

Service Integration

Low Level Design

For Fruits

Details the ESB design for integrating Fruits Service

Version : V0.1

**Document Control**

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| **Document Information** | |
| *Document Name* | *Low Level Design Document* |
| *Client* | *Department of e-Governance, Government of Karnataka* |
| *Document Author(s)* | *Prashanth Nuggehalli Chandrashekar* |
| *Document Version* | *V0.1* |
| *Document Status* | *Ready for Reiview* |
| *Date Last Update* | *7th July 2021* |
| *Date Released* | *12-July-2021* |

**Document Edit History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Additions/Modifications** | **Prepared / Revised by** |
| V0.1 | 12th Jul 2021 | Initial Draft | Prashanth Chandrashekar |
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**Document Review/Approval History**

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| --- | --- | --- | --- | --- |
| **#** | **Name**  ***(Prepared By)*** | **Organization/Title**  ***(Approved By)*** | **Date**  ***(Approval Date)*** | **Comments**  ***(Description)*** |
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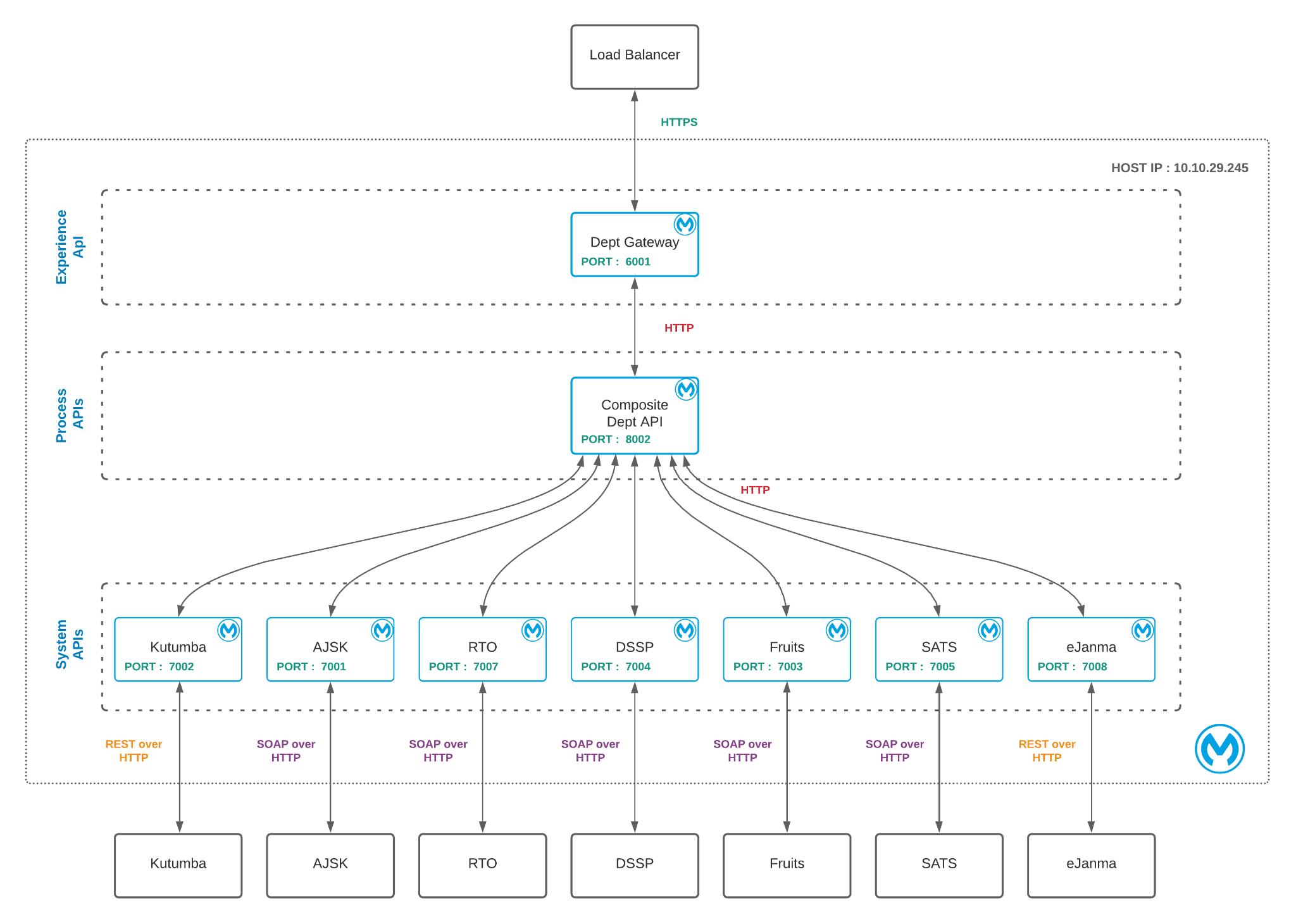
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# Introduction

