

Examples

Triple-S version 3.0 Metadata File Example 1 (fixed format raw data)

The example defines a survey with twelve variables each demonstrating one or more v3.0 features as annotated...

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE sss PUBLIC "-//triple-s//DTD Survey Interchange v3.0//EN"
    "http://www.triple-s.org/dtd/sss_v30.dtd">

<sss version="3.0" modes="interview analysis">
<!-- introducing modes used to specialise texts at Q2 -->

<date>14 April 2016</date>
<time>16:00</time>
<origin>SurveyProg v1.3.05</origin>
<user>User Site</user>

<survey>
  <name>SP5201-1</name>
  <title>Historic House Exit Survey<br/>First Wave</title>

  <record ident="V">

    <variable ident="1" type="quantity" use="serial">
<!-- serial variable with long name -->
      <name>RESPONDENT_ID</name>
      <label>Respondent ID</label>
      <position start="1" finish="6"/>
      <values>
        <range from="000001" to="999999" />
      </values>
    </variable>

    <variable ident="2" type="date">
<!-- date variable -->
      <name>Q1.a</name>
      <label>Date of visit</label>
      <position start="7" finish="14"/>
      <values>
        <range from="20160101" to="20161231" />
      </values>
    </variable>

    <variable ident="3" type="time">
<!-- time variable -->
```

```

    <name>Q1.b</name>
    <label>Time of visit</label>
    <position start="15" finish="20"/>
    <!-- implicit range from="000000" to="235959" -->
  </variable>

  <variable ident="4" type="single">
    <name>Q2</name>
    <label>Frequency of visit
      <text mode="interview">Have you visited here before?</text>
      <text mode="analysis">Visited before</text>
    </label>
    <!-- specialised texts -->
    <position start="21" />
    <values>
      <value code="0">No, this is the first visit</value>
      <value code="1">I have visited before within the
year</value>
      <value code="2">I visited before that</value>
    </values>
    <!-- value list including code 0 -->
  </variable>

  <variable ident="5" type="multiple">
    <name>Q3</name>
    <label>Attractions visited</label>
    <position start="22" finish="30" />
    <values>
      <value code="1">Sherwood Forest</value>
      <value code="2">Nottingham Castle</value>
      <value code="3">&quot;Friar Tuck&quot; Restaurant</value>
      <!-- quotation marks within label fields -->
      <value code="4">&quot;Maid Marion&quot; Cafe</value>
      <value code="5">Mining museum</value>
      <value code="9">Other</value>
    </values>
  </variable>

  <variable ident="6" type="character">
    <name>Q3.a</name>
    <label>Other attractions visited</label>
    <position start="31" finish="60" />
    <size>30</size>
  </variable>

  <variable ident="7" type="single">
    <name>Q4</name>
    <label>Overall impression</label>
    <position start="61" />
    <values>
      <!-- scores -->
      <value code="1" score="2">Very Good</value>
      <value code="2" score="1">Good</value>
      <value code="3" score="0">OK</value>
      <value code="4" score="-1">Poor</value>
      <value code="5" score="-2">Very poor</value>
      <value code="9">DK/NS</value>
    </values>
  </variable>

```

```

        <!-- missing score -->
    </values>
</variable>

<variable id="8" type="multiple">
    <name>Q5</name>
    <label>Two favourite attractions visited</label>
    <position start="62" finish="63" />
    <spread subfields="2" />
    <!--same answer list as Q3-->
    <values>
        <value code="1">Sherwood Forest</value>
        <value code="2">Nottingham Castle</value>
        <value code="3">&quot;Friar Tuck&quot; Restaurant</value>
        <value code="4">&quot;Maid Marion&quot; Cafe</value>
        <value code="5">Mining museum</value>
        <value code="9">Other</value>
    </values>
</variable>

<variable id="9" type="quantity">
    <name>Q6</name>
    <label>Miles travelled</label>
    <position start="64" finish="66" />
    <values>
        <range from="1" to="499" />
        <value code="500">500 or more</value>
        <value code="999">Not stated</value>
    </values>
    <!-- labelled values on a quantity -->
</variable>

<variable id="10" type="logical">
    <name>Q7</name>
    <label>Would come again</label>
    <position start="67" />
</variable>

<variable id="11" type="single" format="literal">
    <name>Q8</name>
    <label>When is that most likely to be</label>
    <position start="68" />
    <filter>Q7</filter>
    <!-- filter -->
    <values>
        <value code="A">Within 3 months</value>
        <value code="B">Between 3 months and 1 year</value>
        <value code="C">More than 1 years time</value>
    </values>
    <!-- literal code values -->
</variable>

<variable id="999999" type="quantity" use="weight">
<!-- weight variable -->
<!-- large magnitude ident -->
    <name>WT</name>
    <label>Record weight</label>

```

```
        <position start="69" finish="75"/>
        <values>
          <range from="0.0000" to="99.9999"/>
        </values>
      </variable>

    </record>

  </survey>

</sss>
```

The example Data File is intended to be used in conjunction with the Metadata File above.

