

generate commands automatically, and specifies the key columns in the CustomKey element on the CustomTable.

[0130] 15. StoredProcedures

[0131] This element serves as a container for zero or more StoredProcedure elements.

[0132] 16. StoredProcedure

[0133] This element represents a Stored Procedure in the database.

| Tag | Card | Comment |
|---------------------|------|---|
| <u>Attributes</u> | | |
| Name | Req | The name of the Stored Procedure. See the naming rules hereinabove for details. |
| <u>Sub-Elements</u> | | |
| Parameters | 0-1 | Container for parameters of this stored procedure. |

EXAMPLE

[0134]

```
<rsd:StoredProcedure Name="sp_Insert__Order">
  <rsd:Parameters>
    ...
  </rsd:Parameters>
</rsd:StoredProcedure>
```

[0135] 17. UserDefinedFunctions

[0136] This element serves as a container for one or more UserDefinedFunction elements.

[0137] 18. UserDefinedFunction

[0138] This element represents a User Defined Function (UDF) defined in the database.

| Tag | Card | Comment |
|---------------------|------|---|
| <u>Attributes</u> | | |
| Name | Req | The UDF name. |
| <u>Sub-Elements</u> | | |
| Columns | 1 | This is a restricted Column type that only allows the name and the type of the column to be specified. It does not allow additional annotations such as AutoIncrement, Default, etc. The columns describe the result set that is returned from the UDF. |
| Parameters | 0-1 | Container for parameters of this stored UDF. |

EXAMPLE

[0139]

```
<rsd:UserDefinedFunction Name="udf_get_Customers">
  <rsd:Columns>
```

-continued

```
...
</rsd:Columns>
<rsd:Parameters>
...
</rsd:Parameters>
</rsd:UserDefinedFunction>
```

[0140] 19. Columns

[0141] This element serves as a container for one or more Column elements.

[0142] 20. Column

[0143] This element represents a Column in a table. A slightly more restrictive version of the xsd:type defined below that allows only @Name and type information can be used to describe the columns of a view, custom table, and result set from a UDF.

| <u>Attributes</u> | | |
|-------------------|------|---|
| Tag | Card | Comment |
| Name | Req | Column name |
| AutoIncrement | Opt | Can be "true" or "false". "false" is the default. |
| AllowDBNull | Opt | Can be "true" or "false". "false" is the default. |
| ReadOnly | Opt | Can be "true" or "false". "false" is the default. |

[0144] Sub-Elements

[0145] Types are now represented as sub-elements rather than attributes. This allows more flexibility in customizing the types that can be expressed using the RSD and does not require continued adding of more and more attributes at the column level that are only used in particular contexts.

| Tag | Card | Comment |
|---------------|------|---|
| DbStringType | 1 | Represents string types in the database |
| DbNumericType | 1 | Represents numeric types in the database |
| DbDateType | 1 | Represents date types in the database |
| DbGuidType | 1 | Represents GUIDs in the database |
| DbXmlType | 1 | Represents the XML datatype in the database |
| DbUDTType | 1 | Represents the UDT type in the database |
| DbAliasType | 1 | Represents AliasTypes in the database |
| Default | 0-1 | Contains the default value to be used for this column. Default will be used by CP to insert the Default value on an Insert operation. |

[0146] Validation

[0147] AutoIncrement can only be set to TRUE if the type is one of the integer types (see below) or one of the exact decimal types and the scale is set to zero. AutoIncrement and AllowDBNull cannot both be TRUE. AutoIncrement and Computed cannot both be TRUE.

[0148] If any of the constraints above are violated, the user will receive an error message giving the three-part name of the structure, as well as the type (table, view, custom table, etc.) and the offending column name. A description of which constraint was violated is also included.