This integration is to talk to connect to Fruits service and get he farmers details. The below mentioned diagram shows the context in which the API is implemented and how the conection is established to the participating services in the integration.

## API Implementation Diagram



# Participating API Endpoints

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Name** | **URI/URL** | | |
| 1 | XAPI | http://10.10.29.245:6001/api/department/data/single | | |
| 2 | PAPI | http://10.10.29.245:8002/esb/fdb/department/single | | |
| 3 | SAPI | http://10.10.29.245:7003/esb/fruits/GetFarmerDetailFarmerIDSet | | |
| 4 | Destination | https://fruits.karnataka.gov.in/fruitsTestservice/fruitsdata.asmx | | |

* XAPI Invokes >> PAPI
* PAPI Invokes >> SAPI
* SAPI Invokes >> Destination Service
* Response from Destination Service is passed to the respective callers

# Input Output

### XAPI (Experience API)

|  |  |  |
| --- | --- | --- |
| Request | | |
| {  "deptId":1,  "input":{  "landStatus":"W",  "farmerId":"FID0101000000294"  },  "method":"GetFarmerDetailFarmerIDSet",  "creds":{  "client-id":"1234567",  "client-secret":"7654321"  }  } | | |
| Response | | |
| {  "GetFarmerDetailFarmerIDSet": {  "NewDataSet": {  "MESSAGES": {  "Processing\_Code": "1",  "Processing\_Status": "Successfull"  },  "Table": {  "RegistrationID": **null**,  "Name": "RAVINDRA KUMAR C N",  "NameKan": "ರವೀಂದ್ರ ಕುಮಾರ್ ಸಿ ಎನ",  "FatherName": "NAGARAJ C N",  "FatherNameKan": "ನಗರಾಜ್ ಸಿ ಎನ್",  "Gender\_ID": "M",  "Caste": "O",  "physicallyHandicapped": "N",  "FarmerCategory": "N",  "Minorities": "N",  "Minorities\_ID": "0",  "Landline": **null**,  "Mobile": "9663839607",  "ResidentialAddress\_Desc": "TEST",  "Bank": "79",  "Branch": "20017901",  "AccountNo": "23423",  "ResidentialDistrict": "527",  "ResidentialTaluk": "5433",  "ResidentialVillage": "597195",  "FarmerRegNo": "FID0101000000294",  "Res\_bh\_dist": "1",  "Res\_bh\_Taluk": "1",  "Res\_bh\_Hobli": "1",  "Res\_bh\_village": "23",  "Caste\_ID\_GOI": "4",  "BankName": "Bharath Bank",  "BranchName": "UI bank",  "IFSC": "06215",  "DistrictB": "20",  "Age": "42",  "Relationshiptype": "1",  "Land\_WOL\_WL": "O",  "Photo": **null**,  "DOB": "01/01/1979"  },  "Table1": {  "FarmerRegNo": "FID0101000000294",  "districtCode": "527",  "talukCode": "5433",  "villageCode": "597193",  "surveyno": "4",  "surnoc": "\*",  "hissano": "3",  "LandCode": "4547",  "OwnerNo": "1",  "MainOwnerNo": "1",  "OwnerName": "ಬಾಗವಾನ",  "sex": "M",  "relationship": "-",  "relativename": **null**,  "ext\_acre": "0",  "ext\_gunta": "8",  "ext\_fgunta": "14.00",  "bh\_dist": "1",  "bh\_taluk": "1",  "bh\_hobli": "1",  "bh\_village": "1",  "DistrinctName": "ಬೆಳಗಾವಿ",  "TalukName": "ಚಿಕ್ಕೋಡಿ",  "HobliName": "ಚಿಕ್ಕೋಡಿ",  "VillageName": "ಚಿಕ್ಕೋಡಿ",  "Score": "0",  "OwnerType": "W",  "AreaHectare": "0.08979"  },  "Table1": {  "FarmerRegNo": "FID0101000000294",  "districtCode": "527",  "talukCode": "5433",  "villageCode": "597193",  "surveyno": "4",  "surnoc": "\*",  "hissano": "3",  "LandCode": "4547",  "OwnerNo": "2",  "MainOwnerNo": "1",  "OwnerName": "ಬಾಗವಾನ ದೊಂಡಿಲಾಲ ಅಬ್ದುಲಖಾದರ",  "sex": "M",  "relationship": "-",  "relativename": **null**,  "ext\_acre": "0",  "ext\_gunta": "0",  "ext\_fgunta": "0.00",  "bh\_dist": "1",  "bh\_taluk": "1",  "bh\_hobli": "1",  "bh\_village": "1",  "DistrinctName": "ಬೆಳಗಾವಿ",  "TalukName": "ಚಿಕ್ಕೋಡಿ",  "HobliName": "ಚಿಕ್ಕೋಡಿ",  "VillageName": "ಚಿಕ್ಕೋಡಿ",  "Score": "0",  "OwnerType": "W",  "AreaHectare": "0.00000"  }  }  }  } | | |
| Error | | |
| **Sample 1**   * As is Error Propagation from down stream service (This means whatever the destination service throws)   **Sampe 2**  {  "httpCode": "403",  "errorType": {  "parentErrorType": {  "parentErrorType": **null**,  "identifier": "ANY",  "namespace": "MULE"  },  "identifier": "INCORRECT\_CREDS",  "namespace": "FRUITS-CONSUMER-SYS"  },  "error": "FRUITS API Authentication Failure : Client Id and Client Secret does not match !",  "correlation": "7889e840-e3bd-11eb-b574-02429ea494eb"  } | | |

