

Schema documentation for lter-personnelDB.xsd

february 25, 2011

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Schema(s)

Main schema lter-personnelDB.xsd

Annotations	This schema defines a data exchange standard for the LTER personnel database developed by the LTER Web Services Working Group. Each personnel document must include one or more person elements describing the identifying information, roles and contact information for an individual associated with the LTER Network. Working group participants include: Mason Kortz (chair; CCE/PAL), Sven Bohm (KBS), M. Gastil Buhl (MCR), Corinna Gries (NTL), Wade Sheldon (GCE) and Jonathan Walsh (BES). Copyright 2011 Long Term Ecological Research Network.
Properties	attribute form default: unqualified

	element form default: unqualified
--	-----------------------------------

Element(s)

Element personnel

Annotations	This is the root element of an lter-personnelDB document.
Diagram	<p>The diagram illustrates the XML structure. A root element 'personnel' (indicated by a circle with a minus sign) contains a sequence of 'person' elements (indicated by a circle with a plus sign). The 'person' element is shown with a cardinality of '1..∞'. A callout box for 'personnel' states: 'This is the root element of an lter-personnelDB document.' Another callout box for 'person' states: 'The person element contains the database identifier, identity information, roles and contact information for one or...'</p>
Properties	content: complex
Model	person+
Children	person
Instance	<pre><personnel> <person>{1,unbounded}</person> </personnel></pre>
Source	<pre><xs:element name="personnel"> <xs:annotation> <xs:documentation>This is the root element of an lter-personnelDB document.</ </xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="person" minOccurs="1" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The person element contains the database identifier, identity information, roles and contact information for one or more individuals in the LTER Network. At least one person element is required.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="personID" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The personID element contains an unsigned integer representing the database identifier for a personnel record in the LTER Database. This is a required element. When preparing data for submission specify a value of 0 to indicate a new entry or a non-zero entry to indicate an existing entry to update.</xs:documentation> </xs:annotation> <xs:simpleType> <xs:restriction base="xs:integer"> <xs:minInclusive value="0"/> </xs:restriction> </xs:simpleType> </xs:element> <xs:element name="identity" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The identity element includes the primary identification information for an individual, including name, title and primary email address. Only 1 set of identity information is permitted per person element.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="prefix" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The prefix element contains a name prefix or salutation (e.g. Dr., Mr. or Ms.). This element is optional.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="firstName" type="textField" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The firstName element contains the first or given name of the person. This element is required.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="middleName" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The middleName element contains the middle name of the person. This element is optional.</xs:documentation> </xs:annotation> </xs:element> </xs:sequence> </xs:complexType> </xs:element> </xs:sequence> </xs:complexType> </xs:element> </xs:sequence> </xs:complexType> </xs:element></pre>

```

<xs:element name="lastName" type="textField" minOccurs="1"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The lastName element contains the last or surname
of the person. This element is required.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="suffix" type="textField" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The suffix element contains the name suffix of the
person (e.g. Jr., III). This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="preferredName" type="textField" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The preferredName element contains the nickname
or other preferred variation of the person's full name. This element is optional.</
xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="title" type="textField" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The title element contains the institutional
or organizational title of the person (e.g. Assistant Professor, Institute of Applied
Ecology Director). This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="primaryEmail" type="emailAddress" minOccurs="1"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The primaryEmail element contains the primary
contact email for use in LTER Network official communication. The LTER email alias will
reference this address. This is a required element.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="optOut" type="xs:boolean" minOccurs="1" maxOccurs="1"
default="0">
  <xs:annotation>
    <xs:documentation>The optOut element contains a boolean value
specifying whether contact information other than name should be omitted from the
personnel directory list on the LTER web site. Acceptable values are true, false, 1 (i.e.
true) and 0 (i.e. false). This is a required element with a default value of 0 (false).</
xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="nameAlias" type="textField" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The nameAlias element contains alternative full
names under which the person is or has been known for use in directory searches (e.g.
name prior to marriage, divorce or name change). This is an optional element and it can
be repeated as necessary.</xs:documentation>
  </xs:annotation>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="roleList" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The roleList element contains descriptions of LTER
Network roles held by the person at one or more LTER sites. This element is optional, but
it cannot be repeated more than once and if used then it must include one or more role
elements.</xs:documentation>
  </xs:annotation>
<xs:complexType>
  <xs:sequence>
    <xs:element name="role" minOccurs="1" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>The role element contains elements describing a
LTER Network role held by the person. This is a required element that can be repeated as
many times as appropriate. Note that only one active role of type nsf should be assigned
per site for each person element.</xs:documentation>
      </xs:annotation>
      <xs:complexType>
        <xs:sequence>
          <xs:element name="roleID" minOccurs="1" maxOccurs="1">
            <xs:annotation>
              <xs:documentation>The roleID element contains an unsigned
integer representing the personnel database ID of the role record for a person. This is a
required element that cannot be repeated. For new roles to be added to the database, use
a roleID of 0.</xs:documentation>
            </xs:annotation>

```

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<xs:simpleType>
  <xs:restriction base="xs:integer">
    <xs:minInclusive value="0"/>
  </xs:restriction>
</xs:simpleType>
</xs:element>
<xs:element name="roleType" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The roleType element contains a role type
from a controlled vocabulary of NSF roles or local roles defined in the LTER Personnel
Database. This is a required element that cannot be repeated.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:simpleContent>
      <xs:extension base="textField">
        <xs:attribute name="type" use="required">
          <xs:annotation>
            <xs:documentation>The type attribute specifies
the type or scope of the roleType. Allowed values are "nsf" for pre-defined NSF roles
and "local" for site-defined and network-wide roles in the Personnel Database.</
xs:documentation>
          </xs:annotation>
        </xs:attribute>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>
</xs:element>
<xs:element name="siteAcronym" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The siteAcronym element contains a 3-letter
acronym specifying the LTER site at which the person holds this role. For network-wide
roles not associated with a specific site, use the siteAcronym NWK. This is a required
element that cannot be repeated.</xs:documentation>
  </xs:annotation>
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:enumeration value="nsf"/>
      <xs:enumeration value="local"/>
    </xs:restriction>
  </xs:simpleType>
</xs:element>
<xs:element name="beginDate" type="xs:date" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The beginDate element contains the beginning
date of the person's participation in the role. This element is optional but highly
recommended when known.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="endDate" type="xs:date" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The endDate element contains the ending
date of the person's participation in the role. This element is optional but highly
recommended when known, and should agree with the value of the isActive element value
(i.e. endDate in the past when isActive = false, endDate empty or in the future when
isActive = true).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="isActive" type="xs:boolean" minOccurs="1"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The isActive element contains a boolean
value indicating whether or not the person is currently active in the role. Possible
values are true, false, 1 (i.e. true) or 0 (i.e. false). This element is required, and
note that only one combination of roleType and siteAcronym should have isActive of true
for the same person. Note that this element takes precedence over endDate for determining
status of the role if they disagree.</xs:documentation>
  </xs:annotation>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="contactInfoList" minOccurs="0" maxOccurs="1">
  <xs:annotation>

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<xs:documentation>The contactInfoList element contains one or more sets of
contact information for the person. This element is optional, but if included cannot be
repeated and must include at least one contactInfo element.</xs:documentation>
</xs:annotation>
<xs:complexType>
<xs:sequence>
  <xs:element name="contactInfo" minOccurs="1" maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>The contactInfo element contains one set of
contact information for the person, including a descriptive label element and isPrimary
boolean element specifying which set of contact information should be used for official
LTER communication.</xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:sequence>
        <xs:element name="contactInfoID">
          <xs:annotation>
            <xs:documentation>The contactInfoID element contains an
unsigned integer representing the LTER Personnel Database ID of the contact information
record. This is a required element. For new sets of contact information, specify 0 for
contactInfoID.</xs:documentation>
          </xs:annotation>
          <xs:simpleType>
            <xs:restriction base="xs:integer">
              <xs:minInclusive value="0"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:element>
        <xs:element name="label" type="textField" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The label element contains a descriptive
text label describing the set of contact information for the person (e.g. Primary
institutional contact information, Field station address during the summer). This label
is intended to convey information to end-users of the LTER directory regarding which
contact information is appropriate to use under different circumstances. This is a
required element.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="isPrimary" type="xs:boolean" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The isPrimary element contains a boolean
value specifying whether the contact information represents the primary address of the
person for official LTER communication. Possible values are true, false, 1 (i.e. true)
and 0 (i.e. false). This is a required element.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="beginDate" type="xs:date" minOccurs="0"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The beginDate element contains the beginning
date for the respective contact information. This element is optional but highly
recommended when known.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="endDate" type="xs:date" minOccurs="0"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The endDate element contains the ending date
for the respective contact information. This element is optional but highly recommended
when known, and should agree with the value of the isActive element value (i.e. endDate
in the past when isActive = false, endDate empty or in the future when isActive =
true).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="isActive" type="xs:boolean" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The isActive element contains a boolean
value indicating whether or not the contact information is currently active. Possible
values are true, false, 1 (i.e. true) and 0 (i.e. false). This is a required element.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="address" type="textField" minOccurs="0"
maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>The address element contains the delivery
address for the person (e.g. street address). This element is optional and can be
repeated for multiple address lines.</xs:documentation>
          </xs:annotation>
        </xs:element>