```
520001201605041120000101010001Nottingham Goose Fair      251 251A 1.1310
520002201605061343002010000000                          92 1000 0.9921
520003201605031805001110000001"Heritage" Zone           1929991C 1.0089
```

Interpretation of fixed data format

The Triple-S specification file applied to the above Data File should result in the following interpretations.

	Respondent 1	Respondent 2	Respondent 3
RESPONDENT_ID	520001	520002	520003
Date of visit	May 4 th , 2016	May 6 th , 2016	May 3 rd , 2016
Time of visit	11:20 am	1:43 pm	6:05 pm
Visited before	No, first visit	Visited before that	Visited before within the year
Attractions visited	Sherwood Forest, "Friar Tuck" Restaurant, Mining Museum, Other	Nottingham Castle	Sherwood Forest, Nottingham Castle, Other
Other attractions	Nottingham Goose Fair	(no reply)	"Heritage" Zone
Overall impression	Good	DK/NS	Very Good

Two favourite attractions	Mining Museum, Sherwood Forest	Nottingham Castle	Other, Nottingham Castle
Miles travelled	25	100	Not stated
Would come again	true	false	true
When come again	Within 3 months	(not asked)	More than 1 year
Record weight	1.131	0.9921	1.0089

Triple-S version 3.0 Metadata File Example 2 (csv raw data)

The example defines a survey with twelve variables each demonstrating one or more v3.0 features as annotated...

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE sss PUBLIC "-//triple-s//DTD Survey Interchange v3.0//EN"
    "http://www.triple-s.org/dtd/sss_v30.dtd">

<sss version="3.0" modes="interview analysis">
<!-- introducing modes used to specialise texts at Q2 -->

<date>14 April 2016</date>
<time>16:00</time>
<origin>SurveyProg v1.3.05</origin>
<user>User Site</user>

<survey>
  <name>SP5201-1</name>
  <title>Historic House Exit Survey<br/>First Wave</title>
;   <record ident="V" format="csv" skip="1">
    <!-- csv file spec: skip first record, default name .csv -->

      <variable ident="1" type="quantity" use="serial">
        <!-- serial variable with long name -->
        <name>RESPONDENT_ID</name>
        <label>Respondent ID</label>
        <position start="1"/>
        <values>
          <range from="000001" to="999999" />
        </values>
      </variable>

      <variable ident="2" type="date">
        <!-- date variable -->
        <name>Q1.a</name>
        <label>Date of visit</label>
        <position start="2"/>
        <values>
          <range from="20160101" to="20161231" />
        </values>
      </variable>

      <variable ident="3" type="time">
        <!-- time variable -->
        <name>Q1.b</name>
        <label>Time of visit</label>
```

```

    <position start="3"/>
    <!-- implicit range from="000000" to="235959" -->
</variable>

<variable ident="4" type="single">
  <name>Q2</name>
  <label>Frequency of visit
    <text mode="interview">Have you visited here before?</text>
    <text mode="analysis">Visited before</text>
  </label>
  <!-- specialised texts -->
  <position start="4" />
  <values>
    <value code="0">No, this is the first visit</value>
    <value code="1">I visited before within the year</value>
    <value code="2">I visited before that</value>
  </values>
  <!-- value list including code 0 -->
</variable>

<variable ident="5" type="multiple">
  <name>Q3</name>
  <label>Attractions visited</label>
  <position start="5" />
  <values>
    <value code="1">Sherwood Forest</value>
    <value code="2">Nottingham Castle</value>
    <value code="3">&quot;Friar Tuck&quot; Restaurant</value>
    <!-- quotation marks within label fields -->
    <value code="4">&quot;Maid Marion&quot; Cafe</value>
    <value code="5">Mining museum</value>
    <value code="9">Other</value>
  </values>
</variable>

<variable ident="6" type="character">
  <name>Q3.a</name>
  <label>Other attractions visited</label>
  <position start="7" />
  <!-- positions do not need to be consecutive -->
  <size>30</size>
</variable>

<variable ident="7" type="single">
  <name>Q4</name>
  <label>Overall impression</label>
  <position start="6" />
  <values>
    <!-- scores -->
    <value code="1" score="2">Very Good</value>
    <value code="2" score="1">Good</value>
    <value code="3" score="0">OK</value>
    <value code="4" score="-1">Poor</value>
    <value code="5" score="-2">Very poor</value>
    <value code="9">DK/NS</value>
    <!-- missing score -->
  </values>

