Web Service	WS01
Description	Creates a new user/client
Related Core Views	V_001
Route	Base/Clientes/Atualiza
| Input example | ```
{
    "Cliente": "1",
    "Nome": "Manfred Reubens",
    "Morada": "Praceta Conde Arnoso 60",
    "CodigoPostal": "2640-467",
    "Telefone": "6705966965",
    "NumContribuinte": "64287048860",
    "Pais": "PT",
    "Moeda": "EUR"
}
``` |
| Expected Output | HTTP 204 |

Web Service	WS02
Description	Gets the relevant information of an user/client
Related Core Views	V_001, V_006, V_008
Route	Base/Clientes/Edita/{cliente_id}
| Input example | ```
cliente_id = "TIAGO" (parameter in the route)
``` |
| Expected Output | ```
{
    "CodigoTabLog": "Cliente",
    "ChaveLog": "Cliente",
    "EstadoBE": "",
    "Cliente": "TIAGO",
    "Nome": "Tiago Santos",
    "Descricao": "",
    "Morada": "Rua Eng. Farinas de Almeida, 313, 4º esq",
    (...)
    "CamposUtil": [
        {
            "Conteudo": "ValorValoremailxyz@gmail.com",
            "Nome": "CDU_email",
            "Valor": "emailxyz@gmail.com",
            "Objecto": null,
            "Tipo": 1,
            "ChaveLog": "Nome",
            "EstadoBE": "",
            "TipoSimplificado": 1
        },
        {
            "Conteudo": "ValorValor03AC674216F3E15C761EE1A5E255F067953623C8B388B4459E13F978D7C846F4",
            "Nome": "CDU_password_hash",
            "Valor": "03AC674216F3E15C761EE1A5E255F067953623C8B388B4459E13F978D7C846F4",
            "Objecto": null,
``` |

```
                    "Tipo": 1,
                    "ChaveLog": "Nome",
                    "EstadoBE": "",
                    "TipoSimplificado": 1
                }
            ],
            (...)
        }
```

Web Service	WS03
Description	Updates the information of an user/client
Related Core View s	V_008
Route	Base/Clientes/Actualiza

Input example	<pre>//Input is the same as the output of WS02, but with some changed attributes,
	//such as Morada, CDU_email and CDU_password_hash
	{
	    "CodigoTabLog": "Cliente",
	    "ChaveLog": "Cliente",
	    "EstadoBE": "",
	    "Cliente": "TIAGO",
	    "Nome": "Tiago Santos",
	    "Descricao": "",
	    "Morada": "Nova Morada, 451",
	    (...)
	    "CamposUtil": [
	        (...)
	        {
	            "Conteudo": "ValorValornewemail@gmail.com",
	            "Nome": "CDU_email",
	            "Valor": "newemail@gmail.com",
	            "Objecto": null,
	            "Tipo": 1,
	            "ChaveLog": "Nome",
	            "EstadoBE": "",
	            "TipoSimplificado": 1
	        },
	        {
	            "Conteudo": "ValorValor253C2E786C2414DCAEC8DBF11DF515B5075371454B93A5687D24D96DDBF3B939",
	            "Nome": "CDU_password_hash",
	            "Valor": "253C2E786C2414DCAEC8DBF11DF515B5075371454B93A5687D24D96DDBF3B939",
	            "Objecto": null,
	            "Tipo": 1,
	            "ChaveLog": "Nome",
	            "EstadoBE": "",
	            "TipoSimplificado": 1
	        }
	    ],
	    (...)
	}</pre>

Expected Output	HTTP 204

Web Service	WS04
Description	Gets all the relevant information of a book
Related Core Views	V_004, V_005, V_006, V_007
Route	Administrador/Consulta

Input example	<pre>-- select the relevant info of book "B0001"
	
	Select Descricao, CDU_Autor, CDU_Sinopse, CDU_ISBN,
	CDU_Editora, CDU_Capa, CDU_Paginas, CDU_Ano, CDU_Dimensoes,
	Familia, CDU_Idioma, PVP1
	from Artigo, ArtigoMoeda
	where Artigo.Artigo = 'B0001' and Artigo.Artigo = ArtigoMoeda.Artigo</pre>

Expected Output	<pre>{
	    "DataSet": {
	        "Table": [
	            {
	                "Descricao": "A Brief History Of Time",
	                "CDU_Autor": "Stephen Hawking",
	                "CDU_Sinopse": "A landmark volume in science writing by one of the great minds of our t
	                "CDU_ISBN": "0857501003",
	                "CDU_Editora": "Transworld Publishers Ltd",
	                "CDU_Capa": "Paperback",
	                "CDU_Paginas": 272,
	                "CDU_Ano": "05 Feb 2015",
	                "CDU_Dimensoes": "127 x 198 x 17mm",
	                "Familia": "FICTION",
	                "CDU_Idioma": English,
	                "PVP1": 25.99
	            }
	        ]
	    },
	    "Query": "System.Data.SqlClient.SqlCommand"
	}</pre>

Web Service	WS05
Description	Gets a set of books that belong to the specified category
Related Core Views	V_001, V_004
Route	Administrador/Consulta

Input example	<pre>-- select all books that belong to the category "IT"
	
	Select Artigo.Artigo, Descricao, PVP1, CDU_Autor
	from Artigo, ArtigoMoeda
	where Familia = 'IT' and Artigo.Artigo = ArtigoMoeda.Artigo</pre>

	<pre>{</pre>

| Expected Output | ```
        "DataSet": {
            "Table": [
                {
                    "Artigo": "B0003",
                    "Descricao": "Introdução à Programação em Java",
                    "PVP1": 20,
                    "CDU_Autor": "António Manuel Adrego da Rocha"
                },
                {
                    "Artigo": "B0004",
                    "Descricao": "Introdução à programação em C",
                    "PVP1": 25,
                    "CDU_Autor": "António Manuel Adrego da Rocha"
                }
            ]
        },
        "Query": "System.Data.SqlClient.SqlCommand"
    }
``` |
|---|---|