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<xs:element name="institution" type="textField" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The institution element contains the name
of the institution or organization at which the person is located. This element is
optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="city" type="textField" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The city element contains the name of the
city in which the person resides. This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="administrativeArea" type="textField"
minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The administrativeArea contains the
name of the state, province or other administrative area. This element is optional.</
xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="postalCode" type="textField" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The postalCode element contains the Zip code
or other postal code for the address. This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="country" type="textField" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The country element contains the name of the
country in which the person resides. This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="phone" type="textField" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The phone element contains a voice phone or
pager number at which the person can be reached. This is an optional element that can be
repeated as many times as appropriate.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="fax" type="textField" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The fax contains the number of a fax (i.e.
facsimile) machine that can be used to send documents to the person. This is an optional
element that can be repeated as many times as appropriate.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="email" type="emailAddress" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The email element contains additional
electronic mail addresses that can be used to contact the person. This is an optional
element that can be repeated as many times as appropriate.</xs:documentation>
  </xs:annotation>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>

```

Element personnel / person

Annotations	The person element contains the database identifier, identity information, roles and contact information for one or more individuals in the LTER Network. At least one person element is required.
-------------	--

Diagram	<pre> graph TD person((person)) --- personID((personID)) person --- identity((identity)) person --- roleList((roleList)) person --- contactInfoList((contactInfoList)) </pre> <p>The person element contains the database identifier, identity information, roles and contact information for one or...</p> <p>The personID element contains an unsigned integer representing the database identifier for a personnel record in the...</p> <p>The identity element includes the primary identification information for an individual, including name, title and...</p> <p>The roleList element contains descriptions of LTER Network roles held by the person at one or more LTER sites. This...</p> <p>The contactInfoList element contains one or more sets of contact information for the person. This element is optional,...</p>						
Properties	<table> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>unbounded</td></tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	unbounded
content:	complex						
minOccurs:	1						
maxOccurs:	unbounded						
Model	personID , identity{0,1} , roleList{0,1} , contactInfoList{0,1}						
Children	contactInfoList, identity, personID, roleList						
Instance	<pre> <person> <personID>{1,1}</personID> <identity>{0,1}</identity> <roleList>{0,1}</roleList> <contactInfoList>{0,1}</contactInfoList> </person> </pre>						
Source	<pre> <xs:element name="person" minOccurs="1" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The person element contains the database identifier, identity information, roles and contact information for one or more individuals in the LTER Network. At least one person element is required.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="personID" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The personID element contains an unsigned integer representing the database identifier for a personnel record in the LTER Database. This is a required element. When preparing data for submission specify a value of 0 to indicate a new entry or a non-zero entry to indicate an existing entry to update.</xs:documentation> </xs:annotation> <xs:simpleType> <xs:restriction base="xs:integer"> <xs:minInclusive value="0"/> </xs:restriction> </xs:simpleType> </xs:element> <xs:element name="identity" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The identity element includes the primary identification information for an individual, including name, title and primary email address. Only 1 set of identity information is permitted per person element.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="prefix" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The prefix element contains a name prefix or salutation (e.g. Dr., Mr. or Ms.). This element is optional.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="firstName" type="textField" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The firstName element contains the first or given name of the person. This element is required.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="middleName" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The middleName element contains the middle name of the person. This element is optional.</xs:documentation> </xs:annotation> </xs:element> </xs:sequence> </xs:complexType> </xs:element> </xs:sequence> </xs:complexType> </xs:element> </pre>						

```

<xs:element name="lastName" type="textField" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The lastName element contains the last or surname of the
person. This element is required.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="suffix" type="textField" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The suffix element contains the name suffix of the
person (e.g. Jr., III). This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="preferredName" type="textField" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The preferredName element contains the nickname
or other preferred variation of the person's full name. This element is optional.</
xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="title" type="textField" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The title element contains the institutional or
organizational title of the person (e.g. Assistant Professor, Institute of Applied
Ecology Director). This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="primaryEmail" type="emailAddress" minOccurs="1"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The primaryEmail element contains the primary contact
email for use in LTER Network official communication. The LTER email alias will reference
this address. This is a required element.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="optOut" type="xs:boolean" minOccurs="1" maxOccurs="1"
default="0">
  <xs:annotation>
    <xs:documentation>The optOut element contains a boolean value specifying
whether contact information other than name should be omitted from the personnel
directory list on the LTER web site. Acceptable values are true, false, 1 (i.e. true)
and 0 (i.e. false). This is a required element with a default value of 0 (false).</
xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="nameAlias" type="textField" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The nameAlias element contains alternative full names
under which the person is or has been known for use in directory searches (e.g. name
prior to marriage, divorce or name change). This is an optional element and it can be
repeated as necessary.</xs:documentation>
  </xs:annotation>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="roleList" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The roleList element contains descriptions of LTER Network
roles held by the person at one or more LTER sites. This element is optional, but it
cannot be repeated more than once and if used then it must include one or more role
elements.</xs:documentation>
  </xs:annotation>
</xs:complexType>
<xs:sequence>
  <xs:element name="role" minOccurs="1" maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>The role element contains elements describing a LTER
Network role held by the person. This is a required element that can be repeated as many
times as appropriate. Note that only one active role of type nsf should be assigned per
site for each person element.</xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:sequence>
        <xs:element name="roleID" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The roleID element contains an unsigned integer
representing the personnel database ID of the role record for a person. This is a
required element that cannot be repeated. For new roles to be added to the database, use
a roleID of 0.</xs:documentation>
          </xs:annotation>
          <xs:simpleType>
            <xs:restriction base="xs:integer">

```



```

        <xs:minInclusive value="0"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
  <xs:element name="roleType" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The roleType element contains a role type from
a controlled vocabulary of NSF roles or local roles defined in the LTER Personnel
Database. This is a required element that cannot be repeated.</xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:simpleContent>
        <xs:extension base="textField">
          <xs:attribute name="type" use="required">
            <xs:annotation>
              <xs:documentation>The type attribute specifies the type or
scope of the roleType. Allowed values are "nsf" for pre-defined NSF roles and "local" for
site-defined and network-wide roles in the Personnel Database.</xs:documentation>
            </xs:annotation>
            <xs:simpleType>
              <xs:restriction base="xs:string">
                <xs:enumeration value="nsf"/>
                <xs:enumeration value="local"/>
              </xs:restriction>
            </xs:simpleType>
          </xs:attribute>
        </xs:extension>
      </xs:simpleContent>
    </xs:complexType>
  </xs:element>
  <xs:element name="siteAcronym" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The siteAcronym element contains a 3-letter
acronym specifying the LTER site at which the person holds this role. For network-wide
roles not associated with a specific site, use the siteAcronym NWK. This is a required
element that cannot be repeated.</xs:documentation>
    </xs:annotation>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:length value="3"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
  <xs:element name="beginDate" type="xs:date" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The beginDate element contains the beginning
date of the person's participation in the role. This element is optional but highly
recommended when known.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="endDate" type="xs:date" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The endDate element contains the ending date of
the person's participation in the role. This element is optional but highly recommended
when known, and should agree with the value of the isActive element value (i.e. endDate
in the past when isActive = false, endDate empty or in the future when isActive =
true).</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="isActive" type="xs:boolean" minOccurs="1"
maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The isActive element contains a boolean value
indicating whether or not the person is currently active in the role. Possible values
are true, false, 1 (i.e. true) or 0 (i.e. false). This element is required, and note that
only one combination of roleType and siteAcronym should have isActive of true for the
same person. Note that this element takes precedence over endDate for determining status
of the role if they disagree.</xs:documentation>
    </xs:annotation>
  </xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="contactInfoList" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The contactInfoList element contains one or more sets of
contact information for the person. This element is optional, but if included cannot be
repeated and must include at least one contactInfo element.</xs:documentation>
  </xs:annotation>
  <xs:complexType>

```

```

<xs:sequence>
  <xs:element name="contactInfo" minOccurs="1" maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>The contactInfo element contains one set of contact
information for the person, including a descriptive label element and isPrimary boolean
element specifying which set of contact information should be used for official LTER
communication.</xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:sequence>
        <xs:element name="contactInfoID">
          <xs:annotation>
            <xs:documentation>The contactInfoID element contains an unsigned
integer representing the LTER Personnel Database ID of the contact information
record. This is a required element. For new sets of contact information, specify 0 for
contactInfoID.</xs:documentation>
          </xs:annotation>
          <xs:simpleType>
            <xs:restriction base="xs:integer">
              <xs:minInclusive value="0"/>
            </xs:restriction>
          </xs:simpleType>
        </xs:element>
        <xs:element name="label" type="textField" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The label element contains a descriptive
text label describing the set of contact information for the person (e.g. Primary
institutional contact information, Field station address during the summer). This label
is intended to convey information to end-users of the LTER directory regarding which
contact information is appropriate to use under different circumstances. This is a
required element.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="isPrimary" type="xs:boolean" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The isPrimary element contains a boolean value
specifying whether the contact information represents the primary address of the person
for official LTER communication. Possible values are true, false, 1 (i.e. true) and 0
(i.e. false). This is a required element.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="beginDate" type="xs:date" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The beginDate element contains the beginning date
for the respective contact information. This element is optional but highly recommended
when known.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="endDate" type="xs:date" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The endDate element contains the ending date for
the respective contact information. This element is optional but highly recommended when
known, and should agree with the value of the isActive element value (i.e. endDate in
the past when isActive = false, endDate empty or in the future when isActive = true).</
xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="isActive" type="xs:boolean" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The isActive element contains a boolean value
indicating whether or not the contact information is currently active. Possible values
are true, false, 1 (i.e. true) and 0 (i.e. false). This is a required element.</
xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="address" type="textField" minOccurs="0"
maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>The address element contains the delivery address
for the person (e.g. street address). This element is optional and can be repeated for
multiple address lines.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="institution" type="textField" minOccurs="0"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The institution element contains the name of the
institution or organization at which the person is located. This element is optional.</
xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>

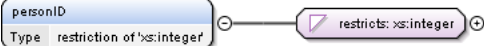
```

```

<xs:element name="city" type="textField" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The city element contains the name of the city in
which the person resides. This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="administrativeArea" type="textField" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The administrativeArea contains the name of the
state, province or other administrative area. This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="postalCode" type="textField" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The postalCode element contains the Zip code or
other postal code for the address. This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="country" type="textField" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The country element contains the name of the
country in which the person resides. This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="phone" type="textField" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The phone element contains a voice phone or
pager number at which the person can be reached. This is an optional element that can be
repeated as many times as appropriate.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="fax" type="textField" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The fax contains the number of a fax (i.e.
facsimile) machine that can be used to send documents to the person. This is an optional
element that can be repeated as many times as appropriate.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="email" type="emailAddress" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The email element contains additional electronic
mail addresses that can be used to contact the person. This is an optional element that
can be repeated as many times as appropriate.</xs:documentation>
  </xs:annotation>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>

```

Element personnel / person / personID

Annotations	The personID element contains an unsigned integer representing the database identifier for a personnel record in the LTER Database. This is a required element. When preparing data for submission specify a value of 0 to indicate a new entry or a non-zero entry to indicate an existing entry to update.						
Diagram	 <p>The personID element contains an unsigned integer representing the database identifier for a personnel record in the...</p>						
Type	restriction of xs:integer						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre> <xs:element name="personID" minOccurs="1" maxOccurs="1"> <xs:annotation> </pre>						

```

<xs:documentation>The personID element contains an unsigned integer representing the
database identifier for a personnel record in the LTER Database. This is a required
element. When preparing data for submission specify a value of 0 to indicate a new entry
or a non-zero entry to indicate an existing entry to update.</xs:documentation>
</xs:annotation>
<xs:simpleType>
  <xs:restriction base="xs:integer">
    <xs:minInclusive value="0"/>
  </xs:restriction>
</xs:simpleType>
</xs:element>

```

Element personnel / person / identity

Annotations	The identity element includes the primary identification information for an individual, including name, title and primary email address. Only 1 set of identity information is permitted per person element.						
Diagram	<p>The diagram illustrates the structure of the identity element. It is an optional element (indicated by a circle with a plus sign) that contains several sub-elements, each with its own type and constraints:</p> <ul style="list-style-type: none"> prefix: Type <code>textField</code>. Optional. Description: The prefix element contains a name prefix or salutation (e.g. Dr., Mr. or Ms.). This element is optional. firstName: Type <code>textField</code>. Required. Description: The firstName element contains the first or given name of the person. This element is required. middleName: Type <code>textField</code>. Optional. Description: The middleName element contains the middle name of the person. This element is optional. lastName: Type <code>textField</code>. Required. Description: The lastName element contains the last or surname of the person. This element is required. suffix: Type <code>textField</code>. Optional. Description: The suffix element contains the name suffix of the person (e.g. Jr., III). This element is optional. preferredName: Type <code>textField</code>. Optional. Description: The preferredName element contains the nickname or other preferred variation of the person's full name. This element is optional. title: Type <code>textField</code>. Optional. Description: The title element contains the institutional or organizational title of the person (e.g. Assistant Professor, Institute...). primaryEmail: Type <code>emailAddress</code>. Optional. Description: The primaryEmail element contains the primary contact email for use in LTER Network official communication. The LTER... optOut: Type <code>xs:boolean</code>. Default <code>0</code>. Optional. Description: The optOut element contains a boolean value specifying whether contact information other than name should be omitted... nameAlias: Type <code>textField</code>. Occurs 0..∞. Description: The nameAlias element contains alternative full names under which the person is or has been known for use in directory... 						
Properties	<table> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	prefix{0,1} , firstName , middleName{0,1} , lastName , suffix{0,1} , preferredName{0,1} , title{0,1} , primaryEmail , optOut , nameAlias*						

Children	firstName, lastName, middleName, nameAlias, optOut, preferredName, prefix, primaryEmail, suffix, title
Instance	<pre> <identity> <prefix>{0,1}</prefix> <firstName>{1,1}</firstName> <middleName>{0,1}</middleName> <lastName>{1,1}</lastName> <suffix>{0,1}</suffix> <preferredName>{0,1}</preferredName> <title>{0,1}</title> <primaryEmail>{1,1}</primaryEmail> <optOut>{1,1}</optOut> <nameAlias>{0,unbounded}</nameAlias> </identity> </pre>
Source	<pre> <xs:element name="identity" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The identity element includes the primary identification information for an individual, including name, title and primary email address. Only 1 set of identity information is permitted per person element.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="prefix" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The prefix element contains a name prefix or salutation (e.g. Dr., Mr. or Ms.). This element is optional.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="firstName" type="textField" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The firstName element contains the first or given name of the person. This element is required.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="middleName" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The middleName element contains the middle name of the person. This element is optional.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="lastName" type="textField" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The lastName element contains the last or surname of the person. This element is required.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="suffix" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The suffix element contains the name suffix of the person (e.g. Jr., III). This element is optional.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="preferredName" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The preferredName element contains the nickname or other preferred variation of the person's full name. This element is optional.</ xs:documentation> </xs:annotation> </xs:element> <xs:element name="title" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The title element contains the institutional or organizational title of the person (e.g. Assistant Professor, Institute of Applied Ecology Director). This element is optional.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="primaryEmail" type="emailAddress" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The primaryEmail element contains the primary contact email for use in LTER Network official communication. The LTER email alias will reference this address. This is a required element.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="optOut" type="xs:boolean" minOccurs="1" maxOccurs="1" default="0"> <xs:annotation> <xs:documentation>The optOut element contains a boolean value specifying whether contact information other than name should be omitted from the personnel directory list on the LTER web site. Acceptable values are true, false, 1 (i.e. true) and 0 (i.e. false). This is a required element with a default value of 0 (false).</xs:documentation> </xs:annotation> </xs:element> <xs:element name="nameAlias" type="textField" minOccurs="0" maxOccurs="unbounded"> </pre>

