A reader recently asked:

> Hi,
>
> We are using Oracle eBS and 9i (XML DB not installed), and need to generate XSDs
> from the client site using SQLPlus. DTDs are currently generated from the client:
> the SQLPlus script calls a database package that creates a bunch of DTDs from a
> table that describes all parameters/tags of the XML in a manager-to-employee-
> nested way. Now, instead of changing the source (1 gazillion lines of code..) to a
> produce XSD syntax, I guess there is pl/sql-usable XSD factory somewhere. Is XML
> DB the way to go?
>
> Obviously I cannot convert the current DTDs to XSDs using say, TRANG, as I want
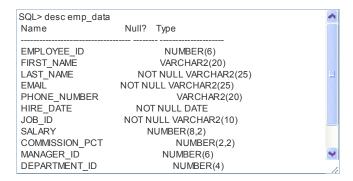> to be able to autogenerate some of the richness of XSD.
>
> Thanx in advance.

I'm not sure exactly what the structures needed are. But if you are using Oracle Types
(or can create them), XML DB offers a very nice tool to create your schemas on the fly. If
your tags and descriptions are stored in a table, you could create your types from that
data and then use this methof of XSD generation.

I'll use the HR schema in my example. I'm going to create an Employee-based type
called EMP_DATA. Here is the command:

```
CREATE OR REPLACE TYPE emp_data
 AS OBJECT (
   EMPLOYEE_ID NUMBER(6),
   FIRST_NAME VARCHAR2(20),
   LAST_NAME VARCHAR2(25),
   EMAIL VARCHAR2(25),
   PHONE_NUMBER VARCHAR2(20),
   HIRE_DATE DATE,
   JOB_ID VARCHAR2(10),
   SALARY NUMBER(8,2),
   COMMISSION_PCT NUMBER(2,2),
   MANAGER_ID NUMBER(6),
   DEPARTMENT_ID NUMBER(4)
);
```

I execute that and do a DESC on it:

```
SQL> desc emp_data
 Name                         Null?    Type
 -------------------------------- ------- --------------------
 EMPLOYEE_ID                           NUMBER(6)
 FIRST_NAME                            VARCHAR2(20)
 LAST_NAME                    NOT NULL VARCHAR2(25)
 EMAIL                        NOT NULL VARCHAR2(25)
 PHONE_NUMBER                          VARCHAR2(20)
 HIRE_DATE                    NOT NULL DATE
 JOB_ID                       NOT NULL VARCHAR2(10)
 SALARY                                NUMBER(8,2)
 COMMISSION_PCT                        NUMBER(2,2)
 MANAGER_ID                            NUMBER(6)
 DEPARTMENT_ID                         NUMBER(4)
```

And then I run the DBMS_XMLSCHEMA.generateSchema function against it: