

Report

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1.0.4

国煤交易系统数据库设计

Table of Contents

1 Specifications.....3

2 Model information.....4

 2.1 Card of model 国煤交易系统.....4

3 PDM Diagrams.....5

 3.1 Model level diagrams.....5

 3.1.1 Diagram 国煤交易系统.....5

4 Common Objects.....6

 4.1 Data Sources.....6

 4.1.1 List of data sources.....6

 4.1.2 Data source 数据源.....6

5 Physical diagrams objects.....7

 5.1 References.....7

 5.1.1 Model level references.....7

 5.2 Tables.....17

 5.2.1 Model level tables.....17

1 Specifications

Include specifications here...

2 Model information

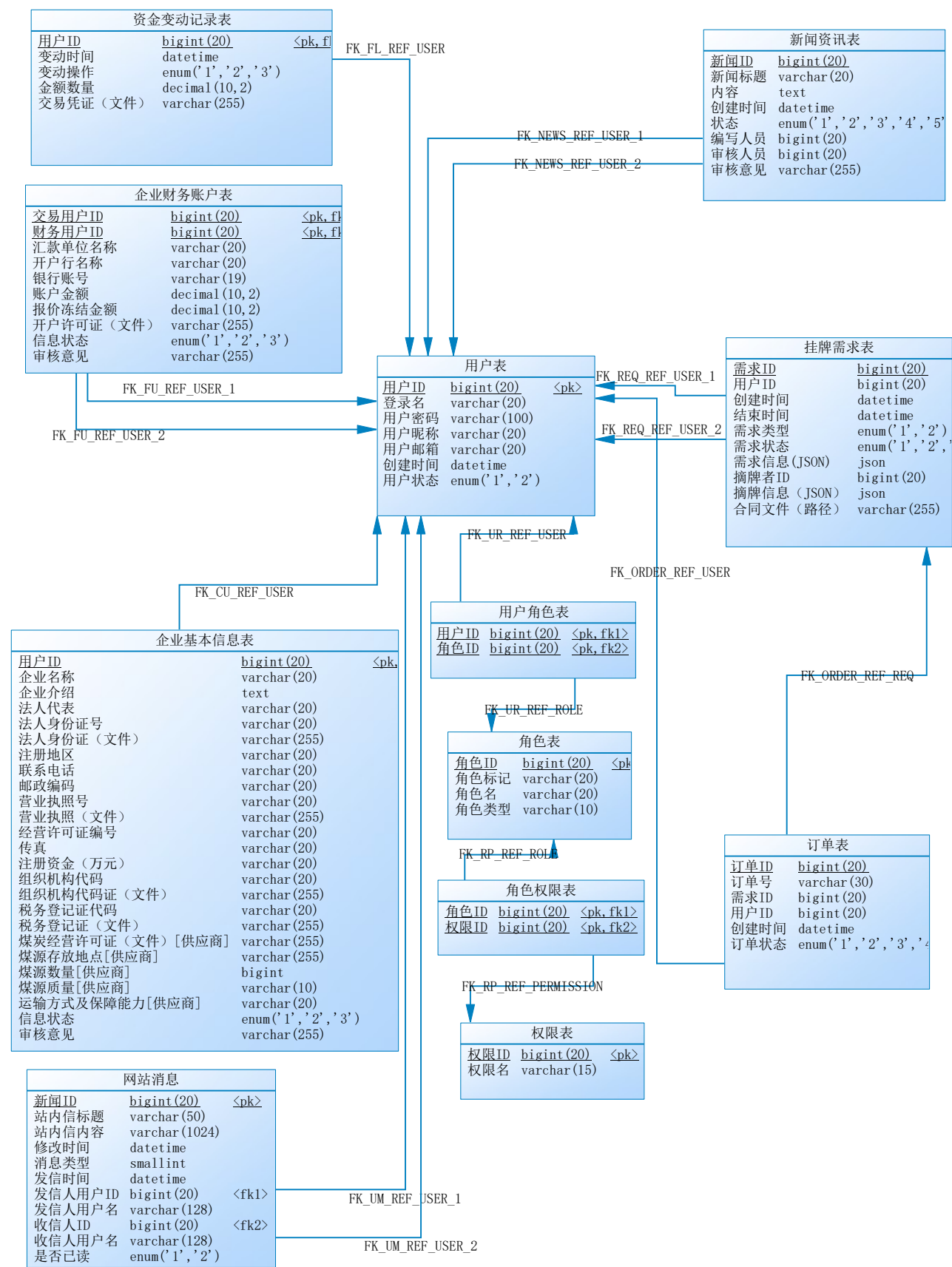
2.1 Card of model 国煤交易系统

Name	国煤交易系统
Code	coal_trading
Comment	国煤交易系统数据库设计
DBMS	MySQL 5.7
Database	国煤交易系统

3 PDM Diagrams

3.1 Model level diagrams

3.1.1 Diagram 国煤交易系统



4 Common Objects

4.1 Data Sources

4.1.1 List of data sources

<i>Name</i>	<i>Code</i>
数据源	数据源

4.1.2 Data source 数据源

4.1.2.1 Card of data source 数据源

<i>Name</i>	数据源
<i>Code</i>	数据源

5 Physical diagrams objects**5.1 References****5.1.1 Model level references****5.1.1.1 List of references**

<i>Name</i>	<i>Code</i>	<i>Parent Table</i>	<i>Child Table</i>
CU_REF_USER	CU_REF_USER	用户表	企业基本信息表
FL_REF_USER	FL_REF_USER	用户表	资金变动记录表
FU_REF_USER_1	FU_REF_USER_1	用户表	企业财务账户表
FU_REF_USER_2	FU_REF_USER_2	用户表	企业财务账户表
NEWS_REF_USER_1	NEWS_REF_USER_1	用户表	新闻资讯表
NEWS_REF_USER_2	NEWS_REF_USER_2	用户表	新闻资讯表
ORDER_REF_REQ	ORDER_REF_REQ	挂牌需求表	订单表
ORDER_REF_USER	ORDER_REF_USER	用户表	订单表
REQ_REF_USER_1	REQ_REF_USER_1	用户表	挂牌需求表
REQ_REF_USER_2	REQ_REF_USER_2	用户表	挂牌需求表
RP_REF_PERMISSION	RP_REF_PERMISSION	权限表	角色权限表
RP_REF_ROLE	RP_REF_ROLE	角色表	角色权限表
UM_REF_USER_1	UM_REF_USER_1	用户表	网站消息
UM_REF_USER_2	UM_REF_USER_2	用户表	网站消息
UR_REF_ROLE	UR_REF_ROLE	角色表	用户角色表
UR_REF_USER	UR_REF_USER	用户表	用户角色表

5.1.1.2 Reference CU_REF_USER**5.1.1.2.1 Card of reference CU_REF_USER**

<i>Name</i>	CU_REF_USER
<i>Code</i>	CU_REF_USER
<i>Parent Table</i>	用户表
<i>Child Table</i>	企业基本信息表

5.1.1.2.2 Code preview of the reference CU_REF_USER

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_company add constraint FK_CU_REF_USER foreign key (user_id)
references ct_users (id) on delete restrict on update restrict;
```

5.1.1.2.3 List of diagrams containing the reference CU_REF_USER

<i>Name</i>	<i>Code</i>
国煤交易系统	pdp

5.1.1.2.4 List of reference joins of the reference CU_REF_USER

<i>Parent Table Column</i>	<i>Child Table Column</i>
用户ID	用户ID

5.1.1.2.5 List of extended attributes of the reference CU_REF_USER

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
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Name	Data Type	Value	Target Name
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.3 Reference FL_REF_USER

5.1.1.3.1 Card of reference FL_REF_USER

Name	FL_REF_USER
Code	FL_REF_USER
Parent Table	用户表
Child Table	资金变动记录表

5.1.1.3.2 Code preview of the reference FL_REF_USER

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_finance_log add constraint FK_FL_REF_USER foreign key (user_id)
references ct_users (id) on delete restrict on update restrict;
```

5.1.1.3.3 List of diagrams containing the reference FL_REF_USER

Name	Code
国煤交易系统	pdp

5.1.1.3.4 List of reference joins of the reference FL_REF_USER

Parent Table Column	Child Table Column
用户ID	用户ID

5.1.1.3.5 List of extended attributes of the reference FL_REF_USER

Name	Data Type	Value	Target Name
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.4 Reference FU_REF_USER_1

5.1.1.4.1 Card of reference FU_REF_USER_1

Name	FU_REF_USER_1
Code	FU_REF_USER_1
Parent Table	用户表
Child Table	企业财务账户表

5.1.1.4.2 Code preview of the reference FU_REF_USER_1

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_finance add constraint FK_FU_REF_USER_1 foreign key (main_userid)
references ct_users (id) on delete restrict on update restrict;
```

5.1.1.4.3 List of diagrams containing the reference FU_REF_USER_1

Name	Code
国煤交易系统	pdp

5.1.1.4.4 List of reference joins of the reference FU_REF_USER_1

<i>Parent Table Column</i>	<i>Child Table Column</i>
用户ID	交易用户ID

5.1.1.4.5 List of extended attributes of the reference FU_REF_USER_1

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.5 Reference FU_REF_USER_2**5.1.1.5.1 Card of reference FU_REF_USER_2**

<i>Name</i>	FU_REF_USER_2
<i>Code</i>	FU_REF_USER_2
<i>Parent Table</i>	用户表
<i>Child Table</i>	企业财务账户表

5.1.1.5.2 Code preview of the reference FU_REF_USER_2

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_finance add constraint FK_FU_REF_USER_2 foreign key (finance_userid)
references ct_users (id) on delete restrict on update restrict;
```

5.1.1.5.3 List of diagrams containing the reference FU_REF_USER_2

<i>Name</i>	<i>Code</i>
国煤交易系统	pdp

5.1.1.5.4 List of reference joins of the reference FU_REF_USER_2

<i>Parent Table Column</i>	<i>Child Table Column</i>
用户ID	财务用户ID

5.1.1.5.5 List of extended attributes of the reference FU_REF_USER_2

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.6 Reference NEWS_REF_USER_1**5.1.1.6.1 Card of reference NEWS_REF_USER_1**

<i>Name</i>	NEWS_REF_USER_1
<i>Code</i>	NEWS_REF_USER_1
<i>Parent Table</i>	用户表
<i>Child Table</i>	新闻资讯表

5.1.1.6.2 Code preview of the reference NEWS_REF_USER_1

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_news add constraint FK_NEWS_REF_USER_1 foreign key (author_id)
references ct_users (id) on delete restrict on update restrict;
```

5.1.1.6.3 List of diagrams containing the reference NEWS_REF_USER_1

Name	Code
国煤交易系统	pdp

5.1.1.6.4 List of reference joins of the reference NEWS_REF_USER_1

Parent Table Column	Child Table Column
用户ID	编写人员

5.1.1.6.5 List of extended attributes of the reference NEWS_REF_USER_1

Name	Data Type	Value	Target Name
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.7 Reference NEWS_REF_USER_2**5.1.1.7.1 Card of reference NEWS_REF_USER_2**

Name	NEWS_REF_USER_2
Code	NEWS_REF_USER_2
Parent Table	用户表
Child Table	新闻资讯表

5.1.1.7.2 Code preview of the reference NEWS_REF_USER_2

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_news add constraint FK_NEWS_REF_USER_2 foreign key (auditor_id)
references ct_users (id) on delete restrict on update restrict;
```

5.1.1.7.3 List of diagrams containing the reference NEWS_REF_USER_2

Name	Code
国煤交易系统	pdp

5.1.1.7.4 List of reference joins of the reference NEWS_REF_USER_2

Parent Table Column	Child Table Column
用户ID	审核人员

5.1.1.7.5 List of extended attributes of the reference NEWS_REF_USER_2

Name	Data Type	Value	Target Name
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.8 Reference ORDER_REF_REQ**5.1.1.8.1 Card of reference ORDER_REF_REQ**

Name	ORDER_REF_REQ
Code	ORDER_REF_REQ
Parent Table	挂牌需求表
Child Table	订单表

5.1.1.8.2 Code preview of the reference ORDER_REF_REQ

```
use coal_trading;
```

```
use coal_trading;

alter table ct_order add constraint FK_ORDER_REF_REQ foreign key (req_id)
references ct_request (id) on delete restrict on update restrict;
```

5.1.1.8.3 List of diagrams containing the reference ORDER_REF_REQ

Name	Code
国煤交易系统	pdp

5.1.1.8.4 List of reference joins of the reference ORDER_REF_REQ

Parent Table Column	Child Table Column
需求ID	需求ID

5.1.1.8.5 List of extended attributes of the reference ORDER_REF_REQ

Name	Data Type	Value	Target Name
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.9 Reference ORDER_REF_USER

5.1.1.9.1 Card of reference ORDER_REF_USER

Name	ORDER_REF_USER
Code	ORDER_REF_USER
Parent Table	用户表
Child Table	订单表

5.1.1.9.2 Code preview of the reference ORDER_REF_USER

```
use coal_trading;

use coal_trading;

alter table ct_order add constraint FK_ORDER_REF_USER foreign key (user_id)
references ct_users (id) on delete restrict on update restrict;
```

5.1.1.9.3 List of diagrams containing the reference ORDER_REF_USER

Name	Code
国煤交易系统	pdp

5.1.1.9.4 List of reference joins of the reference ORDER_REF_USER

Parent Table Column	Child Table Column
用户ID	用户ID

5.1.1.9.5 List of extended attributes of the reference ORDER_REF_USER

Name	Data Type	Value	Target Name
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.10 Reference REQ_REF_USER_1

5.1.1.10.1 Card of reference REQ_REF_USER_1

Name	REQ_REF_USER_1
Code	REQ_REF_USER_1
Parent Table	用户表

<i>Child Table</i>	挂牌需求表
--------------------	-------

5.1.1.10.2 Code preview of the reference REQ_REF_USER_1

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_request add constraint FK_REQ_REF_USER_1 foreign key (user_id)
references ct_users (id) on delete restrict on update restrict;
```

5.1.1.10.3 List of diagrams containing the reference REQ_REF_USER_1

<i>Name</i>	<i>Code</i>
国煤交易系统	pdp

5.1.1.10.4 List of reference joins of the reference REQ_REF_USER_1

<i>Parent Table Column</i>	<i>Child Table Column</i>
用户ID	用户ID

5.1.1.10.5 List of extended attributes of the reference REQ_REF_USER_1

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.11 Reference REQ_REF_USER_2**5.1.1.11.1 Card of reference REQ_REF_USER_2**

<i>Name</i>	REQ_REF_USER_2
<i>Code</i>	REQ_REF_USER_2
<i>Parent Table</i>	用户表
<i>Child Table</i>	挂牌需求表

5.1.1.11.2 Code preview of the reference REQ_REF_USER_2

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_request add constraint FK_REQ_REF_USER_2 foreign key (zp_id)
references ct_users (id) on delete restrict on update restrict;
```

5.1.1.11.3 List of diagrams containing the reference REQ_REF_USER_2

<i>Name</i>	<i>Code</i>
国煤交易系统	pdp

5.1.1.11.4 List of reference joins of the reference REQ_REF_USER_2

<i>Parent Table Column</i>	<i>Child Table Column</i>
用户ID	摘牌者ID

5.1.1.11.5 List of extended attributes of the reference REQ_REF_USER_2

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.12 Reference RP_REF_PERMISSION

5.1.1.12.1 Card of reference RP_REF_PERMISSION

<i>Name</i>	RP_REF_PERMISSION
<i>Code</i>	RP_REF_PERMISSION
<i>Parent Table</i>	权限表
<i>Child Table</i>	角色权限表

5.1.1.12.2 Code preview of the reference RP_REF_PERMISSION

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_role_permission_relationships add constraint FK_RP_REF_PERMISSION foreign key (permission_id)
references ct_permissions (id) on delete restrict on update restrict;
```

5.1.1.12.3 List of diagrams containing the reference RP_REF_PERMISSION

<i>Name</i>	<i>Code</i>
国煤交易系统	pdp

5.1.1.12.4 List of reference joins of the reference RP_REF_PERMISSION

<i>Parent Table Column</i>	<i>Child Table Column</i>
权限ID	权限ID

5.1.1.12.5 List of extended attributes of the reference RP_REF_PERMISSION

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.13 Reference RP_REF_ROLE**5.1.1.13.1 Card of reference RP_REF_ROLE**

<i>Name</i>	RP_REF_ROLE
<i>Code</i>	RP_REF_ROLE
<i>Parent Table</i>	角色表
<i>Child Table</i>	角色权限表

5.1.1.13.2 Code preview of the reference RP_REF_ROLE

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_role_permission_relationships add constraint FK_RP_REF_ROLE foreign key (role_id)
references ct_userrole (id) on delete restrict on update restrict;
```

5.1.1.13.3 List of diagrams containing the reference RP_REF_ROLE

<i>Name</i>	<i>Code</i>
国煤交易系统	pdp

5.1.1.13.4 List of reference joins of the reference RP_REF_ROLE

<i>Parent Table Column</i>	<i>Child Table Column</i>
角色ID	角色ID

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.14 Reference UM_REF_USER_1

5.1.1.14.1 Card of reference UM_REF_USER_1

<i>Name</i>	UM_REF_USER_1
<i>Code</i>	UM_REF_USER_1
<i>Parent Table</i>	用户表
<i>Child Table</i>	网站消息

5.1.1.14.2 Code preview of the reference UM_REF_USER_1

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_website_message add constraint FK_UM_REF_USER_1 foreign key (from_userid)
references ct_users (id) on delete restrict on update restrict;
```

5.1.1.14.3 List of diagrams containing the reference UM_REF_USER_1

<i>Name</i>	<i>Code</i>
国煤交易系统	pdp

5.1.1.14.4 List of reference joins of the reference UM_REF_USER_1

<i>Parent Table Column</i>	<i>Child Table Column</i>
用户ID	发信人用户ID

5.1.1.14.5 List of extended attributes of the reference UM_REF_USER_1

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.15 Reference UM_REF_USER_2

5.1.1.15.1 Card of reference UM_REF_USER_2

<i>Name</i>	UM_REF_USER_2
<i>Code</i>	UM_REF_USER_2
<i>Parent Table</i>	用户表
<i>Child Table</i>	网站消息

5.1.1.15.2 Code preview of the reference UM_REF_USER_2

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_website_message add constraint FK_UM_REF_USER_2 foreign key (to_userid)
references ct_users (id) on delete restrict on update restrict;
```

5.1.1.15.3 List of diagrams containing the reference UM_REF_USER_2

<i>Name</i>	<i>Code</i>
国煤交易系统	pdp

5.1.1.15.4 List of reference joins of the reference UM_REF_USER_2

<i>Parent Table Column</i>	<i>Child Table Column</i>
用户ID	收信人ID

5.1.1.15.5 List of extended attributes of the reference UM_REF_USER_2

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.16 Reference UR_REF_ROLE**5.1.1.16.1 Card of reference UR_REF_ROLE**

<i>Name</i>	UR_REF_ROLE
<i>Code</i>	UR_REF_ROLE
<i>Parent Table</i>	角色表
<i>Child Table</i>	用户角色表

5.1.1.16.2 Code preview of the reference UR_REF_ROLE

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_user_role_relationships add constraint FK_UR_REF_ROLE foreign key (role_id)
references ct_userrole (id) on delete restrict on update restrict;
```

5.1.1.16.3 List of diagrams containing the reference UR_REF_ROLE

<i>Name</i>	<i>Code</i>
国煤交易系统	pdp

5.1.1.16.4 List of reference joins of the reference UR_REF_ROLE

<i>Parent Table Column</i>	<i>Child Table Column</i>
角色ID	角色ID

5.1.1.16.5 List of extended attributes of the reference UR_REF_ROLE

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.1.1.17 Reference UR_REF_USER**5.1.1.17.1 Card of reference UR_REF_USER**

<i>Name</i>	UR_REF_USER
<i>Code</i>	UR_REF_USER
<i>Parent Table</i>	用户表
<i>Child Table</i>	用户角色表

5.1.1.17.2 Code preview of the reference UR_REF_USER

```
use coal_trading;
```

```
use coal_trading;
```

```
alter table ct_user_role_relationships add constraint FK_UR_REF_USER foreign key (user_id)
references ct_users (id) on delete restrict on update restrict;
```

5.1.1.17.3 List of diagrams containing the reference UR REF USER

<i>Name</i>	<i>Code</i>
国煤交易系统	pdp

5.1.1.17.4 List of reference joins of the reference UR REF USER

<i>Parent Table Column</i>	<i>Child Table Column</i>
用户ID	用户ID

5.1.1.17.5 List of extended attributes of the reference UR REF USER

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
ReferenceMatch	ReferenceMatchType		MySQL 5.7

5.2 Tables

5.2.1 Model level tables

5.2.1.1 List of tables

<i>Name</i>	<i>Code</i>
企业基本信息表	ct_company
企业财务账户表	ct_finance
挂牌需求表	ct_request
新闻资讯表	ct_news
权限表	ct_permissions
用户表	ct_users
用户角色表	ct_user_role_relationships
网站消息	ct_website_message
角色权限表	ct_role_permission_relationships
角色表	ct_userrole
订单表	ct_order
资金变动记录表	ct_finance_log

5.2.1.2 List of table columns

<i>Name</i>	<i>Code</i>
新闻ID	id
新闻标题	title
内容	content
创建时间	date
状态	status
编写人员	author_id
审核人员	auditor_id
审核意见	audit_opinion
用户ID	id
登录名	login
用户密码	pass
用户昵称	nick
用户邮箱	email
创建时间	registered
用户状态	status
订单ID	id
订单号	num
需求ID	req_id
用户ID	user_id
创建时间	created_time
订单状态	status
角色ID	id
角色标记	mark
角色名	name
角色类型	type
权限ID	id
权限名	name

<i>Name</i>	<i>Code</i>
用户ID	user_id
角色ID	role_id
角色ID	role_id
权限ID	permission_id
需求ID	id
用户ID	user_id
创建时间	created_time
结束时间	ended_time
需求类型	type
需求状态	status
需求信息(JSON)	detail
摘牌者ID	zp_id
摘牌信息 (JSON)	zp_detail
合同文件 (路径)	contract_file
交易用户ID	main_userid
财务用户ID	finance_userid
汇款单位名称	com_name
开户行名称	bank_name
银行账号	bank_acc
账户金额	balance
报价冻结金额	freeze
开户许可证 (文件)	ao_permit_file
信息状态	status
审核意见	audit_opinion
用户ID	user_id
变动时间	date
变动操作	log_type
金额数量	quantity
交易凭证 (文件)	cert
用户ID	user_id
企业名称	com_name
企业介绍	com_intro
法人代表	legal_name
法人身份证号	legal_id
法人身份证 (文件)	legal_id_file
注册地区	com_addr
联系电话	com_contact
邮政编码	com_zip
营业执照号	business_license_id
营业执照 (文件)	business_license_file
经营许可证编号	manage_license_id
传真	fax
注册资金 (万元)	registered_capital
组织机构代码	oib_code
组织机构代码证 (文件)	oib_code_file
税务登记证代码	tr_cert
税务登记证 (文件)	tr_cert_file

<i>Name</i>	<i>Code</i>
煤炭经营许可证（文件）[供应商]	manage_license_file
煤源存放地点[供应商]	coal_store_site
煤源数量[供应商]	coal_quantity
煤源质量[供应商]	coal_quality
运输方式及保障能力[供应商]	coal_transport
信息状态	status
审核意见	audit_opinion
新闻ID	id
站内信标题	title
站内信内容	content
修改时间	modified
消息类型	msg_type
发信时间	created
发信人用户ID	from_userid
发信人用户名	from_username
收信人ID	to_userid
收信人用户名	to_username
是否已读	read_status

5.2.1.3 List of table keys

<i>Name</i>	<i>Code</i>	<i>Table</i>
Key_1	Key_1	新闻资讯表
Key_1	Key_1	用户表
Key_1	Key_1	订单表
Key_1	Key_1	角色表
Key_1	Key_1	权限表
Key_1	Key_1	用户角色表
Key_1	Key_1	角色权限表
Key_1	Key_1	挂牌需求表
Key_1	Key_1	企业财务账户表
Key_1	Key_1	资金变动记录表
Key_1	Key_1	企业基本信息表
Key_1	Key_1	网站消息

5.2.1.4 List of table indexes

<i>Name</i>	<i>Code</i>	<i>Unique</i>	<i>Cluster</i>	<i>Primary</i>	<i>Foreign Key</i>	<i>Alternate Key</i>	<i>Table</i>
Index_news_id	Index_news_id	X					新闻资讯表
Index_user_login	Index_user_login	X					用户表
Index_user_email	Index_user_email						用户表
Index_user_id	Index_user_id						订单表
Index_req_id	Index_req_id						订单表
Index_order_id	Index_order_id	X					订单表
Index_order_num	Index_order_num	X					订单表
Index_role_id	Index_role_id						角色表
Index_pri	Index_pri	X					权限表

Name	Code	Unique	Cluster	Primary	Foreign Key	Alternate Key	Table
用户角色索引	Index_user_role						用户角色表
Index_user_id	Index_user_id	X					用户角色表
Index_role_pri_id	Index_role_pri_id	X					角色权限表
Index_req_id	Index_req_id						挂牌需求表
Index_finance_userid	Index_finance_userid	X					企业财务账户表
Index_main_userid	Index_main_userid	X					企业财务账户表
Index_user_id	Index_user_id						资金变动记录表
Index_log_type	Index_log_type						资金变动记录表
Index_com_name	Index_com_name	X					企业基本信息表
Index_to_userid	Index_to_userid						网站消息

5.2.1.5 Table 企业基本信息表

5.2.1.5.1 Card of table 企业基本信息表

Name	企业基本信息表
Code	ct_company
DBMS	MySQL 5.7

5.2.1.5.2 Check constraint name of the table 企业基本信息表

TK_ct_company

5.2.1.5.3 Server validation rule of the table 企业基本信息表

%RULES%

5.2.1.5.4 Options of the table 企业基本信息表

engine = InnoDB

5.2.1.5.5 Code preview of the table 企业基本信息表