```

<xs:annotation>
  <xs:documentation>The nameAlias element contains alternative full names under
  which the person is or has been known for use in directory searches (e.g. name prior to
  marriage, divorce or name change). This is an optional element and it can be repeated as
  necessary.</xs:documentation>
</xs:annotation>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>

```

Element personnel / person / identity / prefix

Annotations	The prefix element contains a name prefix or salutation (e.g. Dr., Mr. or Ms.). This element is optional.						
Diagram							
Type	textField						
Properties	<table> <tr><td>content:</td><td>simple</td></tr> <tr><td>minOccurs:</td><td>0</td></tr> <tr><td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre> <xs:element name="prefix" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The prefix element contains a name prefix or salutation (e.g. Dr., Mr. or Ms.). This element is optional.</xs:documentation> </xs:annotation> </xs:element> </pre>						

Element personnel / person / identity / firstName

Annotations	The firstName element contains the first or given name of the person. This element is required.						
Diagram							
Type	textField						
Properties	<table> <tr><td>content:</td><td>simple</td></tr> <tr><td>minOccurs:</td><td>1</td></tr> <tr><td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre> <xs:element name="firstName" type="textField" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The firstName element contains the first or given name of the person. This element is required.</xs:documentation> </xs:annotation> </xs:element> </pre>						

Element personnel / person / identity / middleName

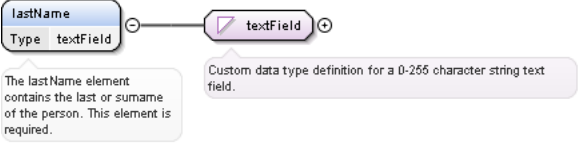
Annotations	The middleName element contains the middle name of the person. This element is optional.						
Diagram							
Type	textField						
Properties	<table> <tr><td>content:</td><td>simple</td></tr> <tr><td>minOccurs:</td><td>0</td></tr> <tr><td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre> <xs:element name="middleName" type="textField" minOccurs="0" maxOccurs="1"> </pre>						

```

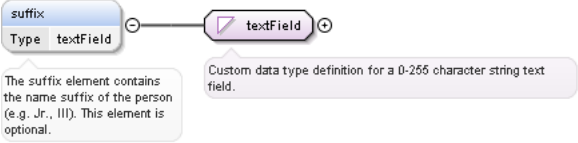
<xs:annotation>
  <xs:documentation>The middleName element contains the middle name of the person. This
  element is optional.</xs:documentation>
</xs:annotation>
</xs:element>

```


Element `personnel / person / identity / lastName`

Annotations	The lastName element contains the last or surname of the person. This element is required.						
Diagram							
Type	textField						
Properties	<table> <tr><td>content:</td><td>simple</td></tr> <tr><td>minOccurs:</td><td>1</td></tr> <tr><td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre> <xs:element name="lastName" type="textField" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The lastName element contains the last or surname of the person. This element is required.</xs:documentation> </xs:annotation> </xs:element> </pre>						

Element `personnel / person / identity / suffix`

Annotations	The suffix element contains the name suffix of the person (e.g. Jr., III). This element is optional.						
Diagram							
Type	textField						
Properties	<table> <tr><td>content:</td><td>simple</td></tr> <tr><td>minOccurs:</td><td>0</td></tr> <tr><td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre> <xs:element name="suffix" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The suffix element contains the name suffix of the person (e.g. Jr., III). This element is optional.</xs:documentation> </xs:annotation> </xs:element> </pre>						

Element `personnel / person / identity / preferredName`

Annotations	The preferredName element contains the nickname or other preferred variation of the person's full name. This element is optional.						
Diagram							
Type	textField						
Properties	<table> <tr><td>content:</td><td>simple</td></tr> <tr><td>minOccurs:</td><td>0</td></tr> <tr><td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre> <xs:element name="preferredName" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The preferredName element contains the nickname or other preferred variation of the person's full name. This element is optional.</xs:documentation> </xs:annotation> </xs:element> </pre>						

```

</xs:annotation>
</xs:element>

```

Element `personnel / person / identity / title`

Annotations	The title element contains the institutional or organizational title of the person (e.g. Assistant Professor, Institute of Applied Ecology Director). This element is optional.						
Diagram							
Type	textField						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre> <xs:element name="title" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The title element contains the institutional or organizational title of the person (e.g. Assistant Professor, Institute of Applied Ecology Director). This element is optional.</xs:documentation> </xs:annotation> </xs:element> </pre>						

Element `personnel / person / identity / primaryEmail`

Annotations	The primaryEmail element contains the primary contact email for use in LTER Network official communication. The LTER email alias will reference this address. This is a required element.						
Diagram							
Type	emailAddress						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre> <xs:element name="primaryEmail" type="emailAddress" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The primaryEmail element contains the primary contact email for use in LTER Network official communication. The LTER email alias will reference this address. This is a required element.</xs:documentation> </xs:annotation> </xs:element> </pre>						

Element `personnel / person / identity / optOut`

Annotations	The optOut element contains a boolean value specifying whether contact information other than name should be omitted from the personnel directory list on the LTER web site. Acceptable values are true, false, 1 (i.e. true) and 0 (i.e. false). This is a required element with a default value of 0 (false).						
Diagram							
Type	xs:boolean						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						

	default: 0
Source	<pre><xs:element name="optOut" type="xs:boolean" minOccurs="1" maxOccurs="1" default="0"> <xs:annotation> <xs:documentation>The optOut element contains a boolean value specifying whether contact information other than name should be omitted from the personnel directory list on the LTER web site. Acceptable values are true, false, 1 (i.e. true) and 0 (i.e. false). This is a required element with a default value of 0 (false).</xs:documentation> </xs:annotation> </xs:element></pre>

Element personnel / person / identity / nameAlias

Annotations	The nameAlias element contains alternative full names under which the person is or has been known for use in directory searches (e.g. name prior to marriage, divorce or name change). This is an optional element and it can be repeated as necessary.						
Diagram							
Type	textField						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>unbounded</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<pre><xs:element name="nameAlias" type="textField" minOccurs="0" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The nameAlias element contains alternative full names under which the person is or has been known for use in directory searches (e.g. name prior to marriage, divorce or name change). This is an optional element and it can be repeated as necessary.</xs:documentation> </xs:annotation> </xs:element></pre>						

Element personnel / person / roleList

Annotations	The roleList element contains descriptions of LTER Network roles held by the person at one or more LTER sites. This element is optional, but it cannot be repeated more than once and if used then it must include one or more role elements.						
Diagram							
Properties	<table> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	role+						
Children	role						
Instance	<pre><roleList> <role>{1,unbounded}</role> </roleList></pre>						
Source	<pre><xs:element name="roleList" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The roleList element contains descriptions of LTER Network roles held by the person at one or more LTER sites. This element is optional, but it cannot be repeated more than once and if used then it must include one or more role elements.</ xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="role" minOccurs="1" maxOccurs="unbounded"> <xs:annotation></pre>						

```

<xs:documentation>The role element contains elements describing a LTER Network
role held by the person. This is a required element that can be repeated as many times as
appropriate. Note that only one active role of type nsf should be assigned per site for
each person element.</xs:documentation>
</xs:annotation>
<xs:complexType>
  <xs:sequence>
    <xs:element name="roleID" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The roleID element contains an unsigned integer
representing the personnel database ID of the role record for a person. This is a
required element that cannot be repeated. For new roles to be added to the database, use
a roleID of 0.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:integer">
            <xs:minInclusive value="0"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="roleType" minOccurs="1" maxOccurs="1">
        <xs:annotation>
          <xs:documentation>The roleType element contains a role type from a
controlled vocabulary of NSF roles or local roles defined in the LTER Personnel
Database. This is a required element that cannot be repeated.</xs:documentation>
          </xs:annotation>
          <xs:complexType>
            <xs:simpleContent>
              <xs:extension base="textField">
                <xs:attribute name="type" use="required">
                  <xs:annotation>
                    <xs:documentation>The type attribute specifies the type or scope
of the roleType. Allowed values are "nsf" for pre-defined NSF roles and "local" for site-
defined and network-wide roles in the Personnel Database.</xs:documentation>
                  </xs:annotation>
                  <xs:simpleType>
                    <xs:restriction base="xs:string">
                      <xs:enumeration value="nsf"/>
                      <xs:enumeration value="local"/>
                    </xs:restriction>
                  </xs:simpleType>
                </xs:attribute>
              </xs:extension>
            </xs:simpleContent>
          </xs:complexType>
        </xs:element>
        <xs:element name="siteAcronym" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The siteAcronym element contains a 3-letter acronym
specifying the LTER site at which the person holds this role. For network-wide roles not
associated with a specific site, use the siteAcronym NWK. This is a required element that
cannot be repeated.</xs:documentation>
            </xs:annotation>
            <xs:simpleType>
              <xs:restriction base="xs:string">
                <xs:length value="3"/>
              </xs:restriction>
            </xs:simpleType>
          </xs:element>
          <xs:element name="beginDate" type="xs:date" minOccurs="0" maxOccurs="1">
            <xs:annotation>
              <xs:documentation>The beginDate element contains the beginning date of the
person's participation in the role. This element is optional but highly recommended when
known.</xs:documentation>
            </xs:annotation>
            </xs:element>
            <xs:element name="endDate" type="xs:date" minOccurs="0" maxOccurs="1">
              <xs:annotation>
                <xs:documentation>The endDate element contains the ending date of the
person's participation in the role. This element is optional but highly recommended when
known, and should agree with the value of the isActive element value (i.e. endDate in
the past when isActive = false, endDate empty or in the future when isActive = true).</
xs:documentation>
              </xs:annotation>
              </xs:element>
              <xs:element name="isActive" type="xs:boolean" minOccurs="1" maxOccurs="1">
                <xs:annotation>
                  <xs:documentation>The isActive element contains a boolean value indicating
whether or not the person is currently active in the role. Possible values are true,
false, 1 (i.e. true) or 0 (i.e. false). This element is required, and note that only one
combination of roleType and siteAcronym should have isActive of true for the same person.
Note that this element takes precedence over endDate for determining status of the role
if they disagree.</xs:documentation>
                </xs:annotation>

```

