Typed Data Transfer (TDT) User's Guide

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Revision

```
#include "tdt.h"
```

2.1.2 Declarations

2.2.2 tdt_open)

Purpose

`tdt_open()` opens the communication channel speci ed by the connection name

Input (c)Tj 617.5988 0 Td /*e connection (name)Tj 83.53538 0 Td /*e

```
TDTConfig tc  /* The identifier of the */
              /* configuration data */
```

Output parameters

None.

Example

```
tdt_close(tc);
```

2.3   Compiling and linking

2.3.1   Co p Un t i U b a y

The TDT can be compiled as a library, `libtdt.a`. This must

3 Using the TDT in Fortran

3.1 Prerequisites

3.1.1 Declarations

The following declarations are needed:

```
INTEGER tdtstate
INTEGER tdtconfig
```

3.2 User functions

3.2.1 tdt_configure()

Purpose

Read and parse the specified configuration file.

Input parameter

```
C the name of the configuration file
configfilename
```

Output parameter

```
C a parsed copy of the configuration information
tdtconf
```

Example

```
CALL tdt_fconfigure(tdtconf, 'config.xml');
```

3.2.2 tdt_open()

Purpose

tdt_open() opens the communication channel specified by the connection name.

Input parameters

```
C a TDTState variable
tdtstate
C a TDTConfig variable
tdtconf
C the connection name
connection
```

Output parameter

```
C a completed TDTState variable
tdtstate
```

Examples:

```
CALL tdt_fopen_socket (tdtstate, tdtconf, 'client_to_server')
```

3.2.3 tdt_ t)

Puri ose

To write data to the connection given by the TDTState **parameter as per the XML identifer string (parameter "**

C The identifier

3.3   Compiling and

4.7 Example

The following XML

```
<data_desc>
  <decl name="astruct">
    <struct>
      <decl name="anarray">
        <array size="2">int</array></decl>
        <decl name="adouble">double</decl>
    </struct>
  </decl>
</data_desc>
```

represents the C declaration:

```
struct {
  int anarray[2];
  double adouble;
} astruct;
```

5 TDT Con guration les

The con guration les used by TDT are also written in XML.

5.1 <program> tag

The document-level tag for a con guration le is the <program> **tag.**

Attributes: name= abcde , **where** abcde **is an alphanumeric string.**

5.2 <channel> tag

The <channel> **tag sp**

port