### PAPI (Process API)

|  |  |  |
| --- | --- | --- |
| Request | | |
| {  "deptId":1,  "input":{  "landStatus":"W",  "farmerId":"FID0101000000294"  },  "method":"GetFarmerDetailFarmerIDSet",  "creds":{  "client-id":"1234567",  "client-secret":"7654321"  }  } | | |
| Response | | |
| {  "GetFarmerDetailFarmerIDSet": {  "NewDataSet": {  "MESSAGES": {  "Processing\_Code": "1",  "Processing\_Status": "Successfull"  },  "Table": {  "RegistrationID": **null**,  "Name": "RAVINDRA KUMAR C N",  "NameKan": "ರವೀಂದ್ರ ಕುಮಾರ್ ಸಿ ಎನ",  "FatherName": "NAGARAJ C N",  "FatherNameKan": "ನಗರಾಜ್ ಸಿ ಎನ್",  "Gender\_ID": "M",  "Caste": "O",  "physicallyHandicapped": "N",  "FarmerCategory": "N",  "Minorities": "N",  "Minorities\_ID": "0",  "Landline": **null**,  "Mobile": "9663839607",  "ResidentialAddress\_Desc": "TEST",  "Bank": "79",  "Branch": "20017901",  "AccountNo": "23423",  "ResidentialDistrict": "527",  "ResidentialTaluk": "5433",  "ResidentialVillage": "597195",  "FarmerRegNo": "FID0101000000294",  "Res\_bh\_dist": "1",  "Res\_bh\_Taluk": "1",  "Res\_bh\_Hobli": "1",  "Res\_bh\_village": "23",  "Caste\_ID\_GOI": "4",  "BankName": "Bharath Bank",  "BranchName": "UI bank",  "IFSC": "06215",  "DistrictB": "20",  "Age": "42",  "Relationshiptype": "1",  "Land\_WOL\_WL": "O",  "Photo": **null**,  "DOB": "01/01/1979"  },  "Table1": {  "FarmerRegNo": "FID0101000000294",  "districtCode": "527",  "talukCode": "5433",  "villageCode": "597193",  "surveyno": "4",  "surnoc": "\*",  "hissano": "3",  "LandCode": "4547",  "OwnerNo": "1",  "MainOwnerNo": "1",  "OwnerName": "ಬಾಗವಾನ",  "sex": "M",  "relationship": "-",  "relativename": **null**,  "ext\_acre": "0",  "ext\_gunta": "8",  "ext\_fgunta": "14.00",  "bh\_dist": "1",  "bh\_taluk": "1",  "bh\_hobli": "1",  "bh\_village": "1",  "DistrinctName": "ಬೆಳಗಾವಿ",  "TalukName": "ಚಿಕ್ಕೋಡಿ",  "HobliName": "ಚಿಕ್ಕೋಡಿ",  "VillageName": "ಚಿಕ್ಕೋಡಿ",  "Score": "0",  "OwnerType": "W",  "AreaHectare": "0.08979"  },  "Table1": {  "FarmerRegNo": "FID0101000000294",  "districtCode": "527",  "talukCode": "5433",  "villageCode": "597193",  "surveyno": "4",  "surnoc": "\*",  "hissano": "3",  "LandCode": "4547",  "OwnerNo": "2",  "MainOwnerNo": "1",  "OwnerName": "ಬಾಗವಾನ ದೊಂಡಿಲಾಲ ಅಬ್ದುಲಖಾದರ",  "sex": "M",  "relationship": "-",  "relativename": **null**,  "ext\_acre": "0",  "ext\_gunta": "0",  "ext\_fgunta": "0.00",  "bh\_dist": "1",  "bh\_taluk": "1",  "bh\_hobli": "1",  "bh\_village": "1",  "DistrinctName": "ಬೆಳಗಾವಿ",  "TalukName": "ಚಿಕ್ಕೋಡಿ",  "HobliName": "ಚಿಕ್ಕೋಡಿ",  "VillageName": "ಚಿಕ್ಕೋಡಿ",  "Score": "0",  "OwnerType": "W",  "AreaHectare": "0.00000"  }  }  }  } | | |
| Error | | |
| **Sample 1**   * As is Error Propagation from down stream service (This means whatever the destination service throws)   **Sampe 2**  {  "httpCode": "403",  "errorType": {  "parentErrorType": {  "parentErrorType": **null**,  "identifier": "ANY",  "namespace": "MULE"  },  "identifier": "INCORRECT\_CREDS",  "namespace": "FRUITS-CONSUMER-SYS"  },  "error": "FRUITS API Authentication Failure : Client Id and Client Secret does not match !",  "correlation": "7889e840-e3bd-11eb-b574-02429ea494eb"  } | | |

