person information.

2.2. Service specifications.

Operation name		GetManagersByCR																																													
Input																																															
Field	Datatype	Description			Size	Mandatory																																									
CrNo	String	Commercial record number.			10	True																																									
Output																																															
Field	Datatype	Description				Mandatory																																									
PersonManagerInformation	List of object	<table><tr><th>Field</th><th>Datatype</th><th>Description</th><th>Size</th><th>Mandatory</th></tr><tr><td>ID</td><td>string</td><td>Identification Number</td><td>10</td><td>False</td></tr><tr><td>CR</td><td>string</td><td>Input CR number</td><td>10</td><td>True</td></tr><tr><td>Name</td><td>string</td><td>Person Arabic Name</td><td>75</td><td>True</td></tr><tr><td>IDIssueDate</td><td>string</td><td>Hijri yyyyMMdd</td><td>8</td><td>False</td></tr><tr><td>Nationality</td><td>string</td><td>Nationality *</td><td>30</td><td>True</td></tr><tr><td>NationalityID</td><td>int</td><td>Nationality code *</td><td>5</td><td>True</td></tr><tr><td>BirthYear</td><td>string</td><td>Hijri yyyy</td><td>4</td><td>True</td></tr></table>					Field	Datatype	Description	Size	Mandatory	ID	string	Identification Number	10	False	CR	string	Input CR number	10	True	Name	string	Person Arabic Name	75	True	IDIssueDate	string	Hijri yyyyMMdd	8	False	Nationality	string	Nationality *	30	True	NationalityID	int	Nationality code *	5	True	BirthYear	string	Hijri yyyy	4	True	True
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		BirthYear	string	Hijri yyyy	4	True																																									
* Has a lookup table																																															

3. Retrieve Commercial Registration “CR” owners.

3.1. Brief description.

This services will return a list of owner or partners for CR. Each item of the list contains the person information and the relation to that CR.

3.2. Service specifications.

Operation name		GetOwnershipsByCR																																																				
Input																																																						
Field	Datatype	Description	Size	Mandatory																																																		
CrNo	String	Commercial record number.	10	True																																																		
Output																																																						
Field	Datatype	Description	Mandatory																																																			
PersonInformation	List of object	<table><tr><th>Field</th><th>Datatype</th><th>Description</th><th>Size</th><th>Mandatory</th></tr><tr><td>ID</td><td>string</td><td>Identification Number</td><td>10</td><td>False</td></tr><tr><td>CR</td><td>string</td><td>Input CR number</td><td>10</td><td>True</td></tr><tr><td>Name</td><td>string</td><td>Person Name</td><td>75</td><td>True</td></tr><tr><td>IDIssueDate</td><td>string</td><td>Hijri yyyyMMdd</td><td>8</td><td>False</td></tr><tr><td>Nationality</td><td>string</td><td>Nationality *</td><td>30</td><td>True</td></tr><tr><td>NationalityID</td><td>int</td><td>Nationality code *</td><td>5</td><td>True</td></tr><tr><td>BirthYear</td><td>string</td><td>Hijri yyyy</td><td>4</td><td>False</td></tr><tr><td>RelationName</td><td>string</td><td>Relation name *</td><td>100</td><td>True</td></tr><tr><td>RelationID</td><td>int</td><td>Relation code *</td><td>5</td><td>True</td></tr></table>	Field	Datatype	Description	Size	Mandatory	ID	string	Identification Number	10	False	CR	string	Input CR number	10	True	Name	string	Person Name	75	True	IDIssueDate	string	Hijri yyyyMMdd	8	False	Nationality	string	Nationality *	30	True	NationalityID	int	Nationality code *	5	True	BirthYear	string	Hijri yyyy	4	False	RelationName	string	Relation name *	100	True	RelationID	int	Relation code *	5	True	True	
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		NationalityID	int	Nationality code *	5	True																																																
		BirthYear	string	Hijri yyyy	4	False																																																
		RelationName	string	Relation name *	100	True																																																
RelationID	int	Relation code *	5	True																																																		
* Has a lookup table																																																						

4. Retrieve Commercial Records “CR” by identification number.

4.1. Brief description.

The service will return a list of CR’s which related to the identification number. Each item of the list will return the person relation to the CR in addition to the CR business type.

4.2. Service specifications.

Operation name		GetCRsByID					
Input							
Field	Datatype	Description			Size	Mandatory	
ID	String	Identification number			10	True	
Output							
Field	Datatype	Description				Mandatory	
CrListInfo	List of object					True	
		Field	Datatype	Description	Size		Mandatory
		ID	string	Input ID number	10		True
		CR	string	Commercial record number.	10		True
		RelationName	string	Relation name *	100		True
		RelationID	int	Relation code *	5		True
		BusType	string	Business type *	100		True
		BusTypeID	int	Business type code *	5		True
		* Has a lookup table					

5. Retrieve related Commercial Records “CR” by CR number Main/branch.

5.1. Brief description.

The service will return all related CR's for the input. Whether the input CR is main or branch the response will contains all related CR's including the input.