Web Service	WS06
Description	Searches books by title, including partial strings
Related Core Views	V_006, V_001
Route	Administrador/Consulta
| Input example | ```
-- select all books with "Intro" in the title

"Select Artigo.Artigo, Descricao, CDU_Autor, PVP1
from Artigo, ArtigoMoeda
where Descricao like '%Intro%' and Artigo.Artigo = ArtigoMoeda.Artigo"
``` |
| Expected Output | ```
{
    "DataSet": {
        "Table": [
            {
                "Artigo": "B0003",
                "Descricao": "Introdução à Programação em Java",
                "CDU_Autor": "António Manuel Adrego da Rocha",
                "PVP1": 20
            },
            {
                "Artigo": "B0004",
                "Descricao": "Introdução à programação em C",
                "CDU_Autor": "António Manuel Adrego da Rocha",
                "PVP1": 25
            }
        ]
    },
    "Query": "System.Data.SqlClient.SqlCommand"
}
``` |

Web Service	WS07
Description	Gets a list of books ordered by existing stock, except books with no stock
Related Core Views	V_001

Route	Administrador/Consulta
| Input example | ```
Select Artigo.Artigo, Descricao, PVP1, CDU_Autor, STKActual
from Artigo, ArtigoMoeda
where Artigo.Artigo = ArtigoMoeda.Artigo and STKActual > 0 order by STKActual
``` |
| Expected Output | ```
{
    "DataSet": {
        "Table": [
            {
                "Artigo": "B0003",
                "Descricao": "Introdução à Programação em Java",
                "PVP1": 20,
                "CDU_Autor": "António Manuel Adrego da Rocha",
                "STKActual": 1
            },
            {
                "Artigo": "B0005",
                "Descricao": "Foi Sem Querer Que Te Quis",
                "PVP1": 12,
                "CDU_Autor": "Raul Minh'alma ",
                "STKActual": 6
            },
            {
                "Artigo": "B0004",
                "Descricao": "Introdução à programação em C",
                "PVP1": 25,
                "CDU_Autor": "António Manuel Adrego da Rocha",
                "STKActual": 15
            },
            {
                "Artigo": "B0002",
                "Descricao": "Romeu e Julieta",
                "PVP1": 25,
                "CDU_Autor": "William Shakespeare ",
                "STKActual": 22
            },
            {
                "Artigo": "B0001",
                "Descricao": "A Brief History Of Time",
                "PVP1": 25.99,
                "CDU_Autor": "Stephen Hawking",
                "STKActual": 30
            }
        ]
    },
    "Query": "System.Data.SqlClient.SqlCommand"
}
``` |

Web Service	WS08
Description	Gets a list of books ordered by the last date they were updated (first is the most recent)
Related Core Views	V_008
Route	Administrador/Consulta
| Input example | ```
Select Artigo.Artigo, Descricao, PVP1, CDU_Autor, DataUltimaActualizacao
from Artigo, ArtigoMoeda
where Artigo.Artigo = ArtigoMoeda.Artigo order by DataUltimaActualizacao desc
``` |

| Expected Output | ```json
{
    "DataSet": {
        "Table": [
            {
                "Artigo": "B0003",
                "Descricao": "Introdução à Programação em Java",
                "PVP1": 20,
                "CDU_Autor": "António Manuel Adrego da Rocha",
                "DataUltimaActualizacao": "2018-12-02T02:04:21"
            },
            {
                "Artigo": "B0005",
                "Descricao": "Foi Sem Querer Que Te Quis",
                "PVP1": 12,
                "CDU_Autor": "Raul Minh'alma ",
                "DataUltimaActualizacao": "2018-12-02T02:03:39"
            },
            {
                "Artigo": "B0004",
                "Descricao": "Introdução à programação em C",
                "PVP1": 25,
                "CDU_Autor": "António Manuel Adrego da Rocha",
                "DataUltimaActualizacao": "2018-12-02T01:59:40"
            },
            {
                "Artigo": "B0002",
                "Descricao": "Romeu e Julieta",
                "PVP1": 25,
                "CDU_Autor": "William Shakespeare ",
                "DataUltimaActualizacao": "2018-12-02T01:50:31"
            },
            {
                "Artigo": "B0001",
                "Descricao": "A Brief History Of Time",
                "PVP1": 25.99,
                "CDU_Autor": "Stephen Hawking",
                "DataUltimaActualizacao": "2018-12-02T01:46:43"
            }
        ]
    },
    "Query": "System.Data.SqlClient.SqlCommand"
}
``` |