```



```
</variable>

<variable ident="8" type="multiple">
  <name>Q5</name>
  <label>Two favourite attractions visited</label>
  <position start="8" />
  <spread subfields="2" width="1" />
  <!-- spread fields must explicitly mention width with csv data -->
  <!-- same answer list as Q3 -->
  <values>
    <value code="1">Sherwood Forest</value>
    <value code="2">Nottingham Castle</value>
    <value code="3">&quot;Friar Tuck&quot; Restaurant</value>
    <value code="4">&quot;Maid Marion&quot; Cafe</value>
    <value code="5">Mining museum</value>
    <value code="9">Other</value>
  </values>
</variable>

<variable ident="9" type="quantity">
  <name>Q6</name>
  <label>Miles travelled</label>
  <position start="9" />
  <values>
    <range from="1" to="499" />
    <value code="500">500 or more</value>
    <value code="999">Not stated</value>
  </values>
  <!-- special values on a quantity -->
</variable>

<variable ident="10" type="logical">
  <name>Q7</name>
  <label>Would come again</label>
  <position start="10" />
</variable>

<variable ident="11" type="single" format="literal">
  <name>Q8</name>
  <label>When is that most likely to be</label>
  <position start="11" />
  <filter>Q7</filter>
  <!-- filter -->
  <values>
    <value code="A">Within 3 months</value>
    <value code="B">Between 3 months and 1 year</value>
    <value code="C">More than 1 years time</value>
  </values>
  <!-- literal code values -->
</variable>

<variable ident="999999" type="quantity" use="weight">
<!-- weight variable -->
<!-- large magnitude ident -->
  <name>WT</name>
  <label>Record weight</label>
  <position start="12" />
```

```
        <values>
          <range from="0.0000" to="99.9999"/>
        </values>
      </variable>
    </record>
  </survey>
</sss>
```

The example Data File is intended to be used in conjunction with the Metadata File above.

```
RESPONDENT_ID,Q1.a,Q1.b,Q2,Q3,Q4,Q3.a,Q5,Q6,Q7,Q8,WT
520001,20160504,112000,0,101010001,2,Nottingham Goose Fair,51,25,1,A,1.131
520002,20160506,134300,2,"010000000",9,,2,100,0,,0.9921
520003,20160503,180500,1,110000001,1,"""Heritage"" Zone",92,999,1,C,1.0089
```

Interpretation of csv data

The Triple-S specification file applied to the above Data File should result in the following interpretations.

	Respondent 1	Respondent 2	Respondent 3
RESPONDENT_ID	520001	520002	520003
Date of visit	May 4 th , 2016	May 6 th , 2016	May 3 rd , 2016
Time of visit	11:20 am	1:43 pm	6:05 pm
Visited before	No, first visit	Visited before that	Visited before within the year
Attractions visited	Sherwood Forest, "Friar Tuck" Restaurant, Mining Museum, Other	Nottingham Castle	Sherwood Forest, Nottingham Castle, Other
Other attractions	Nottingham Goose Fair	(no reply)	"Heritage" Zone
Overall impression	Good	DK/NS	Very Good
Two favourite attractions	Mining Museum, Sherwood Forest	Nottingham Castle	Other, Nottingham Castle

Miles travelled	25	100	Not stated
Would come again	true	false	true
When come again	Within 3 months	(not asked)	More than 1 year
Record weight	1.131	0.9921	1.0089

Triple-S version 3.0 Hierarchy File Example

Part 1: the Hierarchical Definition

The example defines a hierarchical definition for three (household, person and trip) surveys.

Each house has zero, one or more people associated with it and each person has zero, one or more trips associated with them. Indirectly, each trip is also associated with a household (the household of the person making the trip).