### SAPI (System API)

|  |  |  |
| --- | --- | --- |
| Request | | |
| {  "userName":"EgovTest",  "password":"E$Test0521",  "landStatus":"W",  "farmerId":"FID0101000000294"  } | | |
| Response | | |
| <?xml version="1.0" encoding="utf-8"?>  <soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">  <soap:Body>  <GetFarmerDetailFarmerIDSetResponse xmlns="http://tempuri.org/">  <GetFarmerDetailFarmerIDSetResult>  <xs:schema id="NewDataSet" xmlns="" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:msdata="urn:schemas-microsoft-com:xml-msdata">  <xs:element name="NewDataSet" msdata:IsDataSet="true" msdata:UseCurrentLocale="true">  <xs:complexType>  <xs:choice minOccurs="0" maxOccurs="unbounded">  <xs:element name="MESSAGES">  <xs:complexType>  <xs:sequence>  <xs:element name="Processing\_Code" type="xs:int" minOccurs="0" />  <xs:element name="Processing\_Status" type="xs:string" minOccurs="0" />  </xs:sequence>  </xs:complexType>  </xs:element>  <xs:element name="Table">  <xs:complexType>  <xs:sequence>  <xs:element name="RegistrationID" type="xs:string" minOccurs="0" />  <xs:element name="Name" type="xs:string" minOccurs="0" />  <xs:element name="NameKan" type="xs:string" minOccurs="0" />  <xs:element name="FatherName" type="xs:string" minOccurs="0" />  <xs:element name="FatherNameKan" type="xs:string" minOccurs="0" />  <xs:element name="Gender\_ID" type="xs:string" minOccurs="0" />  <xs:element name="Caste" type="xs:string" minOccurs="0" />  <xs:element name="physicallyHandicapped" type="xs:string" minOccurs="0" />  <xs:element name="FarmerCategory" type="xs:string" minOccurs="0" />  <xs:element name="GSCNo" type="xs:string" minOccurs="0" />  <xs:element name="Minorities" type="xs:string" minOccurs="0" />  <xs:element name="Minorities\_ID" type="xs:string" minOccurs="0" />  <xs:element name="Landline" type="xs:string" minOccurs="0" />  <xs:element name="Mobile" type="xs:string" minOccurs="0" />  <xs:element name="ResidentialAddress\_Desc" type="xs:string" minOccurs="0" />  <xs:element name="Bank" type="xs:int" minOccurs="0" />  <xs:element name="Branch" type="xs:long" minOccurs="0" />  <xs:element name="AccountNo" type="xs:string" minOccurs="0" />  <xs:element name="ResidentialDistrict" type="xs:int" minOccurs="0" />  <xs:element name="ResidentialTaluk" type="xs:int" minOccurs="0" />  <xs:element name="ResidentialVillage" type="xs:int" minOccurs="0" />  <xs:element name="FarmerRegNo" type="xs:string" minOccurs="0" />  <xs:element name="Res\_bh\_dist" type="xs:int" minOccurs="0" />  <xs:element name="Res\_bh\_Taluk" type="xs:int" minOccurs="0" />  <xs:element name="Res\_bh\_Hobli" type="xs:int" minOccurs="0" />  <xs:element