```
use coal_trading;

drop table if exists ct_company;

/*=====*/
/* Table: ct_company */
/*=====*/

create table ct_company
(
  user_id      bigint(20) not null comment '用户ID',
  com_name     varchar(20) not null comment '企业名称',
  com_intro    text comment '企业介绍',
  legal_name   varchar(20) comment '法人代表',
  legal_id     varchar(20) comment '法人身份证号',
  legal_id_file varchar(255) comment '法人身份证（文件）',
  com_addr     varchar(20) comment '注册地区',
  com_contact  varchar(20) comment '联系电话',
  com_zip      varchar(20) comment '邮政编码',
  business_license_id varchar(20) comment '营业执照号',
  business_license_file varchar(255) comment '营业执照（文件）',
  manage_license_id varchar(20) comment '经营许可证编号',
  fax          varchar(20) comment '传真',
  registered_capital varchar(20) comment '注册资金（万元）',
  oib_code     varchar(20) comment '组织机构代码',
```

```

oib_code_file    varchar(255) comment '组织机构代码证（文件）';
tr_cert         varchar(20) comment '税务登记证代码';
tr_cert_file    varchar(255) comment '税务登记证（文件）';
manage_license_file varchar(255) comment '煤炭经营许可证（文件）[供应商]';
coal_store_site varchar(255) comment '煤源存放地点[供应商]';
coal_quantity   bigint comment '煤源数量[供应商]';
coal_quality    varchar(10) comment '煤源质量[供应商]';
coal_transport  varchar(20) comment '运输方式及保障能力[供应商]';
status         enum('1','2','3') not null default '1' comment '信息状态
    1. 不可用
    2. 审核阶段
    3. 可用';
audit_opinion   varchar(255) comment '审核意见';
primary key (user_id)
)
engine = InnoDB;

```

```
alter table ct_company comment '企业基本信息表';
```

```

/*=====*/
/* Index: Index_com_name */
/*=====*/
create unique index Index_com_name on ct_company
(
    com_name
);

```

```

alter table ct_company add constraint FK_CU_REF_USER foreign key (user_id)
references ct_users (id) on delete restrict on update restrict;

```

5.2.1.5.6 List of diagrams containing the table 企业基本信息表

Name	Code
国煤交易系统	pdp

5.2.1.5.7 List of outgoing references of the table 企业基本信息表

Name	Code	Foreign Key Columns
CU_REF_USER	CU_REF_USER	用户ID

5.2.1.5.8 List of all dependencies of the table 企业基本信息表

Name	Code	Class Name
CU_REF_USER	CU_REF_USER	Reference

5.2.1.5.9 List of extended attributes of the table 企业基本信息表

Name	Data Type	Value	Target Name
Temporary	(Boolean)	false	MySQL 5.7

5.2.1.5.10 List of columns of the table 企业基本信息表

Name	Code
用户ID	user_id
企业名称	com_name
企业介绍	com_intro
法人代表	legal_name
法人身份证号	legal_id
法人身份证（文件）	legal_id_file
注册地区	com_addr
联系电话	com_contact

<i>Name</i>	<i>Code</i>
邮政编码	com_zip
营业执照号	business_license_id
营业执照（文件）	business_license_file
经营许可证编号	manage_license_id
传真	fax
注册资金（万元）	registered_capital
组织机构代码	oib_code
组织机构代码证（文件）	oib_code_file
税务登记证代码	tr_cert
税务登记证（文件）	tr_cert_file
煤炭经营许可证（文件）[供应商]	manage_license_file
煤源存放地点[供应商]	coal_store_site
煤源数量[供应商]	coal_quantity
煤源质量[供应商]	coal_quality
运输方式及保障能力[供应商]	coal_transport
信息状态	status
审核意见	audit_opinion

5.2.1.5.11 Column 用户ID of the table 企业基本信息表

5.2.1.5.11.1 Card of the column 用户ID of the table 企业基本信息表

<i>Name</i>	用户ID
<i>Code</i>	user_id
<i>Data Type</i>	bigint(20)
<i>Mandatory</i>	Yes

5.2.1.5.11.2 Check constraint name of the column 用户ID of the table 企业基本信息表

CK_user_id

5.2.1.5.11.3 Check of the column 用户ID of the table 企业基本信息表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.5.11.4 Server validation rule of the column 用户ID of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.11.5 List of all dependencies of the table column 用户ID

<i>Name</i>	<i>Code</i>	<i>Class Name</i>
Key_1	Key_1	Key
?	?	Reference Join

5.2.1.5.11.6 List of extended attributes of the table column 用户ID

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
CharSet	CharSets		MySQL 5.7

Name	Data Type	Value	Target Name
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.12 Column 企业名称 of the table 企业基本信息表

5.2.1.5.12.1 Card of the column 企业名称 of the table 企业基本信息表

Name	企业名称
Code	com_name
Data Type	varchar(20)
Mandatory	Yes

5.2.1.5.12.2 Check constraint name of the column 企业名称 of the table 企业基本信息表

CK_com_name

5.2.1.5.12.3 Check of the column 企业名称 of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.12.4 Server validation rule of the column 企业名称 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.12.5 List of all dependencies of the table column 企业名称

Name	Code	Class Name
企业名称	com_name	Index Column

5.2.1.5.12.6 List of extended attributes of the table column 企业名称

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.13 Column 企业介绍 of the table 企业基本信息表

5.2.1.5.13.1 Card of the column 企业介绍 of the table 企业基本信息表

Name	企业介绍
Code	com_intro
Data Type	text
Mandatory	No

5.2.1.5.13.2 Check constraint name of the column 企业介绍 of the table 企业基本信息表

CK_com_intro

5.2.1.5.13.3 Check of the column 企业介绍 of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.13.4 Server validation rule of the column 企业介绍 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.13.5 List of extended attributes of the table column 企业介绍

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.14 Column 法人代表 of the table 企业基本信息表**5.2.1.5.14.1 Card of the column 法人代表 of the table 企业基本信息表**

Name	法人代表
Code	legal_name
Data Type	varchar(20)
Mandatory	No

5.2.1.5.14.2 Check constraint name of the column 法人代表 of the table 企业基本信息表

CK_legal_name

5.2.1.5.14.3 Check of the column 法人代表 of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.14.4 Server validation rule of the column 法人代表 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.14.5 List of extended attributes of the table column 法人代表

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.15 Column 法人身份证号 of the table 企业基本信息表

5.2.1.5.15.1 Card of the column 法人身份证号 of the table 企业基本信息表

Name	法人身份证号
Code	legal_id
Data Type	varchar(20)
Mandatory	No

5.2.1.5.15.2 Check constraint name of the column 法人身份证号 of the table 企业基本信息表

CK_legal_id

5.2.1.5.15.3 Check of the column 法人身份证号 of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.15.4 Server validation rule of the column 法人身份证号 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.15.5 List of extended attributes of the table column 法人身份证号

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.16 Column 法人身份证（文件） of the table 企业基本信息表

5.2.1.5.16.1 Card of the column 法人身份证（文件） of the table 企业基本信息表

Name	法人身份证（文件）
Code	legal_id_file
Data Type	varchar(255)
Mandatory	No

5.2.1.5.16.2 Check constraint name of the column 法人身份证（文件） of the table 企业基本信息表

CK_legal_id_file

5.2.1.5.16.3 Check of the column 法人身份证（文件） of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.16.4 Server validation rule of the column 法人身份证（文件） of the table 企业基本信息表

5.2.1.5.16.5 List of extended attributes of the table column 法人身份证（文件）

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.17 Column 注册地区 of the table 企业基本信息表

5.2.1.5.17.1 Card of the column 注册地区 of the table 企业基本信息表

Name	注册地区
Code	com_addr
Data Type	varchar(20)
Mandatory	No

5.2.1.5.17.2 Check constraint name of the column 注册地区 of the table 企业基本信息表

CK_com_addr

5.2.1.5.17.3 Check of the column 注册地区 of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.17.4 Server validation rule of the column 注册地区 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.17.5 List of extended attributes of the table column 注册地区

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.18 Column 联系电话 of the table 企业基本信息表

5.2.1.5.18.1 Card of the column 联系电话 of the table 企业基本信息表

Name	联系电话
Code	com_contact
Data Type	varchar(20)
Mandatory	No

5.2.1.5.18.2 Check constraint name of the column 联系电话 of the table 企业基本信息表

CK_com_contact

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.18.4 Server validation rule of the column 联系电话 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.18.5 List of extended attributes of the table column 联系电话

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.19 Column 邮政编码 of the table 企业基本信息表

5.2.1.5.19.1 Card of the column 邮政编码 of the table 企业基本信息表

Name	邮政编码
Code	com_zip
Data Type	varchar(20)
Mandatory	No

5.2.1.5.19.2 Check constraint name of the column 邮政编码 of the table 企业基本信息表

CK_com_zip

5.2.1.5.19.3 Check of the column 邮政编码 of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.19.4 Server validation rule of the column 邮政编码 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.19.5 List of extended attributes of the table column 邮政编码

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.20 Column 营业执照号 of the table 企业基本信息表

5.2.1.5.20.1 Card of the column 营业执照号 of the table 企业基本信息表

<i>Name</i>	营业执照号
<i>Code</i>	business_license_id
<i>Data Type</i>	varchar(20)
<i>Mandatory</i>	No

5.2.1.5.20.2 Check constraint name of the column 营业执照号 of the table 企业基本信息表

CK_business_license_id

5.2.1.5.20.3 Check of the column 营业执照号 of the table 企业基本信息表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.5.20.4 Server validation rule of the column 营业执照号 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.20.5 List of extended attributes of the table column 营业执照号

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.21 Column 营业执照（文件） of the table 企业基本信息表**5.2.1.5.21.1 Card of the column 营业执照（文件） of the table 企业基本信息表**

<i>Name</i>	营业执照（文件）
<i>Code</i>	business_license_file
<i>Data Type</i>	varchar(255)
<i>Mandatory</i>	No

5.2.1.5.21.2 Check constraint name of the column 营业执照（文件） of the table 企业基本信息表

CK_business_license_file

5.2.1.5.21.3 Check of the column 营业执照（文件） of the table 企业基本信息表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.5.21.4 Server validation rule of the column 营业执照（文件） of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.21.5 List of extended attributes of the table column 营业执照（文件）

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.22 Column 经营许可证编号 of the table 企业基本信息表

5.2.1.5.22.1 Card of the column 经营许可证编号 of the table 企业基本信息表

Name	经营许可证编号
Code	manage_license_id
Data Type	varchar(20)
Mandatory	No

5.2.1.5.22.2 Check constraint name of the column 经营许可证编号 of the table 企业基本信息表

CK_manage_license_id

5.2.1.5.22.3 Check of the column 经营许可证编号 of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.22.4 Server validation rule of the column 经营许可证编号 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.22.5 List of extended attributes of the table column 经营许可证编号

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.23 Column 传真 of the table 企业基本信息表

5.2.1.5.23.1 Card of the column 传真 of the table 企业基本信息表

Name	传真
Code	fax
Data Type	varchar(20)
Mandatory	No

5.2.1.5.23.2 Check constraint name of the column 传真 of the table 企业基本信息表

CK_fax

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.23.4 Server validation rule of the column 传真 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.23.5 List of extended attributes of the table column 传真

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.24 Column 注册资金（万元） of the table 企业基本信息表**5.2.1.5.24.1 Card of the column 注册资金（万元） of the table 企业基本信息表**

Name	注册资金（万元）
Code	registered_capital
Data Type	varchar(20)
Mandatory	No

5.2.1.5.24.2 Check constraint name of the column 注册资金（万元） of the table 企业基本信息表

CK_registered_capital

5.2.1.5.24.3 Check of the column 注册资金（万元） of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.24.4 Server validation rule of the column 注册资金（万元） of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.24.5 List of extended attributes of the table column 注册资金（万元）

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.25 Column 组织机构代码 of the table 企业基本信息表

5.2.1.5.25.1 Card of the column 组织机构代码 of the table 企业基本信息表

Name	组织机构代码
Code	oib_code
Data Type	varchar(20)
Mandatory	No

5.2.1.5.25.2 Check constraint name of the column 组织机构代码 of the table 企业基本信息表

CK_oib_code

5.2.1.5.25.3 Check of the column 组织机构代码 of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.25.4 Server validation rule of the column 组织机构代码 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.25.5 List of extended attributes of the table column 组织机构代码

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.26 Column 组织机构代码证（文件） of the table 企业基本信息表

5.2.1.5.26.1 Card of the column 组织机构代码证（文件） of the table 企业基本信息表

Name	组织机构代码证（文件）
Code	oib_code_file
Data Type	varchar(255)
Mandatory	No

5.2.1.5.26.2 Check constraint name of the column 组织机构代码证（文件） of the table 企业基本信息表

CK_oib_code_file

5.2.1.5.26.3 Check of the column 组织机构代码证（文件） of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.26.4 Server validation rule of the column 组织机构代码证（文件） of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.26.5 List of extended attributes of the table column 组织机构代码证（文件）

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.27 Column 税务登记证代码 of the table 企业基本信息表

5.2.1.5.27.1 Card of the column 税务登记证代码 of the table 企业基本信息表

Name	税务登记证代码
Code	tr_cert
Data Type	varchar(20)
Mandatory	No

5.2.1.5.27.2 Check constraint name of the column 税务登记证代码 of the table 企业基本信息表

CK_tr_cert

5.2.1.5.27.3 Check of the column 税务登记证代码 of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.27.4 Server validation rule of the column 税务登记证代码 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.27.5 List of extended attributes of the table column 税务登记证代码

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.28 Column 税务登记证（文件） of the table 企业基本信息表

5.2.1.5.28.1 Card of the column 税务登记证（文件） of the table 企业基本信息表

Name	税务登记证（文件）
Code	tr_cert_file
Data Type	varchar(255)
Mandatory	No

5.2.1.5.28.2 Check constraint name of the column 税务登记证（文件） of the table 企业基本信息表

CK_tr_cert_file

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.28.4 Server validation rule of the column 税务登记证（文件） of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.28.5 List of extended attributes of the table column 税务登记证（文件）

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.29 Column 煤炭经营许可证（文件）[供应商] of the table 企业基本信息表

5.2.1.5.29.1 Card of the column 煤炭经营许可证（文件）[供应商] of the table 企业基本信息表

Name	煤炭经营许可证（文件）[供应商]
Code	manage_license_file
Data Type	varchar(255)
Mandatory	No

5.2.1.5.29.2 Check constraint name of the column 煤炭经营许可证（文件）[供应商] of the table 企业基本信息表

CK_manage_license_file

5.2.1.5.29.3 Check of the column 煤炭经营许可证（文件）[供应商] of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.29.4 Server validation rule of the column 煤炭经营许可证（文件）[供应商] of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.29.5 List of extended attributes of the table column 煤炭经营许可证（文件）[供应商]

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.30 Column 煤源存放地点[供应商] of the table 企业基本信息表

5.2.1.5.30.1 Card of the column 煤源存放地点[供应商] of the table 企业基本信息表

<i>Name</i>	煤源存放地点[供应商]
<i>Code</i>	coal_store_site
<i>Data Type</i>	varchar(255)
<i>Mandatory</i>	No

5.2.1.5.30.2 Check constraint name of the column 煤源存放地点[供应商] of the table 企业基本信息表

CK_coal_store_site

5.2.1.5.30.3 Check of the column 煤源存放地点[供应商] of the table 企业基本信息表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.5.30.4 Server validation rule of the column 煤源存放地点[供应商] of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.30.5 List of extended attributes of the table column 煤源存放地点[供应商]

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.31 Column 煤源数量[供应商] of the table 企业基本信息表**5.2.1.5.31.1 Card of the column 煤源数量[供应商] of the table 企业基本信息表**

<i>Name</i>	煤源数量[供应商]
<i>Code</i>	coal_quantity
<i>Data Type</i>	bigint
<i>Mandatory</i>	No

5.2.1.5.31.2 Check constraint name of the column 煤源数量[供应商] of the table 企业基本信息表

CK_coal_quantity

5.2.1.5.31.3 Check of the column 煤源数量[供应商] of the table 企业基本信息表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.5.31.4 Server validation rule of the column 煤源数量[供应商] of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.31.5 List of extended attributes of the table column 煤源数量[供应商]

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.32 Column 煤源质量[供应商] of the table 企业基本信息表**5.2.1.5.32.1 Card of the column 煤源质量[供应商] of the table 企业基本信息表**

Name	煤源质量[供应商]
Code	coal_quality
Data Type	varchar(10)
Mandatory	No

5.2.1.5.32.2 Check constraint name of the column 煤源质量[供应商] of the table 企业基本信息表

CK_coal_quality

5.2.1.5.32.3 Check of the column 煤源质量[供应商] of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.32.4 Server validation rule of the column 煤源质量[供应商] of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.32.5 List of extended attributes of the table column 煤源质量[供应商]

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.33 Column 运输方式及保障能力[供应商] of the table 企业基本信息表**5.2.1.5.33.1 Card of the column 运输方式及保障能力[供应商] of the table 企业基本信息表**

Name	运输方式及保障能力[供应商]
Code	coal_transport
Data Type	varchar(20)
Mandatory	No

5.2.1.5.33.2 Check constraint name of the column 运输方式及保障能力[供应商] of the table 企业基本信息表

CK_coal_transport

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.33.4 Server validation rule of the column 运输方式及保障能力[供应商] of the table 企业基本信息表
%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.33.5 List of extended attributes of the table column 运输方式及保障能力[供应商]

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.34 Column 信息状态 of the table 企业基本信息表

5.2.1.5.34.1 Card of the column 信息状态 of the table 企业基本信息表

Name	信息状态
Code	status
Data Type	enum('1','2','3')
Mandatory	Yes

5.2.1.5.34.2 Check constraint name of the column 信息状态 of the table 企业基本信息表
CK_status

5.2.1.5.34.3 Check of the column 信息状态 of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	1
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.34.4 Server validation rule of the column 信息状态 of the table 企业基本信息表
%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.34.5 List of extended attributes of the table column 信息状态

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.35 Column 审核意见 of the table 企业基本信息表

5.2.1.5.35.1 Card of the column 审核意见 of the table 企业基本信息表

Name	审核意见
Code	audit_opinion
Data Type	varchar(255)
Mandatory	No

5.2.1.5.35.2 Check constraint name of the column 审核意见 of the table 企业基本信息表

CK_audit_opinion

5.2.1.5.35.3 Check of the column 审核意见 of the table 企业基本信息表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.5.35.4 Server validation rule of the column 审核意见 of the table 企业基本信息表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.5.35.5 List of extended attributes of the table column 审核意见

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.5.36 List of keys of the table 企业基本信息表

Name	Code	Primary
Key_1	Key_1	X

5.2.1.5.37 Key Key_1 of the table 企业基本信息表

5.2.1.5.37.1 Card of the key Key_1 of the table 企业基本信息表

Name	Key_1
Code	Key_1
Table	企业基本信息表

5.2.1.5.37.2 Code preview of the key Key_1 of the table 企业基本信息表

use coal_trading;

alter table ct_company
drop primary key;

5.2.1.5.37.3 List of columns of the table key Key_1

Name	Code
用户ID	user_id

Name	Data Type	Value	Target Name
ExtUnique	(Boolean)	false	MySQL 5.7

5.2.1.5.38 List of indexes of the table 企业基本信息表

Name	Code	Unique	Cluster	Primary	Foreign Key	Alternate Key
Index_com_name	Index_com_name	X				

5.2.1.5.39 Index Index_com_name of the table 企业基本信息表

5.2.1.5.39.1 Card of the index Index_com_name of the table 企业基本信息表

Name	Index_com_name
Code	Index_com_name
Unique	Yes
Cluster	No
Primary	No
Foreign Key	No
Alternate Key	No
Table	企业基本信息表

5.2.1.5.39.2 Code preview of the index Index_com_name of the table 企业基本信息表

use coal_trading;

use coal_trading;