5.2. Service specifications.

Operation name		GetRelatedCRsByCR						
Input								
Field		Datatype	Description			Size	Mandatory	
CrNo		String	Commercial record number.			10	True	
Output								
Field		Datatype	Description				Mandatory	
CrRelatedInfo	List of object						True	
		Field	Datatype	Description		Size		Mandatory
		CR	string	Commercial record number.		10		True
		IsMain	bool	is Main CR		-		True

6. Retrieve the status of ownership for Commercial Record “CR”.

6.1. Brief description.

The service will return the status of ownership (owner/ partner) for any CR whether it's company or establishment by the identification number.

6.2. Service specifications.

Operation name	HasCRByID						
Input							
Field	Datatype	Description			Size	Mandatory	
ID	String	Identification Number			10	True	
Output							
Field	Datatype	Description				Mandatory	
HasCRResponse	object					True	
		Field	Datatype	Description	Size		Mandatory
		IsFound	bool	Ownership Status	-		True

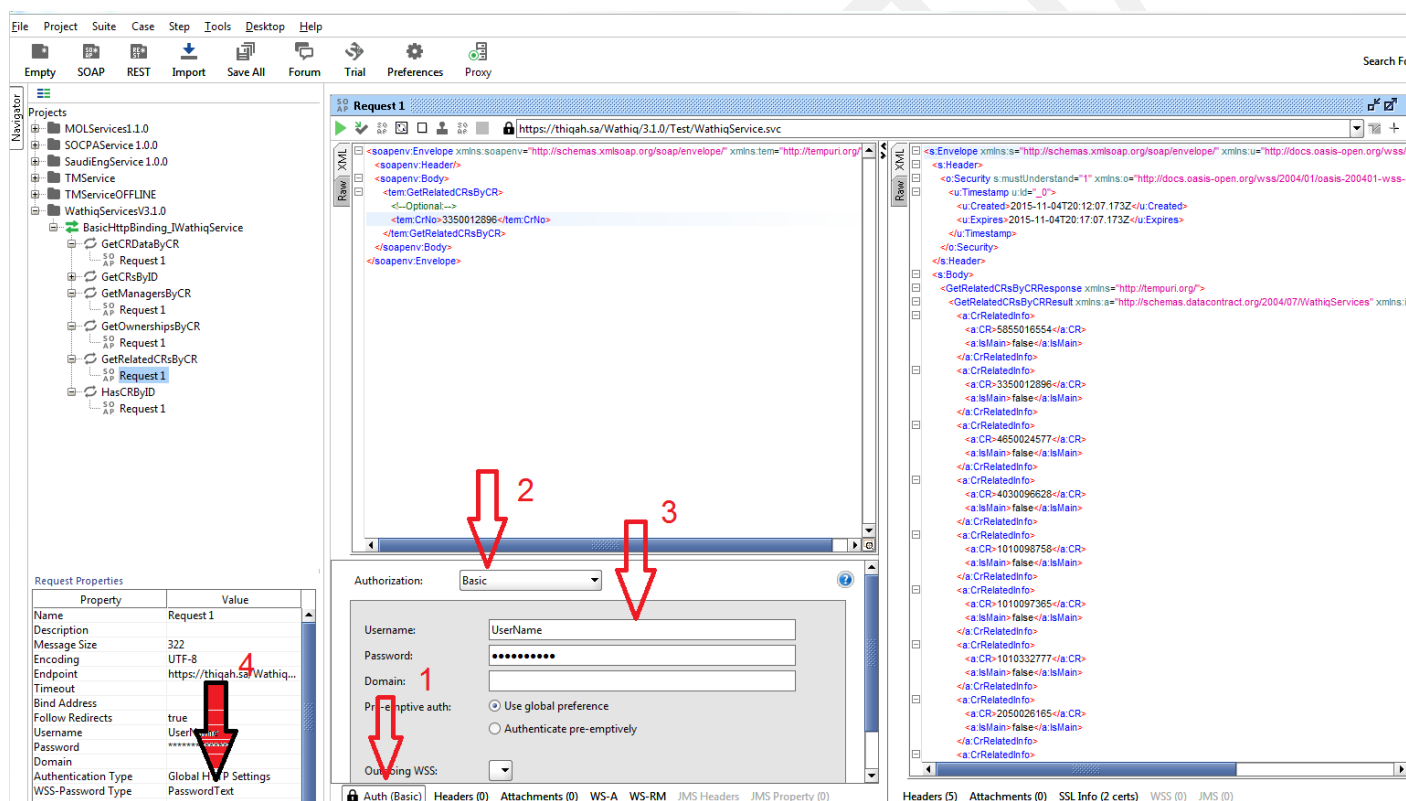
Security

1. Service security.

The service is using WS-Security “WSS” header for SOAP messages to supply the consumer credentials. The messages will be transferred over HTTPS protocol to ensure the channel security. Although the service will be public over the internet, but the requests will be restricted only from the consumers public IP’s. As an additional security the online WSDL file will be disabled and will be sent to the consumer directly.