name="Res\_bh\_village" type="xs:int" minOccurs="0" />  <xs:element name="Caste\_ID\_GOI" type="xs:string" minOccurs="0" />  <xs:element name="Farmer\_ID\_GOI" type="xs:string" minOccurs="0" />  <xs:element name="BankName" type="xs:string" minOccurs="0" />  <xs:element name="BranchName" type="xs:string" minOccurs="0" />  <xs:element name="IFSC" type="xs:string" minOccurs="0" />  <xs:element name="DistrictB" type="xs:int" minOccurs="0" />  <xs:element name="Age" type="xs:short" minOccurs="0" />  <xs:element name="Relationshiptype" type="xs:unsignedByte" minOccurs="0" />  <xs:element name="Land\_WOL\_WL" type="xs:string" minOccurs="0" />  <xs:element name="Photo" type="xs:string" minOccurs="0" />  <xs:element name="DOB" type="xs:string" minOccurs="0" />  </xs:sequence>  </xs:complexType>  </xs:element>  <xs:element name="Table1">  <xs:complexType>  <xs:sequence>  <xs:element name="FarmerRegNo" type="xs:string" minOccurs="0" />  <xs:element name="districtCode" type="xs:int" minOccurs="0" />  <xs:element name="talukCode" type="xs:int" minOccurs="0" />  <xs:element name="villageCode" type="xs:int" minOccurs="0" />  <xs:element name="surveyno" type="xs:int" minOccurs="0" />  <xs:element name="surnoc" type="xs:string" minOccurs="0" />  <xs:element name="hissano" type="xs:string" minOccurs="0" />  <xs:element name="LandCode" type="xs:int" minOccurs="0" />  <xs:element name="OwnerNo" type="xs:short" minOccurs="0" />  <xs:element name="MainOwnerNo" type="xs:short" minOccurs="0" />  <xs:element name="OwnerName" type="xs:string" minOccurs="0" />  <xs:element name="sex" type="xs:string" minOccurs="0" />  <xs:element name="relationship" type="xs:string" minOccurs="0" />  <xs:element name="relativename" type="xs:string" minOccurs="0" />  <xs:element name="ext\_acre" type="xs:int" minOccurs="0" />  <xs:element name="ext\_gunta" type="xs:int" minOccurs="0" />  <xs:element name="ext\_fgunta" type="xs:decimal" minOccurs="0" />  <xs:element name="bh\_dist" type="xs:int" minOccurs="0" />  <xs:element name="bh\_taluk" type="xs:int" minOccurs="0" />  <xs:element name="bh\_hobli" type="xs:int" minOccurs="0" />  <xs:element name="bh\_village" type="xs:int" minOccurs="0" />  <xs:element name="DistrinctName" type="xs:string" minOccurs="0" />  <xs:element name="TalukName" type="xs:string" minOccurs="0" />  <xs:element name="HobliName" type="xs:string" minOccurs="0" />  <xs:element name="VillageName" type="xs:string" minOccurs="0" />  <xs:element name="Score" type="xs:string" minOccurs="0" />  <xs:element name="OwnerType" type="xs:string" minOccurs="0" />  <xs:element name="AreaHectare" type="xs:decimal" minOccurs="0" />  </xs:sequence>  </xs:complexType>  </xs:element>  </xs:choice>  </xs:complexType>  </xs:element>  </xs:schema>  <diffgr:diffgram xmlns:msdata="urn:schemas-microsoft-com:xml-msdata" xmlns:diffgr="urn:schemas-microsoft-com:xml-diffgram-v1">  <NewDataSet xmlns="">  <MESSAGES diffgr:id="MESSAGES1" msdata:rowOrder="0" diffgr:hasChanges="inserted">  <Processing\_Code>1</Processing\_Code>  <Processing\_Status>Successfull</Processing\_Status>  </MESSAGES>  <Table diffgr:id="Table1" msdata:rowOrder="0">  <RegistrationID />  <Name>RASHMI B N</Name>  <NameKan>ರಾಶ್ಮಿ</NameKan>  <FatherName>Ravi</FatherName>  <FatherNameKan>ರವಿ</FatherNameKan>  <Gender\_ID>F</Gender\_ID>  <Caste>O</Caste>  <physicallyHandicapped>Y</physicallyHandicapped>  <FarmerCategory>N</FarmerCategory>  <Minorities>N</Minorities>  <Minorities\_ID>0</Minorities\_ID>  <Landline />  <Mobile>9663869607</Mobile>  <ResidentialAddress\_Desc>test address</ResidentialAddress\_Desc>  <Bank>3</Bank>  <Branch>3622</Branch>  <AccountNo>23423</AccountNo>  <ResidentialDistrict>527</ResidentialDistrict>  <ResidentialTaluk>5433</ResidentialTaluk>  <ResidentialVillage>597179</ResidentialVillage>  <FarmerRegNo>FID0101000000293</FarmerRegNo>  <Res\_bh\_dist>1</Res\_bh\_dist>  <Res\_bh\_Taluk>1</Res\_bh\_Taluk>  <Res\_bh\_Hobli>1</Res\_bh\_Hobli>  <Res\_bh\_village>16</Res\_bh\_village>  <Caste\_ID\_GOI>4</Caste\_ID\_GOI>  <BankName>Bank of Baroda</BankName>  <BranchName>BARB0BIDARX-BIDAR</BranchName>  <IFSC>BARB0BIDARX</IFSC>  <DistrictB>5</DistrictB>  <Age>37</Age>  <Relationshiptype>2</Relationshiptype>  <Land\_WOL\_WL>O</Land\_WOL\_WL>  <Photo>data:image/png;base64,</Photo>  <DOB>01/01/1984</DOB>  </Table>  <Table1 diffgr:id="Table11" msdata:rowOrder="0">  <FarmerRegNo>FID0101000000293</FarmerRegNo>  <districtCode>527</districtCode>  <talukCode>5433</talukCode>  <villageCode>597183</villageCode>  <surveyno>3</surveyno>  <surnoc>\*</surnoc>  <hissano>1</hissano>  <LandCode>1236</LandCode>  <OwnerNo>3</OwnerNo>  <MainOwnerNo>1</MainOwnerNo>  <OwnerName>ಕಾಂಬಳೆ ಕುಮಾರ ಮನೋಹರ</OwnerName>  <sex>M</sex>  <relationship>-</relationship>  <relativename />  <ext\_acre>0</ext\_acre>  <ext\_gunta>8</ext\_gunta>  <ext\_fgunta>12.00</ext\_fgunta>  <bh\_dist>12</bh\_dist>  <bh\_taluk>1</bh\_taluk>  <bh\_hobli>1</bh\_hobli>  <bh\_village>2</bh\_village>  <DistrinctName>ಬಳ್ಳಾರಿ</DistrinctName>  <TalukName>ಹಡಗಲಿ</TalukName>  <HobliName>ಹಡಗಲಿ</HobliName>  <VillageName>ವ್ಯಾಸ ಮಲ್ಲಾಪುರ</VillageName>  <Score>0</Score>  <OwnerType>E</OwnerType>  <AreaHectare>0.08853</AreaHectare>  </Table1>  </NewDataSet>  </diffgr:diffgram>  </GetFarmerDetailFarmerIDSetResult>  </GetFarmerDetailFarmerIDSetResponse>  </soap:Body>  </soap:Envelope> | | |
| Error | | |
|  | | |