```
/*=====*/
/* Index: Index_com_name */
/*=====*/
create unique index Index_com_name on ct_company
(
    com_name
);
```

5.2.1.5.39.3 List of index columns of the table index Index_com_name

Name	Code	Sort
企业名称	com_name	Ascending

5.2.1.5.39.4 List of extended attributes of the table index Index_com_name

Name	Data Type	Value	Target Name
FullText	(Boolean)	false	MySQL 5.7

5.2.1.6 Table 企业财务账户表

5.2.1.6.1 Card of table 企业财务账户表

Name	企业财务账户表
Code	ct_finance
DBMS	MySQL 5.7

5.2.1.6.2 Check constraint name of the table 企业财务账户表

TK_ct_finance

5.2.1.6.3 Server validation rule of the table 企业财务账户表

%RULES%

5.2.1.6.4 Options of the table 企业财务账户表

engine = InnoDB

5.2.1.6.5 End script of the table 企业财务账户表

```
INSERT INTO ct_finance
('main_userid', 'finance_userid', 'com_name', 'bank_name', 'bank_acc', 'balance', 'freeze', 'ao_permit_file')
VALUES
(7, 8, "供应商公司1", "银行1", "123456789", 10000.00, 5000.55, "path/to/file"),
(9, 10, "采购商公司2", "银行1", "123456789", 10000.00, 5000.55, "path/to/file");
```

5.2.1.6.6 Code preview of the table 企业财务账户表

```
use coal_trading;

drop table if exists ct_finance;

/*=====*/
/* Table: ct_finance */
/*=====*/
create table ct_finance
(
    main_userid      bigint(20) not null comment '交易用户ID',
    finance_userid    bigint(20) not null comment '财务用户ID',
    com_name          varchar(20) comment '汇款单位名称',
    bank_name         varchar(20) comment '开户行名称',
    bank_acc          varchar(19) comment '银行账号',
    balance           decimal(10,2) comment '账户金额',
    freeze            decimal(10,2) comment '报价冻结金额',
    ao_permit_file     varchar(255) comment '开户许可证（文件）',
    status            enum('1','2','3') not null default '1' comment '信息状态
        1. 不可用
        2. 审核阶段
        3. 可用',
    audit_opinion      varchar(255) comment '审核意见',
    primary key (main_userid, finance_userid)
)
engine = InnoDB;

alter table ct_finance comment '企业财务账户表';

INSERT INTO ct_finance
('main_userid', 'finance_userid', 'com_name', 'bank_name', 'bank_acc', 'balance', 'freeze', 'ao_permit_file')
VALUES
(7, 8, "供应商公司1", "银行1", "123456789", 10000.00, 5000.55, "path/to/file"),
(9, 10, "采购商公司2", "银行1", "123456789", 10000.00, 5000.55, "path/to/file");

/*=====*/
/* Index: Index_finance_userid */
/*=====*/
create unique index Index_finance_userid on ct_finance
(
    finance_userid
);

/*=====*/
/* Index: Index_main_userid */
/*=====*/
create unique index Index_main_userid on ct_finance
(
    main_userid
);