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE sss PUBLIC "-//triple-s//DTD Survey Interchange v3.0//EN"
"http://www.triple-s.org/dtd/sss_v30.dtd">

<sss version="3.0">

  <date>14 April 2016</date>
  <time>16:30</time>
  <origin>SurveyProg v1.3.05</origin>
  <user>User Site</user>

  <hierarchy>
    <level ident="hhold" href="householddata.sss" />
    <level ident="person" href="persondata.sss">
      <parent level="hhold" linkvar="hnumber" ordered="yes" />
    </level>
    <level ident="trip" href="tripdata.sss">
      <parent level="person" linkvar="pnumber" ordered="yes" />
    </level>
  </hierarchy>

</sss>
```

Part 2: The Household Survey

The variables within each of the three surveys are described in three independent Triple-S Metadata Files. Respondent data is held in three associated Data Files. The Metadata Files could be *any* version of Triple-S but are illustrated using version 3.0 syntax.

The "householddata.sss" Metadata File

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE sss PUBLIC "-//triple-s//DTD Survey Interchange v3.0//EN"
"http://www.triple-s.org/dtd/sss_v30.dtd">

<sss version="3.0">

<date>14 April 2016</date>
<time>16:31</time>
<origin>SurveyProg v1.3.05</origin>
<user>User Site</user>

<survey>
  <name>PR9012-HOUSEHOLD</name>
  <title>Regional Travel Survey<br/>Households</title>

  <record ident="v">

    <variable ident="1" type="quantity" use="serial">
      <!-- the linkvar has the attribute use="serial" -->
      <name>hnumber</name>
      <label>Household</label>
      <position start="1" finish="6"/>
      <values>
        <range from="000001" to="999999" />
      </values>
    </variable>

    <variable ident="2" type="single">
      <name>htype</name>
      <label>House type</label>
      <position start="7"/>
      <values>
        <value code="1">Flat or Maisonette</value>
        <value code="2">Terraced House</value>
        <value code="3">Semi-detached House</value>
        <value code="4">Detached House</value>
      </values>
    </variable>

    <variable ident="3" type="single">
      <name>hlocation</name>
      <label>Household location</label>
      <position start="8"/>
      <values>
        <value code="1">North</value>
```

```
        <value code="2">South</value>
        <value code="3">East</value>
        <value code="4">West</value>
    </values>
</variable>

</record>
</survey>
</sss>
```

The "householddata.asc" raw Data File

The example Data File is intended to be used in conjunction with the Metadata File above.

```
01000123
01000232
01000313
```

Interpretation of the Household survey data

The Triple-S specification file applied to the above Data File should result in the following interpretations.

	Household 1	Household 2	Household 3
hnumber	010001	010002	010003
htype	Terraced House	Semi-detached House	Flat or Maisonette
hlocation	East	South	East

Part 3: The Person Survey

As before, the variables are described in the Triple-S Metadata File and respondent data is in the associated Data File. The Metadata Files could be *any* version of Triple-S but are illustrated using version 3.0 syntax.

The "persondata.sss" Metadata File

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE sss PUBLIC "-//triple-s//DTD Survey Interchange v3.0//EN"
"http://www.triple-s.org/dtd/sss_v30.dtd">
<sss version="3.0">

<date>14 April 2016</date>
<time>16:31</time>
<origin>SurveyProg v1.3.05</origin>
<user>User Site</user>

<survey>
  <name>PR9012-PERSON</name>
  <title>Regional Travel Survey<br/>Persons</title>

  <record ident="v">
    <variable ident="1" type="quantity">
      <name>hnumber</name>
      <label>Household</label>
      <position start="1" finish="6"/>
      <values>
        <range from="000001" to="999999" />
      </values>
    </variable>
    <variable ident="2" type="quantity" use="serial">
      <name>pnumber</name>
      <label>Person</label>
      <position start="1" finish="8"/>
      <values>
        <range from="00000001" to="99999919" />
      </values>
    </variable>
    <variable ident="3" type="single">
      <name>pgender</name>
      <label>Gender</label>
      <position start="9"/>
      <values>
        <value code="1">Male</value>
        <value code="2">Female</value>
      </values>
    </variable>
    <variable ident="4" type="single">
      <name>page</name>
      <label>Age</label>
      <position start="10"/>
      <values>
        <value code="1">Under 21</value>
```



```

        <value code="2">21 to 45</value>
        <value code="3">46 to 65</value>
        <value code="4">Over 65</value>
    </values>
</variable>
</record>
</survey>
</sss>

```

The "persondata.asc" raw Data File

The example Data File is intended to be used in conjunction with the Metadata File above.