```

        </xs:annotation>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>

```

Element personnel / person / roleList / role

Annotations	The role element contains elements describing a LTER Network role held by the person. This is a required element that can be repeated as many times as appropriate. Note that only one active role of type nsf should be assigned per site for each person element.						
Diagram	<p>The role element contains elements describing a LTER Network role held by the person. This is a required element that...</p> <ul style="list-style-type: none"> roleID Type: restriction of 'xs:integer' The roleID element contains an unsigned integer representing the personnel database ID of the role record for a person.... roleType Type: extension of 'textField' The roleType element contains a role type from a controlled vocabulary of NSF roles or local roles defined in the LTER... siteAcronym Type: restriction of 'xs:string' The siteAcronym element contains a 3-letter acronym specifying the LTER site at which the person holds this role. For... beginDate Type: xs:date The beginDate element contains the beginning date of the person's participation in the role. This element is optional... endDate Type: xs:date The endDate element contains the ending date of the person's participation in the role. This element is optional but... isActive Type: xs:boolean The isActive element contains a boolean value indicating whether or not the person is currently active in the role.... 						
Properties	<table> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>unbounded</td></tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	unbounded
content:	complex						
minOccurs:	1						
maxOccurs:	unbounded						
Model	roleID , roleType , siteAcronym , beginDate{0,1} , endDate{0,1} , isActive						
Children	beginDate, endDate, isActive, roleID, roleType, siteAcronym						
Instance	<pre> <role> <roleID>{1,1}</roleID> <roleType type="">{1,1}</roleType> <siteAcronym>{1,1}</siteAcronym> <beginDate>{0,1}</beginDate> <endDate>{0,1}</endDate> <isActive>{1,1}</isActive> </role> </pre>						
Source	<pre> <xs:element name="role" minOccurs="1" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The role element contains elements describing a LTER Network role held by the person. This is a required element that can be repeated as many times as appropriate. Note that only one active role of type nsf should be assigned per site for each person element.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="roleID" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The roleID element contains an unsigned integer representing the personnel database ID of the role record for a person. This is a required element that cannot be repeated. For new roles to be added to the database, use a roleID of 0.</xs:documentation> </xs:annotation> </xs:element> </xs:sequence> </xs:complexType> </xs:element> </pre>						

```

</xs:annotation>
<xs:simpleType>
  <xs:restriction base="xs:integer">
    <xs:minInclusive value="0"/>
  </xs:restriction>
</xs:simpleType>
</xs:element>
<xs:element name="roleType" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The roleType element contains a role type from a controlled
vocabulary of NSF roles or local roles defined in the LTER Personnel Database. This is a
required element that cannot be repeated.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:simpleContent>
      <xs:extension base="textField">
        <xs:attribute name="type" use="required">
          <xs:annotation>
            <xs:documentation>The type attribute specifies the type or scope of the
roleType. Allowed values are "nsf" for pre-defined NSF roles and "local" for site-defined
and network-wide roles in the Personnel Database.</xs:documentation>
          </xs:annotation>
        </xs:attribute>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>
</xs:element>
<xs:element name="siteAcronym" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The siteAcronym element contains a 3-letter acronym specifying
the LTER site at which the person holds this role. For network-wide roles not associated
with a specific site, use the siteAcronym NWK. This is a required element that cannot be
repeated.</xs:documentation>
  </xs:annotation>
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:length value="3"/>
    </xs:restriction>
  </xs:simpleType>
</xs:element>
<xs:element name="beginDate" type="xs:date" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The beginDate element contains the beginning date of the
person's participation in the role. This element is optional but highly recommended when
known.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="endDate" type="xs:date" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The endDate element contains the ending date of the person's
participation in the role. This element is optional but highly recommended when known,
and should agree with the value of the isActive element value (i.e. endDate in the
past when isActive = false, endDate empty or in the future when isActive = true).</
xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="isActive" type="xs:boolean" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The isActive element contains a boolean value indicating
whether or not the person is currently active in the role. Possible values are true,
false, 1 (i.e. true) or 0 (i.e. false). This element is required, and note that only one
combination of roleType and siteAcronym should have isActive of true for the same person.
Note that this element takes precedence over endDate for determining status of the role
if they disagree.</xs:documentation>
  </xs:annotation>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>

```

Element personnel / person / roleList / role / roleID

Annotations	The roleID element contains an unsigned integer representing the personnel database ID of the role record for a person. This is a required element that cannot be repeated. For new roles to be added to the database, use a roleID of 0.
-------------	---

Diagram	<p>The roleID element contains an unsigned integer representing the personnel database ID of the role record for a person....</p>						
Type	restriction of xs:integer						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre><xs:element name="roleID" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The roleID element contains an unsigned integer representing the personnel database ID of the role record for a person. This is a required element that cannot be repeated. For new roles to be added to the database, use a roleID of 0.</ </xs:annotation> <xs:simpleType> <xs:restriction base="xs:integer"> <xs:minInclusive value="0"/> </xs:restriction> </xs:simpleType> </xs:element></pre>						

Element personnel / person / roleList / role / roleType

Annotations	The roleType element contains a role type from a controlled vocabulary of NSF roles or local roles defined in the LTER Personnel Database. This is a required element that cannot be repeated.														
Diagram	<p>The diagram illustrates the structure of the <code>roleType</code> element. It is a complex type that extends the <code>textField</code> type. A callout explains that <code>roleType</code> contains a role type from a controlled vocabulary of NSF roles or local roles defined in the LTER Personnel Database. Another callout describes the <code>@type</code> attribute, which specifies the type or scope of the <code>roleType</code>, with allowed values being 'nsf' for pre-defined NSF roles and 'local' for site-defined and network-wide roles in the Personnel Database.</p>														
Type	extension of textField														
Type hierarchy	<ul style="list-style-type: none">xs:string<ul style="list-style-type: none">textField<ul style="list-style-type: none">roleType														
Properties	<table><tr><td>content:</td><td>complex</td></tr><tr><td>minOccurs:</td><td>1</td></tr><tr><td>maxOccurs:</td><td>1</td></tr></table>					content:	complex	minOccurs:	1	maxOccurs:	1				
content:	complex														
minOccurs:	1														
maxOccurs:	1														
Attributes	<table><thead><tr><th>QName</th><th>Type</th><th>Fixed</th><th>Default</th><th>Use</th></tr></thead><tbody><tr><td>type</td><td>restriction of xs:string</td><td></td><td></td><td>required</td></tr></tbody></table>	QName	Type	Fixed	Default	Use	type	restriction of xs:string			required	<p>The type attribute specifies the type or scope of the roleType. Allowed values are "nsf" for pre-defined NSF roles and "local" for site-defined and network-wide roles in the Personnel Database.</p>			
QName	Type	Fixed	Default	Use											
type	restriction of xs:string			required											
Source	<pre><xs:element name="roleType" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The roleType element contains a role type from a controlled vocabulary of NSF roles or local roles defined in the LTER Personnel Database. This is a required element that cannot be repeated.</xs:documentation> </xs:annotation> <xs:complexType> <xs:simpleContent> <xs:extension base="textField"> <xs:attribute name="type" use="required"> <xs:documentation>The type attribute specifies the type or scope of the roleType. Allowed values are "nsf" for pre-defined NSF roles and "local" for site-defined and network-wide roles in the Personnel Database.</xs:documentation> </xs:attribute> </xs:extension> </xs:simpleContent> </xs:complexType> </xs:element></pre>														