2. Sample, how to call WATHIQ services.

Since this service will be called from different platforms. Following is snapshot from one of the most popular software SOAPUI to explain how to call the services.



The screenshot shows the SOAPUI interface with a SOAP request and its response. Red arrows indicate key configuration points:

- Arrow 1:** Points to the **Domain** field in the **Authorization** section.
- Arrow 2:** Points to the **Username** field in the **Authorization** section.
- Arrow 3:** Points to the **Password** field in the **Authorization** section.
- Arrow 4:** Points to the **Endpoint** field in the **Request Properties** table.

Request Properties Table:

Property	Value
Name	Request 1
Description	
Message Size	322
Encoding	UTF-8
Endpoint	https://thiqah.sa/Wathiq/3.1.0/Test/WathiqService.svc
Timeout	
Bind Address	
Follow Redirects	true
Username	User
Password	*****
Domain	
Authentication Type	Global HTTP Settings
WSS-Password Type	PasswordText

SOAP Request XML:

```
<?xml version='1.0' encoding='UTF-8'>
<soap:Envelope xmlns:soap='http://schemas.xmlsoap.org/soap/envelope/' xmlns:tem='http://tempuri.org/'>
  <soap:Header/>
  <soap:Body>
    <tem:GetRelatedCRsByCR>
      <!-- Optional -->
      <tem:CrInfo>3350012896</tem:CrInfo>
    </tem:GetRelatedCRsByCR>
  </soap:Body>
</soap:Envelope>
```

SOAP Response XML:

```
<?xml version='1.0' encoding='UTF-8'>
<s:Envelope xmlns:s='http://schemas.xmlsoap.org/soap/envelope/' xmlns:u='http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-security-examples-1.0.xsd'>
  <s:Header>
    <o:Security s:mustUnderstand='1' xmlns:o='http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-security-examples-1.0.xsd'>
      <u:Timestamp u:id='_0'>
        <u:Created>2015-11-04T20:12:07.173Z</u:Created>
        <u:Expires>2015-11-04T20:17:07.173Z</u:Expires>
      </u:Timestamp>
    </o:Security>
  </s:Header>
  <s:Body>
    <GetRelatedCRsByCRResponse xmlns='http://tempuri.org/'>
      <GetRelatedCRsByCRResult xmlns:a='http://schemas.datacontract.org/2004/07/WathiqServices'>
        <a:CRRelatedInfo>
          <a:CR>5855016554</a:CR>
          <a:IsMain>false</a:IsMain>
        </a:CRRelatedInfo>
        <a:CRRelatedInfo>
          <a:CR>3350012896</a:CR>
          <a:IsMain>false</a:IsMain>
        </a:CRRelatedInfo>
        <a:CRRelatedInfo>
          <a:CR>4650024577</a:CR>
          <a:IsMain>false</a:IsMain>
        </a:CRRelatedInfo>
        <a:CRRelatedInfo>
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        <a:CRRelatedInfo>
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        </a:CRRelatedInfo>
        <a:CRRelatedInfo>
          <a:CR>1010332777</a:CR>
          <a:IsMain>false</a:IsMain>
        </a:CRRelatedInfo>
        <a:CRRelatedInfo>
          <a:CR>2050026165</a:CR>
          <a:IsMain>false</a:IsMain>
        </a:CRRelatedInfo>
        <a:CRRelatedInfo>
          <a:CR>2050026165</a:CR>
          <a:IsMain>false</a:IsMain>
        </a:CRRelatedInfo>
      </GetRelatedCRsByCRResult>
    </GetRelatedCRsByCRResponse>
  </s:Body>
</s:Envelope>
```

Error handling.

3. Error mechanism.

The service will return a custom error structure for any kind of errors whether functional or technical. The error response will contain the custom error structure in the detail tag which will be found inside the body tag. The custom structure will include the following

- Error code.
- Error message.
- Business message in Arabic.
- Business message in English.
- Unique reference ID.

4. Error codes and description.

Code	Description EN	Description AR	Operation Name
EAI-402	Insufficient Balance	لا يتوفر لديك رصيد كافى	All operations
EAI-403	Permission Denied	لا تمتلك الصلاحية	All operations
EAI-404	No data found	لا يوجد بيانات	GetOwnershipsByCR, GetCRsByID, GetRelatedCRsByCR, GetManagersByCR, GetCRDataByCR
EAI-500	Internal Server Error	خطأ عام	All operations
EAI-901	Wrong Data	خطأ في البيانات المدخلة	All operations