GDD定义：

全局数据字典采用文本文件的方式进行持久化磁盘存储。全局字典文件为metadata.cfg采用结构化键值对进行元数据的存储。目前，其中包含全局字典的版本信息version，站点分布信息site\_info，分片信息fragment，以及各站点本地数据库dbi的信息。

数据字典版本信息：

version = 0.0.1；

站点分布信息：

site\_info = (

{

site\_ID = 1;

site\_name = "site1"; //站点名称

site\_ip = "192.168.0.1";//站点IP

site\_port = 3306;//站点端口，待修改

},

{

site\_ID = 2;

site\_name = "site2";

site\_ip = "192.168.0.2";

site\_port = 3306;

},

{

site\_ID = 3;

site\_name = "site3";

site\_ip = "192.168.0.3";

site\_port = 3306;

},

{

site\_ID = 4;

site\_name = "site4";

site\_ip = "123.123.123.123";

site\_port = 3389;

}

);

各站点本地数据库dbi信息：

db1 :

{

database = "db1";//数据库名称

database\_path = "site1";//数据库所处站点

table\_num = 8;//数据库所包含的表的数量

database\_user = "root";//连接数据库所需用户名

database\_user\_password = "root";//密码

NATION = (

{//表的元数据存储采用list方式，第0个元素为表的基本信息

table\_name = "NATION";//表名

table\_path = "nation.tbl";//表存储所对应的文件

table\_attr\_num = 4;//表的属性个数

},

{//list的第1个元素，即表的第1个属性

attr\_name = "N\_NATIONKEY";//属性名

attr\_datatype = "INTEGER";//属性类型

attr\_length = 4;//属性长度，byte

attr\_rulestype = "NOT\_NULL";//属性约束规则

},

{

attr\_name = "N\_NAME";

attr\_datatype = "CHAR";

attr\_length = 25;

attr\_rulestype = "NOT\_NULL";

},

{

attr\_name = "N\_REGIONKEY";

attr\_datatype = "INTEGER";

attr\_length = 4;

attr\_rulestype = "NOT\_NULL";

},

{

attr\_name = "N\_COMMENT";

attr\_datatype = "VARCHAR";

attr\_length = 152;

attr\_rulestype = "NOT\_NULL";

} );

};

分片信息：

fragment :

{

EMP://每张表一个分片规则

{

frag\_num = 4;//表的分片数量

db1 = //各个站点本地数据库所对应的分片规则

(

{//采用list方式，第0个元素存储分片的元数据

condition\_num = 2;//分片的条件个数

},

{

attr\_name = "eno";//分片属性名称

attr\_condition = "<";//分片条件

attr\_value = "E1000";//分片属性值

},

{

attr\_name = "title";

attr\_condition = "<";

attr\_value = "N";

}

);

db2 =

(

{

condition\_num = 2;

},

{

attr\_name = "eno";

attr\_condition = "<";

attr\_value = "E1000";

},

{

attr\_name = "title";

attr\_condition = ">=";

attr\_value = "N";

}

);

db3 =

(

{

condition\_num = 2;

},

{

attr\_name = "eno";

attr\_condition = ">=";

attr\_value = "E1000";

},

{

attr\_name = "title";

attr\_condition = "<";

attr\_value = "N";

}

);

db4 =

(

{

condition\_num = 2;

},

{

attr\_name = "eno";

attr\_condition = ">=";

attr\_value = "E1000";

},

{

attr\_name = "title";

attr\_condition = ">=";

attr\_value = "N";

}

);

};

};