```

<xs:restriction base="xs:string">
  <xs:enumeration value="nsf"/>
  <xs:enumeration value="local"/>
</xs:restriction>
</xs:simpleType>
</xs:attribute>
</xs:extension>
</xs:simpleContent>
</xs:complexType>
</xs:element>

```

Element `personnel / person / roleList / role / siteAcronym`

Annotations	The siteAcronym element contains a 3-letter acronym specifying the LTER site at which the person holds this role. For network-wide roles not associated with a specific site, use the siteAcronym NWK. This is a required element that cannot be repeated.						
Diagram	<p>The siteAcronym element contains a 3-letter acronym specifying the LTER site at which the person holds this role. For...</p>						
Type	restriction of xs:string						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre> <xs:element name="siteAcronym" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The siteAcronym element contains a 3-letter acronym specifying the LTER site at which the person holds this role. For network-wide roles not associated with a specific site, use the siteAcronym NWK. This is a required element that cannot be repeated.</xs:documentation> </xs:annotation> <xs:simpleType> <xs:restriction base="xs:string"> <xs:length value="3"/> </xs:restriction> </xs:simpleType> </xs:element> </pre>						

Element `personnel / person / roleList / role / beginDate`

Annotations	The beginDate element contains the beginning date of the person's participation in the role. This element is optional but highly recommended when known.						
Diagram	<p>The beginDate element contains the beginning date of the person's participation in the role. This element is optional...</p> <p>Built-in primitive type. The date datatype represents a calendar date.</p>						
Type	xs:date						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre> <xs:element name="beginDate" type="xs:date" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The beginDate element contains the beginning date of the person's participation in the role. This element is optional but highly recommended when known.</xs:documentation> </xs:annotation> </xs:element> </pre>						

Element `personnel / person / roleList / role / endDate`

Annotations	The endDate element contains the ending date of the person's participation in the role. This element is optional but highly recommended when known, and should agree with the value of the isActive element value (i.e. endDate in the past when isActive = false, endDate empty or in the future when isActive = true).
-------------	--

Diagram							
Type	xs:date						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre><xs:element name="endDate" type="xs:date" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The endDate element contains the ending date of the person's participation in the role. This element is optional but highly recommended when known, and should agree with the value of the isActive element value (i.e. endDate in the past when isActive = false, endDate empty or in the future when isActive = true).</ </xs:documentation> </xs:annotation> </xs:element></pre>						

Element `personnel / person / roleList / role / isActive`

Annotations	The isActive element contains a boolean value indicating whether or not the person is currently active in the role. Possible values are true, false, 1 (i.e. true) or 0 (i.e. false). This element is required, and note that only one combination of roleType and siteAcronym should have isActive of true for the same person. Note that this element takes precedence over endDate for determining status of the role if they disagree.						
Diagram							
Type	xs:boolean						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre><xs:element name="isActive" type="xs:boolean" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The isActive element contains a boolean value indicating whether or not the person is currently active in the role. Possible values are true, false, 1 (i.e. true) or 0 (i.e. false). This element is required, and note that only one combination of roleType and siteAcronym should have isActive of true for the same person. Note that this element takes precedence over endDate for determining status of the role if they disagree.</xs:documentation> </xs:annotation> </xs:element></pre>						

Element `personnel / person / contactInfoList`

Annotations	The contactInfoList element contains one or more sets of contact information for the person. This element is optional, but if included cannot be repeated and must include at least one contactInfo element.						
Diagram							
Properties	<table> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	contactInfo+						
Children	contactInfo						
Instance	<code><contactInfoList></code>						

	<pre> <contactInfo>{1,unbounded}</contactInfo> </contactInfoList> </pre>
Source	<pre> <xs:element name="contactInfoList" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The contactInfoList element contains one or more sets of contact information for the person. This element is optional, but if included cannot be repeated and must include at least one contactInfo element.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="contactInfo" minOccurs="1" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The contactInfo element contains one set of contact information for the person, including a descriptive label element and isPrimary boolean element specifying which set of contact information should be used for official LTER communication.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="contactInfoID"> <xs:annotation> <xs:documentation>The contactInfoID element contains an unsigned integer representing the LTER Personnel Database ID of the contact information record. This is a required element. For new sets of contact information, specify 0 for contactInfoID.</ xs:documentation> </xs:annotation> <xs:simpleType> <xs:restriction base="xs:integer"> <xs:minInclusive value="0"/> </xs:restriction> </xs:simpleType> </xs:element> <xs:element name="label" type="textField" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The label element contains a descriptive text label describing the set of contact information for the person (e.g. Primary institutional contact information, Field station address during the summer). This label is intended to convey information to end-users of the LTER directory regarding which contact information is appropriate to use under different circumstances. This is a required element.</ xs:documentation> </xs:annotation> </xs:element> <xs:element name="isPrimary" type="xs:boolean" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The isPrimary element contains a boolean value specifying whether the contact information represents the primary address of the person for official LTER communication. Possible values are true, false, 1 (i.e. true) and 0 (i.e. false). This is a required element.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="beginDate" type="xs:date" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The beginDate element contains the beginning date for the respective contact information. This element is optional but highly recommended when known.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="endDate" type="xs:date" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The endDate element contains the ending date for the respective contact information. This element is optional but highly recommended when known, and should agree with the value of the isActive element value (i.e. endDate in the past when isActive = false, endDate empty or in the future when isActive = true).</ xs:documentation> </xs:annotation> </xs:element> <xs:element name="isActive" type="xs:boolean" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The isActive element contains a boolean value indicating whether or not the contact information is currently active. Possible values are true, false, 1 (i.e. true) and 0 (i.e. false). This is a required element.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="address" type="textField" minOccurs="0" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The address element contains the delivery address for the person (e.g. street address). This element is optional and can be repeated for multiple address lines.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="institution" type="textField" minOccurs="0" maxOccurs="1"> </pre>


```

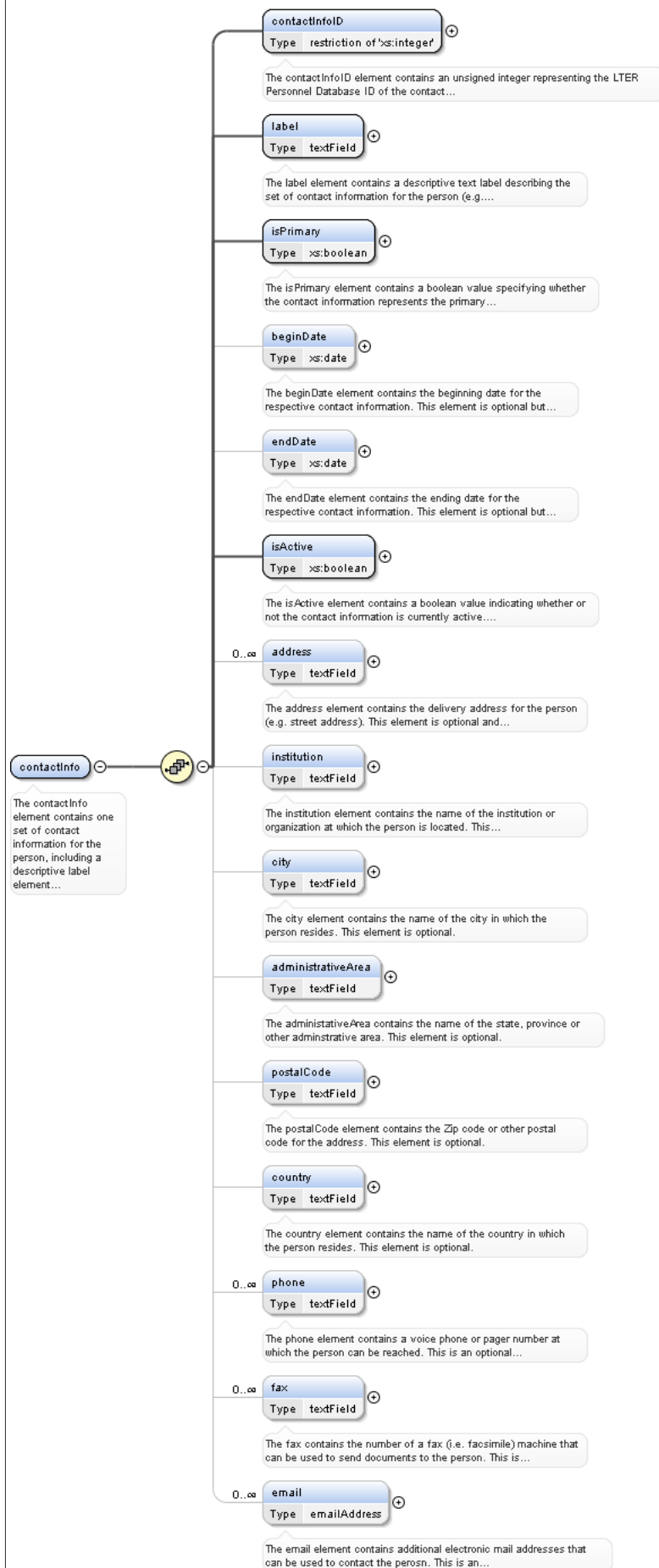
        <xs:annotation>
          <xs:documentation>The institution element contains the name of the
            institution or organization at which the person is located. This element is optional.</
xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="city" type="textField" minOccurs="0" maxOccurs="1">
        <xs:annotation>
          <xs:documentation>The city element contains the name of the city in which
            the person resides. This element is optional.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="administrativeArea" type="textField" minOccurs="0"
maxOccurs="1">
        <xs:annotation>
          <xs:documentation>The administrativeArea contains the name of the state,
            province or other administrative area. This element is optional.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="postalCode" type="textField" minOccurs="0" maxOccurs="1">
        <xs:annotation>
          <xs:documentation>The postalCode element contains the Zip code or other
            postal code for the address. This element is optional.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="country" type="textField" minOccurs="0" maxOccurs="1">
        <xs:annotation>
          <xs:documentation>The country element contains the name of the country in
            which the person resides. This element is optional.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="phone" type="textField" minOccurs="0" maxOccurs="unbounded">
        <xs:annotation>
          <xs:documentation>The phone element contains a voice phone or pager number
            at which the person can be reached. This is an optional element that can be repeated as
            many times as appropriate.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="fax" type="textField" minOccurs="0" maxOccurs="unbounded">
        <xs:annotation>
          <xs:documentation>The fax contains the number of a fax (i.e. facsimile)
            machine that can be used to send documents to the person. This is an optional element
            that can be repeated as many times as appropriate.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="email" type="emailAddress" minOccurs="0"
maxOccurs="unbounded">
        <xs:annotation>
          <xs:documentation>The email element contains additional electronic mail
            addresses that can be used to contact the perosn. This is an optional element that can be
            repeated as many times as appropriate.</xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

