

# WorkingWithCompoundKeys

The RDB DAS provides the ability to work with single-column keys as well as keys composed of multiple columns ([compound keys](#)). RDB DAS clients can specify the primary key for a table as well as foreign keys that reference other tables. The primary key for a table can be identified to the DAS via configuration (typically via a configuration xml file). The following is an example config file that defines a compound primary key:

```
<Config xsi:noNamespaceSchemaLocation="http://org.apache.tuscany.das.rdb/config.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

  <Table tableName="ORDERDETAILS">
    <Column columnName="ORDERID" primaryKey="true"/>
    <Column columnName="PRODUCTID" primaryKey="true"/>
  </Table>

</Config>
```

Relationships between tables are in terms of primary keys and foreign keys and so foreign keys can also be compound. The following example illustrates a relationship using a compound foreign key:

```
<Config xsi:noNamespaceSchemaLocation="http://org.apache.tuscany.das.rdb/config.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

  <Table tableName="ORDERDETAILS">
    <Column columnName="ORDERID" primaryKey="true"/>
    <Column columnName="PRODUCTID" primaryKey="true"/>
  </Table>

  <Table tableName="ORDERDETAILSDESC">
    <Column columnName="ID" primaryKey="true"/>
  </Table>

  <Relationship name="orderDetailsDesc" primaryKeyTable="ORDERDETAILS"
    foreignKeyTable="ORDERDETAILSDESC" many="true">
    <KeyPair primaryKeyColumn="ORDERID" foreignKeyColumn="ORDERID" />
    <KeyPair primaryKeyColumn="PRODUCTID" foreignKeyColumn="PRODUCTID" />
  </Relationship>

</Config>
```