alter table ct_finance add constraint FK_FU_REF_USER_1 foreign key (main_userid)
```

references ct_users (id) on delete restrict on update restrict;

alter table ct_finance add constraint FK_FU_REF_USER_2 foreign key (finance_userid)
references ct_users (id) on delete restrict on update restrict;

5.2.1.6.7 List of diagrams containing the table 企业财务账户表

Name	Code
国煤交易系统	pdp

5.2.1.6.8 List of outgoing references of the table 企业财务账户表

Name	Code	Foreign Key Columns
FU_REF_USER_1	FU_REF_USER_1	交易用户ID
FU_REF_USER_2	FU_REF_USER_2	财务用户ID

5.2.1.6.9 List of all dependencies of the table 企业财务账户表

Name	Code	Class Name
FU_REF_USER_1	FU_REF_USER_1	Reference
FU_REF_USER_2	FU_REF_USER_2	Reference

5.2.1.6.10 List of extended attributes of the table 企业财务账户表

Name	Data Type	Value	Target Name
Temporary	(Boolean)	false	MySQL 5.7

5.2.1.6.11 List of columns of the table 企业财务账户表

Name	Code
交易用户ID	main_userid
财务用户ID	finance_userid
汇款单位名称	com_name
开户行名称	bank_name
银行账号	bank_acc
账户金额	balance
报价冻结金额	freeze
开户许可证（文件）	ao_permit_file
信息状态	status
审核意见	audit_opinion

5.2.1.6.12 Column 交易用户ID of the table 企业财务账户表

5.2.1.6.12.1 Card of the column 交易用户ID of the table 企业财务账户表

Name	交易用户ID
Code	main_userid
Data Type	bigint(20)
Mandatory	Yes

5.2.1.6.12.2 Check constraint name of the column 交易用户ID of the table 企业财务账户表

CK_main_userid

5.2.1.6.12.3 Check of the column 交易用户ID of the table 企业财务账户表

Minimum Value	
Maximum Value	
Default Value	
Unit	

<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.6.12.4 Server validation rule of the column 交易用户ID of the table 企业财务账户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.6.12.5 List of all dependencies of the table column 交易用户ID

<i>Name</i>	<i>Code</i>	<i>Class Name</i>
Key_1	Key_1	Key
交易用户ID	main_userid	Index Column
?	?	Reference Join

5.2.1.6.12.6 List of extended attributes of the table column 交易用户ID

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.6.13 Column 财务用户ID of the table 企业财务账户表

5.2.1.6.13.1 Card of the column 财务用户ID of the table 企业财务账户表

<i>Name</i>	财务用户ID
<i>Code</i>	finance_userid
<i>Data Type</i>	bigint(20)
<i>Mandatory</i>	Yes

5.2.1.6.13.2 Check constraint name of the column 财务用户ID of the table 企业财务账户表

CK_finance_userid

5.2.1.6.13.3 Check of the column 财务用户ID of the table 企业财务账户表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.6.13.4 Server validation rule of the column 财务用户ID of the table 企业财务账户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.6.13.5 List of all dependencies of the table column 财务用户ID

<i>Name</i>	<i>Code</i>	<i>Class Name</i>
Key_1	Key_1	Key
?	?	Reference Join
财务用户ID	finance_userid	Index Column

5.2.1.6.13.6 List of extended attributes of the table column 财务用户ID

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
-------------	------------------	--------------	--------------------

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.6.14 Column 汇款单位名称 of the table 企业财务账户表

5.2.1.6.14.1 Card of the column 汇款单位名称 of the table 企业财务账户表

Name	汇款单位名称
Code	com_name
Data Type	varchar(20)
Mandatory	No

5.2.1.6.14.2 Check constraint name of the column 汇款单位名称 of the table 企业财务账户表

CK_com_name

5.2.1.6.14.3 Check of the column 汇款单位名称 of the table 企业财务账户表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.6.14.4 Server validation rule of the column 汇款单位名称 of the table 企业财务账户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.6.14.5 List of extended attributes of the table column 汇款单位名称

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.6.15 Column 开户行名称 of the table 企业财务账户表

5.2.1.6.15.1 Card of the column 开户行名称 of the table 企业财务账户表

Name	开户行名称
Code	bank_name
Data Type	varchar(20)
Mandatory	No

5.2.1.6.15.2 Check constraint name of the column 开户行名称 of the table 企业财务账户表

CK_bank_name

5.2.1.6.15.3 Check of the column 开户行名称 of the table 企业财务账户表

Minimum Value	
Maximum Value	

Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.6.15.4 Server validation rule of the column 开户行名称 of the table 企业财务账户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.6.15.5 List of extended attributes of the table column 开户行名称

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.6.16 Column 银行账号 of the table 企业财务账户表

5.2.1.6.16.1 Card of the column 银行账号 of the table 企业财务账户表

Name	银行账号
Code	bank_acc
Data Type	varchar(19)
Mandatory	No

5.2.1.6.16.2 Check constraint name of the column 银行账号 of the table 企业财务账户表

CK_bank_acc

5.2.1.6.16.3 Check of the column 银行账号 of the table 企业财务账户表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.6.16.4 Server validation rule of the column 银行账号 of the table 企业财务账户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.6.16.5 List of extended attributes of the table column 银行账号

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.6.17 Column 账户金额 of the table 企业财务账户表

5.2.1.6.17.1 Card of the column 账户金额 of the table 企业财务账户表

Name	账户金额
------	------

<i>Code</i>	balance
<i>Data Type</i>	decimal(10,2)
<i>Mandatory</i>	No

5.2.1.6.17.2 Check constraint name of the column 账户金额 of the table 企业财务账户表

CK_balance

5.2.1.6.17.3 Check of the column 账户金额 of the table 企业财务账户表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.6.17.4 Server validation rule of the column 账户金额 of the table 企业财务账户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.6.17.5 List of extended attributes of the table column 账户金额

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.6.18 Column 报价冻结金额 of the table 企业财务账户表

5.2.1.6.18.1 Card of the column 报价冻结金额 of the table 企业财务账户表

<i>Name</i>	报价冻结金额
<i>Code</i>	freeze
<i>Data Type</i>	decimal(10,2)
<i>Mandatory</i>	No

5.2.1.6.18.2 Check constraint name of the column 报价冻结金额 of the table 企业财务账户表

CK_freeze

5.2.1.6.18.3 Check of the column 报价冻结金额 of the table 企业财务账户表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.6.18.4 Server validation rule of the column 报价冻结金额 of the table 企业财务账户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.6.18.5 List of extended attributes of the table column 报价冻结金额

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
-------------	------------------	--------------	--------------------

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.6.19 Column 开户许可证（文件） of the table 企业财务账户表

5.2.1.6.19.1 Card of the column 开户许可证（文件） of the table 企业财务账户表

<i>Name</i>	开户许可证（文件）
<i>Code</i>	ao_permit_file
<i>Data Type</i>	varchar(255)
<i>Mandatory</i>	No

5.2.1.6.19.2 Check constraint name of the column 开户许可证（文件） of the table 企业财务账户表

CK_ao_permit_file

5.2.1.6.19.3 Check of the column 开户许可证（文件） of the table 企业财务账户表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.6.19.4 Server validation rule of the column 开户许可证（文件） of the table 企业财务账户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.6.19.5 List of extended attributes of the table column 开户许可证（文件）

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.6.20 Column 信息状态 of the table 企业财务账户表

5.2.1.6.20.1 Card of the column 信息状态 of the table 企业财务账户表

<i>Name</i>	信息状态
<i>Code</i>	status
<i>Data Type</i>	enum('1','2','3')
<i>Mandatory</i>	Yes

5.2.1.6.20.2 Check constraint name of the column 信息状态 of the table 企业财务账户表

CK_status

5.2.1.6.20.3 Check of the column 信息状态 of the table 企业财务账户表

<i>Minimum Value</i>	
<i>Maximum Value</i>	

Default Value	1
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.6.20.4 Server validation rule of the column 信息状态 of the table 企业财务账户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.6.20.5 List of extended attributes of the table column 信息状态

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.6.21 Column 审核意见 of the table 企业财务账户表

5.2.1.6.21.1 Card of the column 审核意见 of the table 企业财务账户表

Name	审核意见
Code	audit_opinion
Data Type	varchar(255)
Mandatory	No

5.2.1.6.21.2 Check constraint name of the column 审核意见 of the table 企业财务账户表

CK_audit_opinion

5.2.1.6.21.3 Check of the column 审核意见 of the table 企业财务账户表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.6.21.4 Server validation rule of the column 审核意见 of the table 企业财务账户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.6.21.5 List of extended attributes of the table column 审核意见

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.6.22 List of keys of the table 企业财务账户表

Name	Code	Primary
Key_1	Key_1	X

5.2.1.6.23 Key Key_1 of the table 企业财务账户表**5.2.1.6.23.1 Card of the key Key_1 of the table 企业财务账户表**

<i>Name</i>	Key_1
<i>Code</i>	Key_1
<i>Table</i>	企业财务账户表

5.2.1.6.23.2 Code preview of the key Key_1 of the table 企业财务账户表

```
use coal_trading;
```

```
alter table ct_finance
  drop primary key;
```

5.2.1.6.23.3 List of columns of the table key Key_1

<i>Name</i>	<i>Code</i>
交易用户ID	main_userid
财务用户ID	finance_userid

5.2.1.6.23.4 List of extended attributes of the table key Key_1

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
ExtUnique	(Boolean)	false	MySQL 5.7

5.2.1.6.24 List of indexes of the table 企业财务账户表

<i>Name</i>	<i>Code</i>	<i>Unique</i>	<i>Cluster</i>	<i>Primary</i>	<i>Foreign Key</i>	<i>Alternate Key</i>
Index_finance_userid	Index_finance_userid	X				
Index_main_userid	Index_main_userid	X				

5.2.1.6.25 Index Index_finance_userid of the table 企业财务账户表**5.2.1.6.25.1 Card of the index Index_finance_userid of the table 企业财务账户表**

<i>Name</i>	Index_finance_userid
<i>Code</i>	Index_finance_userid
<i>Unique</i>	Yes
<i>Cluster</i>	No
<i>Primary</i>	No
<i>Foreign Key</i>	No
<i>Alternate Key</i>	No
<i>Table</i>	企业财务账户表

5.2.1.6.25.2 Code preview of the index Index_finance_userid of the table 企业财务账户表

```
use coal_trading;
```

```
use coal_trading;
```

```
/*=====*/
/* Index: Index_finance_userid */
/*=====*/
create unique index Index_finance_userid on ct_finance
(
  finance_userid
);
```

5.2.1.6.25.3 List of index columns of the table index Index finance_userid

Name	Code	Sort
财务用户ID	finance_userid	Ascending

5.2.1.6.25.4 List of extended attributes of the table index Index finance_userid

Name	Data Type	Value	Target Name
FullText	(Boolean)	false	MySQL 5.7

5.2.1.6.26 Index Index main_userid of the table 企业财务账户表

5.2.1.6.26.1 Card of the index Index main_userid of the table 企业财务账户表

Name	Index_main_userid
Code	Index_main_userid
Unique	Yes
Cluster	No
Primary	No
Foreign Key	No
Alternate Key	No
Table	企业财务账户表

5.2.1.6.26.2 Code preview of the index Index main_userid of the table 企业财务账户表

use coal_trading;

use coal_trading;

```
/*=====*/
/* Index: Index_main_userid */
/*=====*/
create unique index Index_main_userid on ct_finance
(
    main_userid
);
```

5.2.1.6.26.3 List of index columns of the table index Index main_userid

Name	Code	Sort
交易用户ID	main_userid	Ascending

5.2.1.6.26.4 List of extended attributes of the table index Index main_userid

Name	Data Type	Value	Target Name
FullText	(Boolean)	false	MySQL 5.7

5.2.1.7 Table 挂牌需求表

5.2.1.7.1 Card of table 挂牌需求表

Name	挂牌需求表
Code	ct_request
DBMS	MySQL 5.7

5.2.1.7.2 Check constraint name of the table 挂牌需求表

TK_ct_request

5.2.1.7.3 Server validation rule of the table 挂牌需求表

%RULES%

5.2.1.7.4 Options of the table 挂牌需求表

engine = InnoDB

5.2.1.7.5 Code preview of the table 挂牌需求表

use coal_trading;

drop table if exists ct_request;

```
/*=====*/
/* Table: ct_request */
/*=====*/
```

create table ct_request

```
(
  id          bigint(20) not null comment '需求ID',
  user_id     bigint(20) comment '用户ID',
  created_time datetime comment '创建时间',
  ended_time  datetime comment '结束时间',
  type        enum('1','2') comment '1. 卖出
            2. 采购',
  status      enum('1','2','3','4','5') not null comment '需求状态
            1. 草稿
            2. 发布
            3. 被摘取
            4. 隐藏
            5. 完成',
  detail      json comment '需求信息(JSON)',
  zp_id       bigint(20) comment '摘牌者ID',
  zp_detail   json comment '摘牌信息 (JSON)',
  contract_file varchar(255) comment '合同文件 (路径)',
  primary key (id)
)
engine = InnoDB;
```

```
/*=====*/
/* Index: Index_req_id */
/*=====*/
```

create index Index_req_id on ct_request

```
(
  id
);
```

```
alter table ct_request add constraint FK_REQ_REF_USER_1 foreign key (user_id)
references ct_users (id) on delete restrict on update restrict;
```

