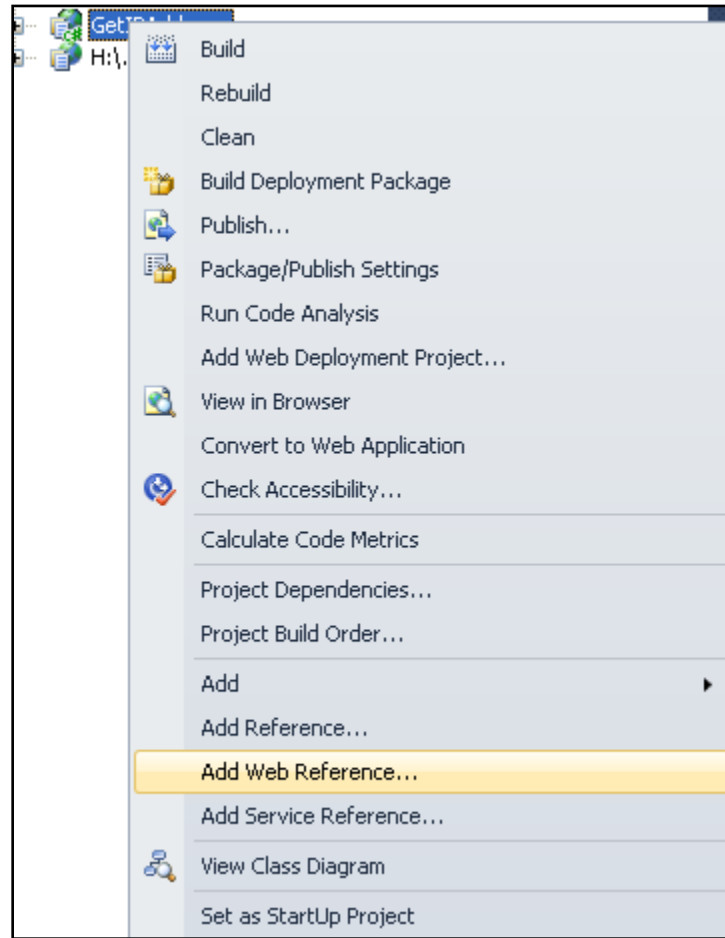


Makani Public Web Service Access

The following explains how to access Makani Public web services using .NET Technology

To consume the Makani public services add the reference as shown below.

1. Go to VS 2010, Create/ Open a New Project.
2. Right click on project in solution explorer and 'click' on Add Web Reference/ Add Service Reference as shown below.