Element personnel / person / contactInfoList / contactInfo

Annotations	The contactInfo element contains one set of contact information for the person, including a descriptive label element and isPrimary boolean element specifying which set of contact information should be used for official LTER communication.
-------------	---

Diagram



Properties	content: complex
	minOccurs: 1
	maxOccurs: unbounded
Model	contactInfoID , label , isPrimary , beginDate{0,1} , endDate{0,1} , isActive , address* , institution{0,1} , city{0,1} , administrativeArea{0,1} , postalCode{0,1} , country{0,1} , phone* , fax* , email*
Children	address, administrativeArea, beginDate, city, contactInfoID, country, email, endDate, fax, institution, isActive, isPrimary, label, phone, postalCode
Instance	<pre> <contactInfo> <contactInfoID>{1,1}</contactInfoID> <label>{1,1}</label> <isPrimary>{1,1}</isPrimary> <beginDate>{0,1}</beginDate> <endDate>{0,1}</endDate> <isActive>{1,1}</isActive> <address>{0,unbounded}</address> <institution>{0,1}</institution> <city>{0,1}</city> <administrativeArea>{0,1}</administrativeArea> <postalCode>{0,1}</postalCode> <country>{0,1}</country> <phone>{0,unbounded}</phone> <fax>{0,unbounded}</fax> <email>{0,unbounded}</email> </contactInfo> </pre>
Source	<pre> <xs:element name="contactInfo" minOccurs="1" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The contactInfo element contains one set of contact information for the person, including a descriptive label element and isPrimary boolean element specifying which set of contact information should be used for official LTER communication.</xs:documentation> </xs:annotation> <xs:complexType> <xs:sequence> <xs:element name="contactInfoID"> <xs:annotation> <xs:documentation>The contactInfoID element contains an unsigned integer representing the LTER Personnel Database ID of the contact information record. This is a required element. For new sets of contact information, specify 0 for contactInfoID.</ xs:documentation> </xs:annotation> <xs:simpleType> <xs:restriction base="xs:integer"> <xs:minInclusive value="0"/> </xs:restriction> </xs:simpleType> </xs:element> <xs:element name="label" type="textField" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The label element contains a descriptive text label describing the set of contact information for the person (e.g. Primary institutional contact information, Field station address during the summer). This label is intended to convey information to end-users of the LTER directory regarding which contact information is appropriate to use under different circumstances. This is a required element.</ xs:documentation> </xs:annotation> </xs:element> <xs:element name="isPrimary" type="xs:boolean" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The isPrimary element contains a boolean value specifying whether the contact information represents the primary address of the person for official LTER communication. Possible values are true, false, 1 (i.e. true) and 0 (i.e. false). This is a required element.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="beginDate" type="xs:date" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The beginDate element contains the beginning date for the respective contact information. This element is optional but highly recommended when known.</xs:documentation> </xs:annotation> </xs:element> <xs:element name="endDate" type="xs:date" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The endDate element contains the ending date for the respective contact information. This element is optional but highly recommended when known, and should agree with the value of the isActive element value (i.e. endDate in the past when isActive = false, endDate empty or in the future when isActive = true).</ xs:documentation> </xs:annotation> </xs:element> </xs:sequence> </xs:complexType> </xs:element> </pre>

```

</xs:annotation>
</xs:element>
<xs:element name="isActive" type="xs:boolean" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The isActive element contains a boolean value indicating
    whether or not the contact information is currently active. Possible values are true,
    false, 1 (i.e. true) and 0 (i.e. false). This is a required element.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="address" type="textField" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The address element contains the delivery address for the
    person (e.g. street address). This element is optional and can be repeated for multiple
    address lines.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="institution" type="textField" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The institution element contains the name of the
    institution or organization at which the person is located. This element is optional.</
    xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="city" type="textField" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The city element contains the name of the city in which the
    person resides. This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="administrativeArea" type="textField" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The administrativeArea contains the name of the state, province
    or other administrative area. This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="postalCode" type="textField" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The postalCode element contains the Zip code or other postal
    code for the address. This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="country" type="textField" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The country element contains the name of the country in which
    the person resides. This element is optional.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="phone" type="textField" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The phone element contains a voice phone or pager number at
    which the person can be reached. This is an optional element that can be repeated as many
    times as appropriate.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="fax" type="textField" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The fax contains the number of a fax (i.e. facsimile) machine
    that can be used to send documents to the person. This is an optional element that can be
    repeated as many times as appropriate.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="email" type="emailAddress" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The email element contains additional electronic mail
    addresses that can be used to contact the person. This is an optional element that can be
    repeated as many times as appropriate.</xs:documentation>
  </xs:annotation>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>

```

Element personnel / person / contactInfoList / contactInfo / contactInfoID

Annotations	The contactInfoID element contains an unsigned integer representing the LTER Personnel Database ID of the contact information record. This is a required element. For new sets of contact information, specify 0 for contactInfoID.
-------------	---

Diagram	
Type	restriction of xs:integer
Properties	content: simple
Source	<pre> <xs:element name="contactInfoID"> <xs:annotation> <xs:documentation>The contactInfoID element contains an unsigned integer representing the LTER Personnel Database ID of the contact information record. This is a required element. For new sets of contact information, specify 0 for contactInfoID.</ xs:documentation> </xs:annotation> <xs:simpleType> <xs:restriction base="xs:integer"> <xs:minInclusive value="0"/> </xs:restriction> </xs:simpleType> </xs:element> </pre>

Element personnel / person / contactInfoList / contactInfo / label

Annotations	The label element contains a descriptive text label describing the set of contact information for the person (e.g. Primary institutional contact information, Field station address during the summer). This label is intended to convey information to end-users of the LTER directory regarding which contact information is appropriate to use under different circumstances. This is a required element.
Diagram	
Type	textField
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<pre> <xs:element name="label" type="textField" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The label element contains a descriptive text label describing the set of contact information for the person (e.g. Primary institutional contact information, Field station address during the summer). This label is intended to convey information to end-users of the LTER directory regarding which contact information is appropriate to use under different circumstances. This is a required element.</ xs:documentation> </xs:annotation> </xs:element> </pre>

Element personnel / person / contactInfoList / contactInfo / isPrimary

Annotations	The isPrimary element contains a boolean value specifying whether the contact information represents the primary address of the person for official LTER communication. Possible values are true, false, 1 (i.e. true) and 0 (i.e. false). This is a required element.
Diagram	
Type	xs:boolean
Properties	content: simple minOccurs: 1 maxOccurs: 1

Source	<pre><xs:element name="isPrimary" type="xs:boolean" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The isPrimary element contains a boolean value specifying whether the contact information represents the primary address of the person for official LTER communication. Possible values are true, false, 1 (i.e. true) and 0 (i.e. false). This is a required element.</xs:documentation> </xs:annotation> </xs:element></pre>
--------	---