```
alter table ct_request add constraint FK_REQ_REF_USER_2 foreign key (zp_id)
references ct_users (id) on delete restrict on update restrict;
```

5.2.1.7.6 List of diagrams containing the table 挂牌需求表

Name	Code
国煤交易系统	pdp

5.2.1.7.7 List of incoming references of the table 挂牌需求表

Name	Code
ORDER_REF_REQ	ORDER_REF_REQ

5.2.1.7.8 List of outgoing references of the table 挂牌需求表

Name	Code	Foreign Key Columns
REQ_REF_USER_1	REQ_REF_USER_1	用户ID

Name	Code	Foreign Key Columns
REQ_REF_USER_2	REQ_REF_USER_2	摘牌者ID

5.2.1.7.9 List of all dependencies of the table 挂牌需求表

Name	Code	Class Name
ORDER_REF_REQ	ORDER_REF_REQ	Reference
REQ_REF_USER_1	REQ_REF_USER_1	Reference
REQ_REF_USER_2	REQ_REF_USER_2	Reference

5.2.1.7.10 List of extended attributes of the table 挂牌需求表

Name	Data Type	Value	Target Name
Temporary	(Boolean)	false	MySQL 5.7

5.2.1.7.11 List of columns of the table 挂牌需求表

Name	Code
需求ID	id
用户ID	user_id
创建时间	created_time
结束时间	ended_time
需求类型	type
需求状态	status
需求信息(JSON)	detail
摘牌者ID	zp_id
摘牌信息（JSON）	zp_detail
合同文件（路径）	contract_file

5.2.1.7.12 Column 需求ID of the table 挂牌需求表

5.2.1.7.12.1 Card of the column 需求ID of the table 挂牌需求表

Name	需求ID
Code	id
Data Type	bigint(20)
Mandatory	Yes

5.2.1.7.12.2 Check constraint name of the column 需求ID of the table 挂牌需求表

CK_id

5.2.1.7.12.3 Check of the column 需求ID of the table 挂牌需求表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.7.12.4 Server validation rule of the column 需求ID of the table 挂牌需求表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.7.12.5 List of all dependencies of the table column 需求ID

Name	Code	Class Name
------	------	------------

<i>Name</i>	<i>Code</i>	<i>Class Name</i>
Key_1	Key_1	Key
需求ID	id	Index Column
?	?	Reference Join

5.2.1.7.12.6 List of extended attributes of the table column 需求ID

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.7.13 Column 用户ID of the table 挂牌需求表

5.2.1.7.13.1 Card of the column 用户ID of the table 挂牌需求表

<i>Name</i>	用户ID
<i>Code</i>	user_id
<i>Data Type</i>	bigint(20)
<i>Mandatory</i>	No

5.2.1.7.13.2 Check constraint name of the column 用户ID of the table 挂牌需求表

CK_user_id

5.2.1.7.13.3 Check of the column 用户ID of the table 挂牌需求表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.7.13.4 Server validation rule of the column 用户ID of the table 挂牌需求表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.7.13.5 List of all dependencies of the table column 用户ID

<i>Name</i>	<i>Code</i>	<i>Class Name</i>
?	?	Reference Join

5.2.1.7.13.6 List of extended attributes of the table column 用户ID

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.7.14 Column 创建时间 of the table 挂牌需求表

<i>Name</i>	创建时间
<i>Code</i>	created_time
<i>Data Type</i>	datetime
<i>Mandatory</i>	No

5.2.1.7.14.2 Check constraint name of the column 创建时间 of the table 挂牌需求表

CK_created_time

5.2.1.7.14.3 Check of the column 创建时间 of the table 挂牌需求表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.7.14.4 Server validation rule of the column 创建时间 of the table 挂牌需求表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.7.14.5 List of extended attributes of the table column 创建时间

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.7.15 Column 结束时间 of the table 挂牌需求表

5.2.1.7.15.1 Card of the column 结束时间 of the table 挂牌需求表

<i>Name</i>	结束时间
<i>Code</i>	ended_time
<i>Data Type</i>	datetime
<i>Mandatory</i>	No

5.2.1.7.15.2 Check constraint name of the column 结束时间 of the table 挂牌需求表

CK_ended_time

5.2.1.7.15.3 Check of the column 结束时间 of the table 挂牌需求表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.7.15.4 Server validation rule of the column 结束时间 of the table 挂牌需求表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.7.16 Column 需求类型 of the table 挂牌需求表

5.2.1.7.16.1 Card of the column 需求类型 of the table 挂牌需求表

Name	需求类型
Code	type
Data Type	enum('1','2')
Mandatory	No

5.2.1.7.16.2 Check constraint name of the column 需求类型 of the table 挂牌需求表

CK_type

5.2.1.7.16.3 Check of the column 需求类型 of the table 挂牌需求表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.7.16.4 Server validation rule of the column 需求类型 of the table 挂牌需求表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.7.16.5 List of extended attributes of the table column 需求类型

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.7.17 Column 需求状态 of the table 挂牌需求表

5.2.1.7.17.1 Card of the column 需求状态 of the table 挂牌需求表

Name	需求状态
Code	status
Data Type	enum('1','2','3','4','5')
Mandatory	Yes

5.2.1.7.17.2 Check constraint name of the column 需求状态 of the table 挂牌需求表

CK_status

5.2.1.7.17.3 Check of the column 需求状态 of the table 挂牌需求表

Minimum Value	
Maximum Value	

Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.7.17.4 Server validation rule of the column 需求状态 of the table 挂牌需求表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.7.17.5 List of extended attributes of the table column 需求状态

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.7.18 Column 需求信息(JSON) of the table 挂牌需求表

5.2.1.7.18.1 Card of the column 需求信息(JSON) of the table 挂牌需求表

Name	需求信息(JSON)
Code	detail
Data Type	json
Mandatory	No

5.2.1.7.18.2 Check constraint name of the column 需求信息(JSON) of the table 挂牌需求表

CK_detail

5.2.1.7.18.3 Check of the column 需求信息(JSON) of the table 挂牌需求表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.7.18.4 Server validation rule of the column 需求信息(JSON) of the table 挂牌需求表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.7.18.5 List of extended attributes of the table column 需求信息(JSON)

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.7.19 Column 摘牌者ID of the table 挂牌需求表

5.2.1.7.19.1 Card of the column 摘牌者ID of the table 挂牌需求表

Name	摘牌者ID
------	-------

Code	zp_id
Data Type	bigint(20)
Mandatory	No

5.2.1.7.19.2 Check constraint name of the column 摘牌者ID of the table 挂牌需求表

CK_zp_id

5.2.1.7.19.3 Check of the column 摘牌者ID of the table 挂牌需求表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.7.19.4 Server validation rule of the column 摘牌者ID of the table 挂牌需求表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.7.19.5 List of all dependencies of the table column 摘牌者ID

Name	Code	Class Name
?	?	Reference Join

5.2.1.7.19.6 List of extended attributes of the table column 摘牌者ID

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.7.20 Column 摘牌信息（JSON） of the table 挂牌需求表

5.2.1.7.20.1 Card of the column 摘牌信息（JSON） of the table 挂牌需求表

Name	摘牌信息（JSON）
Code	zp_detail
Data Type	json
Mandatory	No

5.2.1.7.20.2 Check constraint name of the column 摘牌信息（JSON） of the table 挂牌需求表

CK_zp_detail

5.2.1.7.20.3 Check of the column 摘牌信息（JSON） of the table 挂牌需求表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.7.20.4 Server validation rule of the column 摘牌信息 (JSON) of the table 挂牌需求表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.7.20.5 List of extended attributes of the table column 摘牌信息 (JSON)

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.7.21 Column 合同文件 (路径) of the table 挂牌需求表**5.2.1.7.21.1 Card of the column 合同文件 (路径) of the table 挂牌需求表**

Name	合同文件 (路径)
Code	contract_file
Data Type	varchar(255)
Mandatory	No

5.2.1.7.21.2 Check constraint name of the column 合同文件 (路径) of the table 挂牌需求表

CK_contract_file

5.2.1.7.21.3 Check of the column 合同文件 (路径) of the table 挂牌需求表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.7.21.4 Server validation rule of the column 合同文件 (路径) of the table 挂牌需求表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.7.21.5 List of extended attributes of the table column 合同文件 (路径)

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.7.22 List of keys of the table 挂牌需求表

Name	Code	Primary
Key_1	Key_1	X

5.2.1.7.23 Key Key_1 of the table 挂牌需求表**5.2.1.7.23.1 Card of the key Key_1 of the table 挂牌需求表**

Name	Key_1
Code	Key_1
Table	挂牌需求表

5.2.1.7.23.2 Code preview of the key Key_1 of the table 挂牌需求表

```
use coal_trading;

alter table ct_request
  drop primary key;
```

5.2.1.7.23.3 List of columns of the table key Key_1

Name	Code
需求ID	id

5.2.1.7.23.4 List of all dependencies of the table key Key_1

Name	Code	Class Name
ORDER_REF_REQ	ORDER_REF_REQ	Reference

5.2.1.7.23.5 List of extended attributes of the table key Key_1

Name	Data Type	Value	Target Name
ExtUnique	(Boolean)	false	MySQL 5.7

5.2.1.7.24 List of indexes of the table 挂牌需求表

Name	Code	Unique	Cluster	Primary	Foreign Key	Alternate Key
Index_req_id	Index_req_id					

5.2.1.7.25 Index Index_req_id of the table 挂牌需求表

5.2.1.7.25.1 Card of the index Index_req_id of the table 挂牌需求表

Name	Index_req_id
Code	Index_req_id
Unique	No
Cluster	No
Primary	No
Foreign Key	No
Alternate Key	No
Table	挂牌需求表

5.2.1.7.25.2 Code preview of the index Index_req_id of the table 挂牌需求表

```
use coal_trading;

use coal_trading;

/*=====*/
/* Index: Index_req_id */
/*=====*/
create index Index_req_id on ct_request
(
  id
);
```

5.2.1.7.25.3 List of index columns of the table index Index_req_id

Name	Code	Sort
需求ID	id	Ascending

Name	Data Type	Value	Target Name
FullText	(Boolean)	false	MySQL 5.7

5.2.1.8 Table 新闻资讯表

5.2.1.8.1 Card of table 新闻资讯表

Name	新闻资讯表
Code	ct_news
DBMS	MySQL 5.7

5.2.1.8.2 Check constraint name of the table 新闻资讯表

TK_ct_news

5.2.1.8.3 Server validation rule of the table 新闻资讯表

%RULES%

5.2.1.8.4 Options of the table 新闻资讯表

engine = InnoDB

5.2.1.8.5 End script of the table 新闻资讯表

INSERT INTO ct_news(id, title, content, status, author_id, auditor_id)
VALUES
(1, "草稿资讯", "草稿资讯的内容", 1, 2, NULL),
(2, "审核中资讯", "审核中资讯的内容", 2, 2, 3),
(3, "审核驳回资讯", "审核驳回资讯的内容", 3, 2, 3),
(4, "发布的资讯", "发布的资讯的内容", 4, 2, 3),
(5, "撤销的资讯", "撤销的资讯的内容", 5, 2, 3);

5.2.1.8.6 Code preview of the table 新闻资讯表

```
use coal_trading;

drop table if exists ct_news;

/*=====*/
/* Table: ct_news */
/*=====*/
create table ct_news
(
  id          bigint(20) not null auto_increment comment '新闻ID',
  title       varchar(20) not null comment '新闻标题',
  content     text not null comment '内容',
  date        datetime default CURRENT_TIMESTAMP comment '创建时间',
  status      enum('1','2','3','4','5') not null comment '状态：
    1. 草稿
    2. 审核中
    3. 驳回（审核不通过）
    4. 发布
    5. 撤销（隐藏）
    删除（记录直接没了）';
  author_id   bigint(20) not null comment '编写人员',
  auditor_id  bigint(20) comment '审核人员',
  audit_opinion varchar(255) comment '审核意见',
  primary key (id)
)
engine = InnoDB;

INSERT INTO ct_news(id, title, content, status, author_id, auditor_id)
VALUES
(1, "草稿资讯", "草稿资讯的内容", 1, 2, NULL),
(2, "审核中资讯", "审核中资讯的内容", 2, 2, 3),
```

(3, "审核驳回资讯", "审核驳回资讯的内容", 3, 2, 3),
(4, "发布的资讯", "发布的资讯的内容", 4, 2, 3),
(5, "撤销的资讯", "撤销的资讯的内容", 5, 2, 3);

```
/*=====*/
/* Index: Index_news_id */
/*=====*/
create unique index Index_news_id on ct_news
(
  id
);

alter table ct_news add constraint FK_NEWS_REF_USER_1 foreign key (author_id)
references ct_users (id) on delete restrict on update restrict;