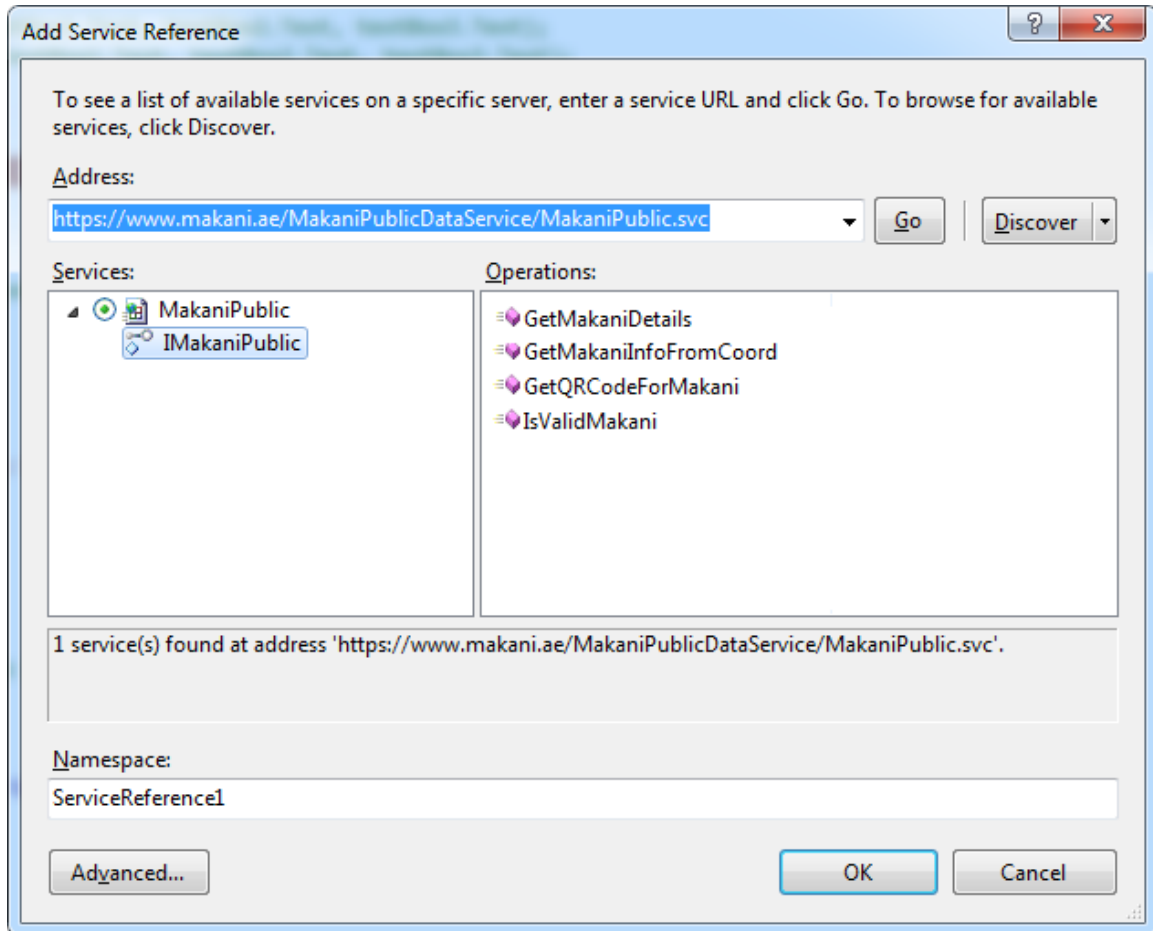
3. Type the service address as mentioned below and click 'Go' the corresponding services and its operations are displayed as shown below

This URL for .Net technology:

<https://www.makani.ae/MakaniPublicDataService/MakaniPublic.svc?wsdl>

This URL for other technologies:

<https://www.makani.ae/MakaniPublicDataService/MakaniPublic.svc>



4. Give a namespace e.g. “MakaniPublic” and click ‘Ok’.
5. In the code behind, declare an object as show below

MakaniPublic.MakaniPublicClientobjClient = newMakaniPublic.MakaniPublicClient();

Web service - Function/ Methods:

Function	string GetMakaniInfoFromCoord(string latitude, string longitude, string remarks)
Description	When entering the coordinate (latitude & longitude) for certain location, this method/function will return building details (in case this location falls inside a building), Makani details for the building and latitude & longitude for each Makani Number. Makani entrance(s) for the building can be plotted / pinned on an electronic map by using the latitude & longitude for each Makani Number.
Input	Output
<ul style="list-style-type: none"> • Latitude value • Longitude value 	<ul style="list-style-type: none"> • Makani Number(s) with their coordinates if the input coordinates falls within a building. • If the building has multiple entrances, then the Makani number for all the entrances shall be returned. • Entrance name (Arabic and English) for each Makani number. • URL for Makani location for each entrance. • Latitude and Longitude for each Makani number. • Building name (Arabic and English). • Community name (Arabic and English). • Emirate name (Arabic and English).
Input Sample	
objClient.GetMakaniInfoFromCoord("25.2646373", "55.312168", "Public Remarks");	
Output Sample	
<pre>{ "COMMUNITY_E": "AL RIGGA - 119", "COMMUNITY_A": "الرقّة - 119", "BLDG_NAME_E": "Dubai Municipality- Main Office", "BLDG_NAME_A": "بلدية دبي - المبنى الرئيسي", "EMIRATE_E": "DUBAI", "EMIRATE_A": "دبي", "MAKANI_INFO": [{ "MAKANI": "30032 95320", "LATLNG": "25.2646373680001,55.3121682890001", "ENT_NAME_E": "", "ENT_NAME_A": "", "ENT_NO": " ", "SHORT_URL": "http://www.makani.ae/q?l=E&m=30032 95320" }], { "MAKANI": "29969 95333", "LATLNG": "25.2647474540001,55.3115426040001", "ENT_NAME_E": "", "ENT_NAME_A": "", "ENT_NO": " ", "SHORT_URL": "http://www.makani.ae/q?l=E&m=29969 95333" } }</pre>	