Element `personnel / person / contactInfoList / contactInfo / beginDate`

Annotations	The beginDate element contains the beginning date for the respective contact information. This element is optional but highly recommended when known.						
Diagram							
Type	xs:date						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre><xs:element name="beginDate" type="xs:date" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The beginDate element contains the beginning date for the respective contact information. This element is optional but highly recommended when known.</ xs:documentation> </xs:annotation> </xs:element></pre>						

Element `personnel / person / contactInfoList / contactInfo / endDate`

Annotations	The endDate element contains the ending date for the respective contact information. This element is optional but highly recommended when known, and should agree with the value of the isActive element value (i.e. endDate in the past when isActive = false, endDate empty or in the future when isActive = true).						
Diagram							
Type	xs:date						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre><xs:element name="endDate" type="xs:date" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The endDate element contains the ending date for the respective contact information. This element is optional but highly recommended when known, and should agree with the value of the isActive element value (i.e. endDate in the past when isActive = false, endDate empty or in the future when isActive = true).</ xs:documentation> </xs:annotation> </xs:element></pre>						

Element `personnel / person / contactInfoList / contactInfo / isActive`

Annotations	The isActive element contains a boolean value indicating whether or not the contact information is currently active. Possible values are true, false, 1 (i.e. true) and 0 (i.e. false). This is a required element.
-------------	---

Diagram							
Type	xs:boolean						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre><xs:element name="isActive" type="xs:boolean" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>The isActive element contains a boolean value indicating whether or not the contact information is currently active. Possible values are true, false, 1 (i.e. true) and 0 (i.e. false). This is a required element.</xs:documentation> </xs:annotation> </xs:element></pre>						

Element `personnel / person / contactInfoList / contactInfo / address`

Annotations	The address element contains the delivery address for the person (e.g. street address). This element is optional and can be repeated for multiple address lines.						
Diagram							
Type	textField						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>unbounded</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<pre><xs:element name="address" type="textField" minOccurs="0" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The address element contains the delivery address for the person (e.g. street address). This element is optional and can be repeated for multiple address lines.</xs:documentation> </xs:annotation> </xs:element></pre>						

Element `personnel / person / contactInfoList / contactInfo / institution`

Annotations	The institution element contains the name of the institution or organization at which the person is located. This element is optional.						
Diagram							
Type	textField						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre><xs:element name="institution" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The institution element contains the name of the institution or organization at which the person is located. This element is optional.</xs:documentation> </xs:annotation> </xs:element></pre>						

Element personnel / person / contactInfoList / contactInfo / city

Annotations	The city element contains the name of the city in which the person resides. This element is optional.						
Diagram							
Type	textField						
Properties	<table> <tr><td>content:</td><td>simple</td></tr> <tr><td>minOccurs:</td><td>0</td></tr> <tr><td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre><xs:element name="city" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The city element contains the name of the city in which the person resides. This element is optional.</xs:documentation> </xs:annotation> </xs:element></pre>						

Element personnel / person / contactInfoList / contactInfo / administrativeArea

Annotations	The administrativeArea contains the name of the state, province or other administrative area. This element is optional.						
Diagram							
Type	textField						
Properties	<table> <tr><td>content:</td><td>simple</td></tr> <tr><td>minOccurs:</td><td>0</td></tr> <tr><td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre><xs:element name="administrativeArea" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The administrativeArea contains the name of the state, province or other administrative area. This element is optional.</xs:documentation> </xs:annotation> </xs:element></pre>						

Element personnel / person / contactInfoList / contactInfo / postalCode

Annotations	The postalCode element contains the Zip code or other postal code for the address. This element is optional.						
Diagram							
Type	textField						
Properties	<table> <tr><td>content:</td><td>simple</td></tr> <tr><td>minOccurs:</td><td>0</td></tr> <tr><td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre><xs:element name="postalCode" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The postalCode element contains the Zip code or other postal code for the address. This element is optional.</xs:documentation> </xs:annotation> </xs:element></pre>						

Element personnel / person / contactInfoList / contactInfo / country

Annotations	The country element contains the name of the country in which the person resides. This element is optional.						
Diagram							
Type	textField						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre><xs:element name="country" type="textField" minOccurs="0" maxOccurs="1"> <xs:annotation> <xs:documentation>The country element contains the name of the country in which the person resides. This element is optional.</xs:documentation> </xs:annotation> </xs:element></pre>						

Element personnel / person / contactInfoList / contactInfo / phone

Annotations	The phone element contains a voice phone or pager number at which the person can be reached. This is an optional element that can be repeated as many times as appropriate.						
Diagram							
Type	textField						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>unbounded</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<pre><xs:element name="phone" type="textField" minOccurs="0" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The phone element contains a voice phone or pager number at which the person can be reached. This is an optional element that can be repeated as many times as appropriate.</xs:documentation> </xs:annotation> </xs:element></pre>						

Element personnel / person / contactInfoList / contactInfo / fax

Annotations	The fax contains the number of a fax (i.e. facsimile) machine that can be used to send documents to the person. This is an optional element that can be repeated as many times as appropriate.						
Diagram							
Type	textField						
Properties	<table> <tr> <td>content:</td><td>simple</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>unbounded</td></tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<pre><xs:element name="fax" type="textField" minOccurs="0" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The fax contains the number of a fax (i.e. facsimile) machine that can be used to send documents to the person. This is an optional element that can be repeated as many times as appropriate.</xs:documentation> </xs:annotation> </xs:element></pre>						

</xs:element>

Element personnel / person / contactInfoList / contactInfo / email

Annotations	The email element contains additional electronic mail addresses that can be used to contact the perosn. This is an optional element that can be repeated as many times as appropriate.
Diagram	
Type	emailAddress
Properties	content: simple minOccurs: 0 maxOccurs: unbounded
Source	<pre><xs:element name="email" type="emailAddress" minOccurs="0" maxOccurs="unbounded"> <xs:annotation> <xs:documentation>The email element contains additional electronic mail addresses that can be used to contact the perosn. This is an optional element that can be repeated as many times as appropriate.</xs:documentation> </xs:annotation> </xs:element></pre>

Simple Type(s)**Simple Type textField**

Annotations	Custom data type definition for a 0-255 character string text field.
Diagram	
Type	restriction of xs:string
Used by	Elements personnel/person/contactInfoList/contactInfo/address, personnel/person/contactInfoList/contactInfo/administrativeArea, personnel/person/contactInfoList/contactInfo/city, personnel/person/contactInfoList/contactInfo/country, personnel/person/contactInfoList/contactInfo/fax, personnel/person/contactInfoList/contactInfo/institution, personnel/person/contactInfoList/contactInfo/label, personnel/person/contactInfoList/contactInfo/phone, personnel/person/contactInfoList/contactInfo/postalCode, personnel/person/identity/firstName, personnel/person/identity/lastName, personnel/person/identity/middleName, personnel/person/identity/nameAlias, personnel/person/identity/preferredName, personnel/person/identity/prefix, personnel/person/identity/suffix, personnel/person/identity/title, personnel/person/roleList/role/roleType
Source	<pre><xs:simpleType name="textField"> <xs:annotation> <xs:documentation>Custom data type definition for a 0-255 character string text field.</xs:documentation> </xs:annotation> <xs:restriction base="xs:string"> <xs:minLength value="0"/> <xs:maxLength value="255"/> </xs:restriction> </xs:simpleType></pre>

Simple Type emailAddress

Annotations	Custom data type definition for an email address.
Diagram	
Type	restriction of xs:string
Used by	Elements personnel/person/contactInfoList/contactInfo/email, personnel/person/identity/primaryEmail

Source	<pre> <xs:simpleType name="emailAddress"> <xs:annotation> <xs:documentation>Custom data type definition for an email address.</xs:documentation> </xs:annotation> <xs:restriction base="xs:string"> <xs:pattern value="^[^@]+@[^\.]+\.\.+" /> </xs:restriction> </xs:simpleType> </pre>
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Attribute(s)

Attribute personnel / person / roleList / role / roleType / @type

Annotations	The type attribute specifies the type or scope of the roleType. Allowed values are "nsf" for pre-defined NSF roles and "local" for site-defined and network-wide roles in the Personnel Database.
Type	restriction of xs:string
Properties	use: required
Used by	Element personnel/person/roleList/role/roleType
Source	<pre> <xs:attribute name="type" use="required"> <xs:annotation> <xs:documentation>The type attribute specifies the type or scope of the roleType. Allowed values are "nsf" for pre-defined NSF roles and "local" for site-defined and network-wide roles in the Personnel Database.</xs:documentation> </xs:annotation> <xs:simpleType> <xs:restriction base="xs:string"> <xs:enumeration value="nsf"/> <xs:enumeration value="local"/> </xs:restriction> </xs:simpleType> </xs:attribute> </pre>