alter table ct_news add constraint FK_NEWS_REF_USER_2 foreign key (auditor_id)
references ct_users (id) on delete restrict on update restrict;
```

5.2.1.8.7 List of diagrams containing the table 新闻资讯表

Name	Code
国煤交易系统	pdp

5.2.1.8.8 List of outgoing references of the table 新闻资讯表

Name	Code	Foreign Key Columns
NEWS_REF_USER_1	NEWS_REF_USER_1	编写人员
NEWS_REF_USER_2	NEWS_REF_USER_2	审核人员

5.2.1.8.9 List of all dependencies of the table 新闻资讯表

Name	Code	Class Name
NEWS_REF_USER_1	NEWS_REF_USER_1	Reference
NEWS_REF_USER_2	NEWS_REF_USER_2	Reference

5.2.1.8.10 List of extended attributes of the table 新闻资讯表

Name	Data Type	Value	Target Name
Temporary	(Boolean)	false	MySQL 5.7

5.2.1.8.11 List of columns of the table 新闻资讯表

Name	Code
新闻ID	id
新闻标题	title
内容	content
创建时间	date
状态	status
编写人员	author_id
审核人员	auditor_id
审核意见	audit_opinion

5.2.1.8.12 Column 新闻ID of the table 新闻资讯表

5.2.1.8.12.1 Card of the column 新闻ID of the table 新闻资讯表

Name	新闻ID
Code	id
Data Type	bigint(20)
Mandatory	Yes

5.2.1.8.12.2 Check constraint name of the column 新闻ID of the table 新闻资讯表

CK_id

5.2.1.8.12.3 Check of the column 新闻ID of the table 新闻资讯表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.8.12.4 Server validation rule of the column 新闻ID of the table 新闻资讯表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.8.12.5 List of all dependencies of the table column 新闻ID

Name	Code	Class Name
Key_1	Key_1	Key
新闻ID	id	Index Column

5.2.1.8.12.6 List of extended attributes of the table column 新闻ID

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.8.13 Column 新闻标题 of the table 新闻资讯表

5.2.1.8.13.1 Card of the column 新闻标题 of the table 新闻资讯表

Name	新闻标题
Code	title
Data Type	varchar(20)
Mandatory	Yes

5.2.1.8.13.2 Check constraint name of the column 新闻标题 of the table 新闻资讯表

CK_title

5.2.1.8.13.3 Check of the column 新闻标题 of the table 新闻资讯表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.8.13.4 Server validation rule of the column 新闻标题 of the table 新闻资讯表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.8.14 Column 内容 of the table 新闻资讯表

5.2.1.8.14.1 Card of the column 内容 of the table 新闻资讯表

Name	内容
Code	content
Data Type	text
Mandatory	Yes

5.2.1.8.14.2 Check constraint name of the column 内容 of the table 新闻资讯表

CK_content

5.2.1.8.14.3 Check of the column 内容 of the table 新闻资讯表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.8.14.4 Server validation rule of the column 内容 of the table 新闻资讯表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.8.14.5 List of extended attributes of the table column 内容

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.8.15 Column 创建时间 of the table 新闻资讯表

5.2.1.8.15.1 Card of the column 创建时间 of the table 新闻资讯表

Name	创建时间
Code	date
Data Type	datetime
Mandatory	No

5.2.1.8.15.2 Check constraint name of the column 创建时间 of the table 新闻资讯表

CK_date

5.2.1.8.15.3 Check of the column 创建时间 of the table 新闻资讯表

Minimum Value	
Maximum Value	

Default Value	CURRENT_TIMESTAMP
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.8.15.4 Server validation rule of the column 创建时间 of the table 新闻资讯表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.8.15.5 List of extended attributes of the table column 创建时间

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.8.16 Column 状态 of the table 新闻资讯表

5.2.1.8.16.1 Card of the column 状态 of the table 新闻资讯表

Name	状态
Code	status
Data Type	enum('1','2','3','4','5')
Mandatory	Yes

5.2.1.8.16.2 Check constraint name of the column 状态 of the table 新闻资讯表

CK_status

5.2.1.8.16.3 Check of the column 状态 of the table 新闻资讯表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.8.16.4 Server validation rule of the column 状态 of the table 新闻资讯表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.8.16.5 List of extended attributes of the table column 状态

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.8.17 Column 编写人员 of the table 新闻资讯表

5.2.1.8.17.1 Card of the column 编写人员 of the table 新闻资讯表

Name	编写人员
------	------

Code	author_id
Data Type	bigint(20)
Mandatory	Yes

5.2.1.8.17.2 Check constraint name of the column 编写人员 of the table 新闻资讯表

CK_author_id

5.2.1.8.17.3 Check of the column 编写人员 of the table 新闻资讯表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.8.17.4 Server validation rule of the column 编写人员 of the table 新闻资讯表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.8.17.5 List of all dependencies of the table column 编写人员

Name	Code	Class Name
?	?	Reference Join

5.2.1.8.17.6 List of extended attributes of the table column 编写人员

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.8.18 Column 审核人员 of the table 新闻资讯表

5.2.1.8.18.1 Card of the column 审核人员 of the table 新闻资讯表

Name	审核人员
Code	auditor_id
Data Type	bigint(20)
Mandatory	No

5.2.1.8.18.2 Check constraint name of the column 审核人员 of the table 新闻资讯表

CK_auditor_id

5.2.1.8.18.3 Check of the column 审核人员 of the table 新闻资讯表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.8.18.4 Server validation rule of the column 审核人员 of the table 新闻资讯表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.8.18.5 List of all dependencies of the table column 审核人员

Name	Code	Class Name
?	?	Reference Join

5.2.1.8.18.6 List of extended attributes of the table column 审核人员

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.8.19 Column 审核意见 of the table 新闻资讯表

5.2.1.8.19.1 Card of the column 审核意见 of the table 新闻资讯表

Name	审核意见
Code	audit_opinion
Data Type	varchar(255)
Mandatory	No

5.2.1.8.19.2 Check constraint name of the column 审核意见 of the table 新闻资讯表

CK_audit_opinion

5.2.1.8.19.3 Check of the column 审核意见 of the table 新闻资讯表

Minimum Value	
Maximum Value	
Default Value	
Unit	
Format	
Cannot Modify	No
List Of Values	

5.2.1.8.19.4 Server validation rule of the column 审核意见 of the table 新闻资讯表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.8.19.5 List of extended attributes of the table column 审核意见

Name	Data Type	Value	Target Name
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.8.20 List of keys of the table 新闻资讯表

Name	Code	Primary
Key_1	Key_1	X

5.2.1.8.21 Key Key_1 of the table 新闻资讯表

5.2.1.8.21.1 Card of the key Key_1 of the table 新闻资讯表

Name	Key_1
Code	Key_1
Table	新闻资讯表

5.2.1.8.21.2 Code preview of the key Key_1 of the table 新闻资讯表

```
use coal_trading;  
  
alter table ct_news  
    drop primary key;
```

5.2.1.8.21.3 List of columns of the table key Key_1

Name	Code
新闻ID	id

5.2.1.8.21.4 List of extended attributes of the table key Key_1

Name	Data Type	Value	Target Name
ExtUnique	(Boolean)	false	MySQL 5.7

5.2.1.8.22 List of indexes of the table 新闻资讯表

Name	Code	Unique	Cluster	Primary	Foreign Key	Alternate Key
Index_news_id	Index_news_id	X				

5.2.1.8.23 Index Index_news_id of the table 新闻资讯表

5.2.1.8.23.1 Card of the index Index_news_id of the table 新闻资讯表

Name	Index_news_id
Code	Index_news_id
Unique	Yes
Cluster	No
Primary	No
Foreign Key	No
Alternate Key	No
Table	新闻资讯表

5.2.1.8.23.2 Code preview of the index Index_news_id of the table 新闻资讯表

```
use coal_trading;  
  
use coal_trading;  
  
/*=====*/  
/* Index: Index_news_id */  
/*=====*/  
create unique index Index_news_id on ct_news  
(  
    id  
);
```

5.2.1.8.23.3 List of index columns of the table index Index_news_id

Name	Code	Sort
新闻ID	id	Ascending

5.2.1.8.23.4 List of extended attributes of the table index Index news id

Name	Data Type	Value	Target Name
FullText	(Boolean)	false	MySQL 5.7

5.2.1.9 Table 权限表

5.2.1.9.1 Card of table 权限表

Name	权限表
Code	ct_permissions
DBMS	MySQL 5.7

5.2.1.9.2 Check constraint name of the table 权限表

TK_ct_permissions

5.2.1.9.3 Server validation rule of the table 权限表

%RULES%

5.2.1.9.4 Options of the table 权限表

engine = InnoDB

5.2.1.9.5 End script of the table 权限表

```
/*
权限：
1. 超级管理员
2. 资讯编辑权限
3. 资讯审核权限
4. 资讯维护权限
5. 注册用户审核权限
6. 交易审核权限
7. 用户创建权限
8. 挂牌权限
9. 挂牌权限
10.信息编辑权限
*/
INSERT INTO ct_permissions VALUES(1, "SUPER_ADMIN"),
(2, "NEWS_EDITOR"),
(3, "NEWS_AUDITOR"),
(4, "NEWS_MANAGER"),
(5, "USER_REG_AUDITOR"),
(6, "TRADE_AUDITOR"),
(7, "USER_ADD"),
(8, "PUB_SALE"),
(9, "PUB_BUY");
```

5.2.1.9.6 Code preview of the table 权限表

```
use coal_trading;

drop table if exists ct_permissions;

/*=====*/
/* Table: ct_permissions */
/*=====*/

create table ct_permissions
(
    id          bigint(20) not null comment '权限ID',
    name        varchar(15) comment '权限名',
    primary key (id)
)
```

```
alter table ct_permissions comment '权限：
1. 资讯编辑权限
2. 资讯审核权限
3. 资讯维护权限
4.';

/*
权限：
1. 超级管理员
2. 资讯编辑权限
3. 资讯审核权限
4. 资讯维护权限
5. 注册用户审核权限
6. 交易审核权限
7. 用户创建权限
8. 挂牌权限
9. 挂牌权限
10.信息编辑权限
*/
INSERT INTO ct_permissions VALUES(1, "SUPER_ADMIN"),
(2, "NEWS_EDITOR"),
(3, "NEWS_AUDITOR"),
(4, "NEWS_MANAGER"),
(5, "USER_REG_AUDITOR"),
(6, "TRADE_AUDITOR"),
(7, "USER_ADD"),
(8, "PUB_SALE"),
(9, "PUB_BUY");

/*=====*/
/* Index: Index_pri */
/*=====*/
create unique index Index_pri on ct_permissions
(
    id
);
```

5.2.1.9.7 List of diagrams containing the table 权限表

Name	Code
国煤交易系统	pdp

5.2.1.9.8 List of incoming references of the table 权限表

Name	Code
RP_REF_PERMISSION	RP_REF_PERMISSION

5.2.1.9.9 List of all dependencies of the table 权限表

Name	Code	Class Name
RP_REF_PERMISSION	RP_REF_PERMISSION	Reference

5.2.1.9.10 List of extended attributes of the table 权限表

Name	Data Type	Value	Target Name
Temporary	(Boolean)	false	MySQL 5.7

5.2.1.9.11 List of columns of the table 权限表

Name	Code
权限ID	id

<i>Name</i>	<i>Code</i>
权限名	name

5.2.1.9.12 Column 权限ID of the table 权限表

5.2.1.9.12.1 Card of the column 权限ID of the table 权限表

<i>Name</i>	权限ID
<i>Code</i>	id
<i>Data Type</i>	bigint(20)
<i>Mandatory</i>	Yes

5.2.1.9.12.2 Check constraint name of the column 权限ID of the table 权限表

CK_id

5.2.1.9.12.3 Check of the column 权限ID of the table 权限表

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.9.12.4 Server validation rule of the column 权限ID of the table 权限表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.9.12.5 List of all dependencies of the table column 权限ID

<i>Name</i>	<i>Code</i>	<i>Class Name</i>
Key_1	Key_1	Key
权限ID	id	Index Column
?	?	Reference Join

5.2.1.9.12.6 List of extended attributes of the table column 权限ID

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.9.13 Column 权限名 of the table 权限表

5.2.1.9.13.1 Card of the column 权限名 of the table 权限表

<i>Name</i>	权限名
<i>Code</i>	name
<i>Data Type</i>	varchar(15)
<i>Mandatory</i>	No

5.2.1.9.13.2 Check constraint name of the column 权限名 of the table 权限表

CK_name

<i>Minimum Value</i>	
<i>Maximum Value</i>	
<i>Default Value</i>	
<i>Unit</i>	
<i>Format</i>	
<i>Cannot Modify</i>	No
<i>List Of Values</i>	

5.2.1.9.13.4 Server validation rule of the column 权限名 of the table 权限表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.9.13.5 List of extended attributes of the table column 权限名

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
CharSet	CharSets		MySQL 5.7
Collate	(String)		MySQL 5.7
National	(Boolean)	false	MySQL 5.7
Unsigned	(Boolean)	false	MySQL 5.7
ZeroFill	(Boolean)	false	MySQL 5.7

5.2.1.9.14 List of keys of the table 权限表

<i>Name</i>	<i>Code</i>	<i>Primary</i>
Key_1	Key_1	X

5.2.1.9.15 Key Key_1 of the table 权限表

5.2.1.9.15.1 Card of the key Key_1 of the table 权限表

<i>Name</i>	Key_1
<i>Code</i>	Key_1
<i>Table</i>	权限表

5.2.1.9.15.2 Code preview of the key Key_1 of the table 权限表

use coal_trading;

alter table ct_permissions
drop primary key;

5.2.1.9.15.3 List of columns of the table key Key_1

<i>Name</i>	<i>Code</i>
权限ID	id

5.2.1.9.15.4 List of all dependencies of the table key Key_1

<i>Name</i>	<i>Code</i>	<i>Class Name</i>
RP_REF_PERMISSION	RP_REF_PERMISSION	Reference

5.2.1.9.15.5 List of extended attributes of the table key Key_1

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
ExtUnique	(Boolean)	false	MySQL 5.7

5.2.1.9.16 List of indexes of the table 权限表

<i>Name</i>	<i>Code</i>	<i>Unique</i>	<i>Cluster</i>	<i>Primary</i>	<i>Foreign Key</i>	<i>Alternate Key</i>
-------------	-------------	---------------	----------------	----------------	--------------------	----------------------

<i>Name</i>	<i>Code</i>	<i>Unique</i>	<i>Cluster</i>	<i>Primary</i>	<i>Foreign Key</i>	<i>Alternate Key</i>
Index_pri	Index_pri	X				

5.2.1.9.17 Index Index_pri of the table 权限表

5.2.1.9.17.1 Card of the index Index_pri of the table 权限表

<i>Name</i>	Index_pri
<i>Code</i>	Index_pri
<i>Unique</i>	Yes
<i>Cluster</i>	No
<i>Primary</i>	No
<i>Foreign Key</i>	No
<i>Alternate Key</i>	No
<i>Table</i>	权限表

5.2.1.9.17.2 Code preview of the index Index_pri of the table 权限表