```

0100010122
0100010212
0100020114
0100020223
0100020311
0100030122

```

Interpretation of the Person survey data

The Triple-S specification file applied to the above Data File should result in the following interpretations.

	Household 1		Household 2			Household 3
	Person 1	Person 2	Person 1	Person 2	Person 3	Person 1
hnumber	010001	010001	010002	010002	010002	010003
pnumber	01000101	01000102	01000201	01000202	01000203	01000301
pgender	Female	Male	Male	Female	Male	Female
page	21 to 45	21 to 45	over 65	46 to 65	Under 21	21 to 45

Part 4: The Trip Survey

As before, the variables are described in the Triple-S Metadata File and respondent data is in the associated Data File. The Metadata Files could be *any* version of Triple-S but are illustrated using version 3.0 syntax.

The "tripdata.sss" Metadata File

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE sss PUBLIC "-//triple-s//DTD Survey Interchange v3.0//EN"
"http://www.triple-s.org/dtd/sss_v30.dtd">

<sss version="3.0">

<date>14 April 2016</date>
<time>16:32</time>
<origin>SurveyProg v1.3.05</origin>
<user>User Site</user>

<survey>
  <name>PR9012-TRIP</name>
  <title>Regional Travel Survey<br/>Trips</title>

  <record ident="v">

    <variable ident="1" type="quantity">
      <name>pnumber</name>
      <label>Person</label>
      <position start="1" finish="8"/>
      <values>
        <range from="00000001" to="99999919" />
      </values>
    </variable>

    <variable ident="2" type="single">
      <name>tpurpose</name>
      <label>Trip purpose</label>
      <position start="9"/>
      <values>
        <value code="1">Social, domestic, pleasure</value>
        <value code="2">To or from place of work</value>
        <value code="3">Business</value>
      </values>
    </variable>

    <variable ident="3" type="single">
      <name>tmode</name>
      <label>Modes of travel</label>
      <position start="10" />
      <values>
        <value code="1">Car or van driver</value>
        <value code="2">Car or van passenger</value>
        <value code="3">Bus</value>
        <value code="4">Train</value>
      </values>
    </variable>
  </record>
</survey>
</sss>
```

```
        <value code="5">Cycle</value>
        <value code="6">Other</value>
    </values>
</variable>

</record>
</survey>
</sss>
```

The "tripdata.asc" raw Data File

The example Data File is intended to be used in conjunction with the Metadata File above.

```
0100010113
0100010112
0100010224
0100010232
0100010224
0100010211
0100020121
0100020121
0100020111
0100020312
0100030123
0100030123
```

Interpretation of the Trip survey data

The Triple-S specification file applied to the above Data File should result in the following interpretations.

	Household 1					
	Person 1	Person 1	Person 2	Person 2	Person 2	Person 2
pnumber	01000101	01000101	01000102	01000102	01000102	01000102
tpurpose	Social	Social	Work	Business	Work	Social
tmode	Bus	Car Passenger	Train	Car Passenger	Train	Car Driver

	Household 2				Household 3	
	Person 1	Person 1	Person 1	Person 3	Person 1	Person 1
pnumber	01000201	01000201	01000201	01000203	01000301	01000301
tpurpose	Work	Work	Social	Social	Work	Work
tmode	Car Driver	Car Driver	Car Driver	Car Passenger	Bus	Bus

Organising Hierarchical Imports

Software that is inherently capable of representing hierarchical data structures should have little problem importing and exporting appropriate, separate surveys as outlined in the example.

Software that does not have an in-built hierarchical mechanism could still offer support for hierarchical surveys by generating a survey representing a "flattened" portion (or all) of the hierarchical group of surveys.

Taking the Household, Person, Trip hierarchy described previously, it is possible that a user wants to do analyses of people and the types of housing they live in. That is they need to import and combine elements from both the Household and Person surveys. Doing that with the examples given would result in the following combined survey:

	Household 1		Household 2			Household 3
	Person 1	Person 2	Person 1	Person 2	Person 3	Person 1
Hnumber	010001	010001	010002	010002	010002	010003
Htype	Terraced House	Terraced House	Semi-detached House	Semi-detached House	Semi-detached House	Flat or Maisonette
hlocation	East	East	South	South	South	East
Pnumber	01000101	01000102	01000201	01000202	01000203	01000301
Pgender	Female	Male	Male	Female	Male	Female
Page	21 to 45	21 to 45	over 65	46 to 65	Under 21	21 to 45

An analyst wanting to produce a crosstabulation of say a person's age by the area in which they live would simply ask for a crosstabulation of `page` by `hlocation`. Similarly for other analyses involving "person" variables or combinations of "person" and "household" variables. Although possible, analyses involving just "household" variables would actually be counting or summarising persons and should typically be avoided.

In general, if your software does not directly handle hierarchical structures, provide extended import options which ask for either a list of surveys or a start survey and an end survey. The surveys specified should be interconnected by the `linkvar` variable(s) as appropriate. The import process then results in a survey where records are the most frequently occurring records of the given input surveys and data from other records is duplicated as appropriate (and as outlined above).

