Technologies Data Import Specifications

The most efficient method of importing Licensing Opportunity / Technology data into Florida ExpertNet is a web-accessible data feed that we can access automatically.

This specification represents an ideal circumstance with a large amount of data available for import into Florida Expertnet. It is recognized that not all of the specified data may be available at any given university due to various reasons. Our technical staff do have some flexibility when it comes to file format and configuration and are able to work with you to successfully import this data into ExpertNet.

Definitions & General Business Rules

- **Technology:**
  A technology is defined as a specific property available for licensing from the university. It should be an active technology that you want to have displayed in Florida ExpertNet.

- **Inventor:**
  The faculty member or members who are credited as the inventor for the technology. In addition to including the inventor information in the Technology profile, we use the provided name and email to link inventors to their Expert profile in Florida ExpertNet if they have one. This increases exposure for both the Technology and the Expert associated with it.

- **Contact:**
  The contact information is included in the Technology profile as the point of contact for the Technology. This can be the inventor, the university licensing office or specific individuals at the licensing office depending on the technology.

- **Unique ID:**
  A unique ID is an alpha-numeric sequence assigned to an entity (such as an inventor or technology) that should not change over time. For Inventors, the same unique ID should be provided for the faculty member as would be used for that same faculty member in the university's expert feed since we use these ids to link those records together.

  Unique IDs can be the same values used in the university's data systems or something different (such as a hashed version of a University's internal IDs) as long as the same value will be consistently provided for the associated entity over time.

- **Truncation:**
  Data should not be truncated. We realize there can be limitations based on how each university collects and stores their data, but if possible complete data should be provided as we will not filter out data that appears 'broken' due to it being truncated.

- **Record Status:**
  Only currently active Technologies should be included in the import feed. Any technology that should not be displayed, should not be included as anything in the import will be flagged as active and displayed in Florida Expertnet. Any previously imported technologies which are not included in an import file will be deactivated and not displayed.

  (If a record which should be inactive slips through or changes status between imports, you can contact our technical staff and we can individually disable technologies if needed. However, manually disabling a technology will be overwritten if it is included in a future import file).

- **Field Restrictions:**
  The specifications indicate the type and length of the data that can be provided for each field. These data type specifications are based on MS SQL Server datatypes and are based on the current database configuration. If the data to be provided by your university does not conform to these field restrictions, please discuss these differences with our technical staff as adjustments can often be made to work with your requirements.

- **File Format**
  The data can be provided in XLSX, CSV, XML or JSON format. We prefer XML or JSON but can work with the other formats as we are aware that they are often supported by various data applications.

  If the data is to be provided in a flat file format (xlsx, csv) we would prefer that each technology appear once for each associated inventor / patent. We are aware that this can cause issues if a technology has multiple inventors and patents, and our technical staff can work with you in coming up with a format that you can produce and that we can import.

- **Means of Providing the Files**
  Florida Expertnet has a fair amount of flexibility in how the data files can be provided to us. The preferred method is a web address from which up-to-date copies of the files can be pulled on a monthly basis. The address can be a simple link to the file or a link to a web service or other API which results in providing the file.

Technology Feed Data Fields

Field Name	Definition	Data type	Required?	Notes
sourceID	Unique ID associated with the technology	Varchar(1000)	Yes	used to match data with records in our database
title	Name or title of the technology	Varchar(1000)	Yes	
description	Descriptive information about the technology	Varchar(max)	Yes	
additionalDescription	Additional descriptive information such as advantages, benefits, market applications, etc.	Varchar(max)		Will be displayed on the technology profile below the description text
technologyURL	URL to the technology's profile/page on the universities website	Varchar(500)		
contactName	Name of Contact Person	Varchar(200)		Will default to the name of the university's Tech Transfer Office if not provided
contactEmail	Email of Contact Person	Varchar(200)		Will default to the email of the university's Tech Transfer Office if not provided
contactPhone	Phone number of Contact Person	Varchar(20)		
inventorLastName	Inventor Last Name	Varchar(50)		
linventorFirstName	Inventor First Name	Varchar(50)		
inventorEmail	Inventor Email Address	Varchar(200)		
inventorUniqueID	Unique ID of the inventor.	Varchar(100)		Should match faculty unique ID included in experts feed. Used to link inventors to Expert Profiles
patentNumber	Patent number	Varchar(500)		
patentURL	URL for Patent Information	Varchar(500)		For US Patents, Expertnet will attempt to determine the Google Patent link based on the patent number provided. If specific url is provided it will be displayed as well.