Web Service	WS09
Description	Makes a purchase of the specified items, producing an invoice
Related Core Views	V_007
Route	Administrador/Consulta
| Input example | ```json
{
  "Linhas": [
    {
      "Artigo": "B0001",
      "Quantidade": "1"
    },
    {
      "Artigo": "B0002",
      "Quantidade": "1"
    }
  ],
  "Tipodoc": "FAR",
  "Serie": "A",
``` |

```
        "Entidade": "C0001",
        "TipoEntidade": "C",
        "DataDoc":"12/11/2018",
        "DataVenc":"12/12/2018"
      }
```

Expected Output	true

Web Service	WS10
Description	Makes a purchase of the specified items, producing an ECL document
Related Core Views	V_007
Route	Vendas/Docs/CreateDocument

Input example	
	``
	{
	  "Linhas": [
	    {
	      "Artigo": "B0001",
	      "Quantidade": "1"
	    },
	    {
	      "Artigo": "B0002",
	      "Quantidade": "1"
	    }
	  ],
	  "Tipodoc": "ECL",
	  "Serie": "A",
	  "Entidade": "C0001",
	  "TipoEntidade": "C",
	  "DataDoc":"12/11/2018",
	  "DataVenc":"12/12/2018"
	}
	``

Expected Output	true

Web Service	WS11
Description	Gets the specified document
Related Core Views	V_005, V_006
Route	Vendas/Docs/Edita/000/{type}/{entity_type}/{id}
Input example	type = FAR entity_type = A id = 1 (parâmetros da rota)

	``
	{
	    "IDDiarioCaixa": "",
	    "OrigemPOS": false,
	    (...)
	    "PropExcluirLog": "",
	    "Linhas": [
	        {
	            "ChaveLog": "Artigo,Armazem,Lote,TipoLinha",
	            "EstadoBE": "",
	``

Expected Output

```
                            (...)
                            "IntrastatValorLiq": 0,
                            "NumLinDocOriginal": 0,
                            "CamposUtil": [
                                {
                                    "Conteudo": "ValorValor",
                                    "Nome": "CDU_LinVar1",
                                    (...)
                                    "EstadoBE": "",
                                    "TipoSimplificado": 1
                                },
                                (...)
                            ],
                            (...)
                            "BaseIncidencia": 0,
                            "RegraCalculoIncidencia": 0,
                            "DadosAdiantamento": {
                                "Conteudo": "DifArredondamentoMAlt0DifArredondamentoMBase0DifCambioMAlt0DifCambioMBase0
                                "MoedaDocOrig": "",
                                (...)
                            },
                            "DadosImpostoSelo": {
                                "Ano": 0,
                                "Selo": "",
                                (...)
                            },
                            "ValorLiquidoDesconto": 0,
                            "IvaValorDesconto": 0,
                            (...)
                            "ValorProcessoAnosSeguintes": 0,
                            "AbvtApl": "VND"
                        }
                    ],
                    "Retencoes": [],
                    "ResumoIva": [
                        {
                            "ChaveLog": "Filial,Serie,Tipodoc,NumDoc,CodIva",
                            "EstadoBE": "",
                            (...)
                            "ValorDesconto": 0,
                            "AbvtApl": "BAS"
                        }
                    ],
                    "ID": "8cf01dd8-f667-11e8-b6a5-08002756714a",
                    "IDCabecMovCbl": "a5f9744c-f667-11e8-b6a5-08002756714a",
                    (...)
                    "ValorEntregueCambio": 0,
                    "EmModoEdicao": true,
                    "CamposUtil": [
                        {
                            "Conteudo": "ValorValor",
                            "Nome": "CDU_CabVar1",
                            (...)
                            "EstadoBE": "",
                            "TipoSimplificado": 1
                        },
                        (...)
                    ],
                    (...)
                    "ContratoFactoring": "",
                    "ATDocCodeID": "",
                    "CargaDescarga": {
                        (...)
                        "ATDocCodeID": "",
                        "AbvtApl": "BAS"
                    },
                    "EntidadeDescarga": "C0001",
                    "LocalDescarga": "V/ Morada",
                    (...)
                    "HoraDefinida": false,
                    "AbvtApl": "VND"
                }
```