Function	<code>string IsValidMakani(string makanino, string remarks)</code>
Description	Makani Number is generated to uniquely identify each main entrance of an existing building. When entering Makani Number for certain entrance, this method/function will verify if the entry is valid.
Input	Output
<ul style="list-style-type: none"> • Makani number 	<ul style="list-style-type: none"> • True. OR •False. • Emirate name(Arabic and English)..
Input Sample	
objClient.IsValidMakani("30032 95320", "Public Remarks");	
Output Sample	
<pre>{ "MAKANI": "30032 95320", "IS_VALID": "true", "VALID": [{ "EMIRATE_E": "DUBAI", "EMIRATE_A": "دبي" }] }</pre>	

Function	<code>string GetMakaniDetails(string makanino, string remarks)</code>
Description	When entering Makani Number for certain building entrance, this method/function will return building details and Makani details for the building. In case Makani Number is available in more than one emirate, this method/function will list the emirates and their communities.
Input	Output
<ul style="list-style-type: none"> • Makani number (valid number) 	<ul style="list-style-type: none"> • Makani Number. • Entrance name (Arabic and English) for Makani number. • URL for Makani location. • Community name (Arabic and English). • Building name (Arabic and English). • Emirate name (Arabic and English). • Latitude and Longitude for Makani.
Input Sample	
objClient.GetMakaniDetails("30032 95320", "Public Remarks");	
Output Sample	

```
{
  "MAKANI": "30032 95320",
  "MAKANI_INFO": [{
    "COMMUNITY_E": "AL RIGGA - 119",
    "COMMUNITY_A": "الرقعة - 119",
    "ENT_NAME_E": "",
    "ENT_NAME_A": "",
    "ENT_NO": " ",
    "BLDG_NAME_E": "Dubai Municipality- Main Office",
    "BLDG_NAME_A": "بلدية دبي - المبنى الرئيسي",
    "EMIRATE_E": "DUBAI",
    "EMIRATE_A": "دبي",
    "LATLNG": "25.2646373680001,55.3121682890001",
    "SHORT_URL": "http://www.makani.ae/q?l=E&m=30032 95320"
  }]
}
```

Function	string GetQRCodeForMakani(string makanino, string remarks)
Description	When entering Makani Number, this method/function returns the QR Code download path in .jpg file which includes URL for entrance's location link.
Input	Output
<ul style="list-style-type: none"> • Makani number. 	<ul style="list-style-type: none"> • QR Code includes location link for the specified Makani number (short URL for Makani location). • Emirate name (Arabic and English).

Input Sample

objClient.GetQRCodeForMakani("30032 95320", "Public Remarks");

Emirate Name	The QR Code contains following URL values
Dubai	http://www.makani.ae/q?l=E&m=3003295320
Abu Dhabi	http://www.makani.ae/q?l=E&E=AD&m=1474136963
Ajman	http://www.makani.ae/q?l=E&E=A&m=0041085963
Fujairah	http://www.makani.ae/q?l=E&E=F&m=3575325852
RAK	http://www.makani.ae/q?l=E&E=R&m=3214569870
Sharjah	http://www.makani.ae/q?l=E&E=S&m=1256085269
UAQ	http://www.makani.ae/q?l=E&E=U&m=1258715951

Output Sample

```
{
  "MAKANI": "30032 95320",
  "QRCODES": [{
    "QRCODE_URL":
    "http://stg.gis.gov.ae/MakaniPublicData/QRCodeFiles_Server1/DUBAI_30032 95320.jpg",
    "EMIRATE_E": "DUBAI",
    "EMIRATE_A": "دبي"
  }]
}
```