TECHNOLOGY FEED EXAMPLES

XML EXAMPLE

```xml
<technologies>
    <technology>
        <sourceID>LO-00154</sourceID>
        <title>Low Speed Electronic Error Correction for Optical Systems</title>
        <description>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla auctor vulputate quam eget ultrices. Duis elementum tellus id lacinia faucibus. Aenean vestibulum ac nisi sit amet lobortis. Aliquam lobortis orci quis augue vehicula, ac posuere felis sollicitudin. Suspendisse tempus sagittis velit sed tristique. Sed nec porta eros. Suspendisse potenti. In augue sem, elementum ultricies orci nec, eleifend ullamcorper ligula. Etiam vitae justo ornare, luctus nisl nec, auctor ipsum. Praesent sit amet nunc eget massa suscipit faucibus. Phasellus eu malesuada ligula. Proin odio sapien, eleifend ultrices ipsum eu, luctus placerat est.</description>
        <additionalDescription><![CDATA[<strong>Advantages</strong><ul><li>Advantage One</li><li>Advantage 2</li></ul>]]></additionalDescription>
        <technologyURL>https://tto.university.edu/index.cfm?fuseaction=techCat&id=LO-00154</technologyURL>
        <contactName>John Doe</contactName>
        <contactEmail>john.doe@university.edu</contactEmail>
        <contactPhone>000-000-0000</contactPhone>
        <keywords>Demonstration; Optical; Error Correction</keywords>
        <inventors>
            <inventor>
                <inventorLastname>Monroe</inventorLastname>
                <inventorFirstname>Blair</inventorFirstname>
                <inventorEmail>bmonroe@university.edu</inventorEmail>
                <inventorID>0004551</inventorID>
            </inventor>
            <inventor>
                <inventorLastname>Finley</inventorLastname>
                <inventorFirstname>Amy</inventorFirstname>
                <inventorEmail>afinley@university.edu</inventorEmail>
                <inventorID>0000747</inventorID>
            </inventor>
        </inventors>
        <patents>
            <patent>
                <patentNumber>US421147</patentNumber>
                <patentURL>https://ppubs.uspto.gov/dirsearch-public/print/downloadPdf/421147</patentURL>
            </patent>
        </patents>
    </technology>
    <technology>
        <sourceID> LO-00155</sourceID>
        <title>Title of the Property</title>
```

<description>Etiam lectus enim, laoreet eget aliquam sit amet, suscipit vel quam. Aenean fringilla nunc convallis sem scelerisque finibus. Nullam vel ullamcorper est, et commodo lacus. Aenean sit amet massa lorem. Fusce turpis nunc, auctor a augue at, fringilla condimentum ipsum. Phasellus rutrum lobortis iaculis. Fusce cursus eleifend mollis. Aliquam elementum facilisis purus, sit amet pretium ipsum varius eget. </description>
        </technology>
</technologies>

XML Schema

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="technologies">
    <xs:complexType>
      <xs:sequence>
        <xs:element maxOccurs="unbounded" name="technology">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="sourceID" type="xs:string" use="required" />
              <xs:element name="title" type="xs:string" use="required" />
              <xs:element name="advantages" type="xs:string" />
              <xs:element name="summary" type="xs:string" use="required" />
              <xs:element name="technologyURL" type="xs:string" />
              <xs:element name="contactName" type="xs:string" />
              <xs:element name="contactEmail" type="xs:string" />
              <xs:element name="contactPhone" type="xs:string" />
              <xs:element name="keywords" type="xs:string" />
              <xs:element name="inventors">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element maxOccurs="unbounded" name="inventor">
                      <xs:complexType>
                        <xs:sequence>
                          <xs:element name="inventorLastname" type="xs:string" />
                          <xs:element name="inventorFirstname" type="xs:string" />
                          <xs:element name="inventorEmail" type="xs:string" />
                          <xs:element name="inventorID" type="xs:string" />
                        </xs:sequence>
                      </xs:complexType>
                    </xs:element>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
              <xs:element name="patents">
                <xs:complexType>
                  <xs:sequence minOccurs="0">
```

```
                    <xs:element maxOccurs="unbounded" name="patent">
                      <xs:complexType>
                        <xs:sequence>
                          <xs:element name="patentNumber" type="xs:string" />
                          <xs:element name="patentURL" type="xs:string" />
                        </xs:sequence>
                      </xs:complexType>
                    </xs:element>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```