```
use coal_trading;
```

```
use coal_trading;
```

```
/*=====*/
/* Index: Index_pri */
/*=====*/
create unique index Index_pri on ct_permissions
(
    id
);
```

5.2.1.9.17.3 List of index columns of the table index Index_pri

<i>Name</i>	<i>Code</i>	<i>Sort</i>
权限ID	id	Ascending

5.2.1.9.17.4 List of extended attributes of the table index Index_pri

<i>Name</i>	<i>Data Type</i>	<i>Value</i>	<i>Target Name</i>
FullText	(Boolean)	false	MySQL 5.7

5.2.1.10 Table 用户表

5.2.1.10.1 Card of table 用户表

<i>Name</i>	用户表
<i>Code</i>	ct_users
<i>DBMS</i>	MySQL 5.7

5.2.1.10.2 Check constraint name of the table 用户表

```
TK_ct_users
```

5.2.1.10.3 Server validation rule of the table 用户表

```
%RULES%
```

5.2.1.10.4 Options of the table 用户表

```
engine = InnoDB
```

5.2.1.10.5 End script of the table 用户表

```
INSERT INTO `ct_users` (`id`, `login`, `pass`, `nick`, `email`)
```

```
VALUES
```

```
(1, 'superadmin', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '超级管理员', '1@mail.com'),
(2, 'newseditor1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '资讯编辑员1', '2@mail.com'),
(3, 'newsauditor1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '资讯审核员1', '3@mail.com'),
(4, 'newsmanager1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '资讯维护员1',
'4@mail.com'),
(5, 'userregauditor1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '注册用户审核员1',
'5@mail.com'),
(6, 'tradeauditor1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '交易审核员1',
'6@mail.com'),
(7, 'saleuser1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '供应商用户1', '7@mail.com'),
(8, 'salemoneyuser1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '供应商财务用户1',
'8@mail.com'),
(9, 'buyuser1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '采购商用户', '9@mail.com'),
(10, 'buymoneyuser1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '采购商财务用户1',
'10@mail.com');
```

5.2.1.10.6 Code preview of the table 用户表

```
use coal_trading;
```

```
drop table if exists ct_users;
```

```
/*=====*/
/* Table: ct_users */
/*=====*/
create table ct_users
(
    id          bigint(20) not null auto_increment comment '用户ID（唯一）',
    login       varchar(20) not null comment '登录名（唯一）',
    pass        varchar(100) comment '用户密码：
    要经过加密',
    nick        varchar(20) comment '用户昵称',
    email       varchar(20) comment '用户邮箱（唯一）',
    registered   datetime default CURRENT_TIMESTAMP comment '创建时间',
    status       enum('1','2') not null default '2' comment '用户状态
    1. 用户未激活
    2. 已激活',
    primary key (id)
)
engine = InnoDB;
```

```
alter table ct_users comment '存储的用户类型：
```

1. 管理员
 2. 交易用户
 3. 财务用户
- ```
;
```

```
INSERT INTO `ct_users` (`id`, `login`, `pass`, `nick`, `email`)
```

```
VALUES
```

```
(1, 'superadmin', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '超级管理员', '1@mail.com'),
(2, 'newseditor1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '资讯编辑员1', '2@mail.com'),
(3, 'newsauditor1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '资讯审核员1', '3@mail.com'),
(4, 'newsmanager1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '资讯维护员1',
'4@mail.com'),
(5, 'userregauditor1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '注册用户审核员1',
'5@mail.com'),
(6, 'tradeauditor1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '交易审核员1',
'6@mail.com'),
(7, 'saleuser1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '供应商用户1', '7@mail.com'),
(8, 'salemoneyuser1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '供应商财务用户1',
'8@mail.com'),
(9, 'buyuser1', '$2a$10$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '采购商用户', '9@mail.com'),
```

(10, 'buymoneyuser1', '\$2a\$10\$.y9u24yrwyy6aw96ny/HVOgPxa.z/WuWzmBKVP0ELbE7w5U.9/EA2', '采购商财务用户1', "10@mail.com");

```
/*=====*/
/* Index: Index_user_login */
/*=====*/
create unique index Index_user_login on ct_users
(
 login
);

/*=====*/
/* Index: Index_user_email */
/*=====*/
create index Index_user_email on ct_users
(
 email
);
```

5.2.1.10.7 List of diagrams containing the table 用户表

| Name   | Code |
|--------|------|
| 国煤交易系统 | pdp  |

5.2.1.10.8 List of incoming references of the table 用户表

| Name            | Code            |
|-----------------|-----------------|
| CU_REF_USER     | CU_REF_USER     |
| FL_REF_USER     | FL_REF_USER     |
| FU_REF_USER_1   | FU_REF_USER_1   |
| FU_REF_USER_2   | FU_REF_USER_2   |
| NEWS_REF_USER_1 | NEWS_REF_USER_1 |
| NEWS_REF_USER_2 | NEWS_REF_USER_2 |
| ORDER_REF_USER  | ORDER_REF_USER  |
| REQ_REF_USER_1  | REQ_REF_USER_1  |
| REQ_REF_USER_2  | REQ_REF_USER_2  |
| UM_REF_USER_1   | UM_REF_USER_1   |
| UM_REF_USER_2   | UM_REF_USER_2   |
| UR_REF_USER     | UR_REF_USER     |

5.2.1.10.9 List of all dependencies of the table 用户表

| Name            | Code            | Class Name |
|-----------------|-----------------|------------|
| CU_REF_USER     | CU_REF_USER     | Reference  |
| FL_REF_USER     | FL_REF_USER     | Reference  |
| FU_REF_USER_1   | FU_REF_USER_1   | Reference  |
| FU_REF_USER_2   | FU_REF_USER_2   | Reference  |
| NEWS_REF_USER_1 | NEWS_REF_USER_1 | Reference  |
| NEWS_REF_USER_2 | NEWS_REF_USER_2 | Reference  |
| ORDER_REF_USER  | ORDER_REF_USER  | Reference  |
| REQ_REF_USER_1  | REQ_REF_USER_1  | Reference  |
| REQ_REF_USER_2  | REQ_REF_USER_2  | Reference  |
| UM_REF_USER_1   | UM_REF_USER_1   | Reference  |
| UM_REF_USER_2   | UM_REF_USER_2   | Reference  |
| UR_REF_USER     | UR_REF_USER     | Reference  |



5.2.1.10.10 List of extended attributes of the table 用户表

| Name      | Data Type | Value | Target Name |
|-----------|-----------|-------|-------------|
| Temporary | (Boolean) | false | MySQL 5.7   |

5.2.1.10.11 List of columns of the table 用户表

| Name | Code       |
|------|------------|
| 用户ID | id         |
| 登录名  | login      |
| 用户密码 | pass       |
| 用户昵称 | nick       |
| 用户邮箱 | email      |
| 创建时间 | registered |
| 用户状态 | status     |

5.2.1.10.12 Column 用户ID of the table 用户表

5.2.1.10.12.1 Card of the column 用户ID of the table 用户表

|           |            |
|-----------|------------|
| Name      | 用户ID       |
| Code      | id         |
| Data Type | bigint(20) |
| Mandatory | Yes        |

5.2.1.10.12.2 Check constraint name of the column 用户ID of the table 用户表

CK\_id

5.2.1.10.12.3 Check of the column 用户ID of the table 用户表

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.10.12.4 Server validation rule of the column 用户ID of the table 用户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.10.12.5 List of all dependencies of the table column 用户ID

| Name  | Code  | Class Name     |
|-------|-------|----------------|
| Key_1 | Key_1 | Key            |
| ?     | ?     | Reference Join |
| ?     | ?     | Reference Join |
| ?     | ?     | Reference Join |
| ?     | ?     | Reference Join |
| ?     | ?     | Reference Join |
| ?     | ?     | Reference Join |
| ?     | ?     | Reference Join |
| ?     | ?     | Reference Join |
| ?     | ?     | Reference Join |
| ?     | ?     | Reference Join |

| <i>Name</i> | <i>Code</i> | <i>Class Name</i> |
|-------------|-------------|-------------------|
| ?           | ?           | Reference Join    |
| ?           | ?           | Reference Join    |

5.2.1.10.12.6 List of extended attributes of the table column 用户ID

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| CharSet     | CharSets         |              | MySQL 5.7          |
| Collate     | (String)         |              | MySQL 5.7          |
| National    | (Boolean)        | false        | MySQL 5.7          |
| Unsigned    | (Boolean)        | false        | MySQL 5.7          |
| ZeroFill    | (Boolean)        | false        | MySQL 5.7          |

5.2.1.10.13 Column 登录名 of the table 用户表

5.2.1.10.13.1 Card of the column 登录名 of the table 用户表

|                  |             |
|------------------|-------------|
| <i>Name</i>      | 登录名         |
| <i>Code</i>      | login       |
| <i>Data Type</i> | varchar(20) |
| <i>Mandatory</i> | Yes         |

5.2.1.10.13.2 Check constraint name of the column 登录名 of the table 用户表

CK\_login

5.2.1.10.13.3 Check of the column 登录名 of the table 用户表

|                       |    |
|-----------------------|----|
| <i>Minimum Value</i>  |    |
| <i>Maximum Value</i>  |    |
| <i>Default Value</i>  |    |
| <i>Unit</i>           |    |
| <i>Format</i>         |    |
| <i>Cannot Modify</i>  | No |
| <i>List Of Values</i> |    |

5.2.1.10.13.4 Server validation rule of the column 登录名 of the table 用户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.10.13.5 List of all dependencies of the table column 登录名

| <i>Name</i> | <i>Code</i> | <i>Class Name</i> |
|-------------|-------------|-------------------|
| 登录名         | login       | Index Column      |

5.2.1.10.13.6 List of extended attributes of the table column 登录名

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| CharSet     | CharSets         |              | MySQL 5.7          |
| Collate     | (String)         |              | MySQL 5.7          |
| National    | (Boolean)        | false        | MySQL 5.7          |
| Unsigned    | (Boolean)        | false        | MySQL 5.7          |
| ZeroFill    | (Boolean)        | false        | MySQL 5.7          |

5.2.1.10.14 Column 用户密码 of the table 用户表

5.2.1.10.14.1 Card of the column 用户密码 of the table 用户表

|             |      |
|-------------|------|
| <i>Name</i> | 用户密码 |
|-------------|------|

|                  |              |
|------------------|--------------|
| <i>Code</i>      | pass         |
| <i>Data Type</i> | varchar(100) |
| <i>Mandatory</i> | No           |

**5.2.1.10.14.2 Check constraint name of the column 用户密码 of the table 用户表**

CK\_pass

**5.2.1.10.14.3 Check of the column 用户密码 of the table 用户表**

|                       |    |
|-----------------------|----|
| <i>Minimum Value</i>  |    |
| <i>Maximum Value</i>  |    |
| <i>Default Value</i>  |    |
| <i>Unit</i>           |    |
| <i>Format</i>         |    |
| <i>Cannot Modify</i>  | No |
| <i>List Of Values</i> |    |

**5.2.1.10.14.4 Server validation rule of the column 用户密码 of the table 用户表**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

**5.2.1.10.14.5 List of extended attributes of the table column 用户密码**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| CharSet     | CharSets         |              | MySQL 5.7          |
| Collate     | (String)         |              | MySQL 5.7          |
| National    | (Boolean)        | false        | MySQL 5.7          |
| Unsigned    | (Boolean)        | false        | MySQL 5.7          |
| ZeroFill    | (Boolean)        | false        | MySQL 5.7          |

**5.2.1.10.15 Column 用户昵称 of the table 用户表****5.2.1.10.15.1 Card of the column 用户昵称 of the table 用户表**

|                  |             |
|------------------|-------------|
| <i>Name</i>      | 用户昵称        |
| <i>Code</i>      | nick        |
| <i>Data Type</i> | varchar(20) |
| <i>Mandatory</i> | No          |

**5.2.1.10.15.2 Check constraint name of the column 用户昵称 of the table 用户表**

CK\_nick

**5.2.1.10.15.3 Check of the column 用户昵称 of the table 用户表**

|                       |    |
|-----------------------|----|
| <i>Minimum Value</i>  |    |
| <i>Maximum Value</i>  |    |
| <i>Default Value</i>  |    |
| <i>Unit</i>           |    |
| <i>Format</i>         |    |
| <i>Cannot Modify</i>  | No |
| <i>List Of Values</i> |    |

**5.2.1.10.15.4 Server validation rule of the column 用户昵称 of the table 用户表**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

**5.2.1.10.15.5 List of extended attributes of the table column 用户昵称**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
|-------------|------------------|--------------|--------------------|

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.10.16 Column 用户邮箱 of the table 用户表

5.2.1.10.16.1 Card of the column 用户邮箱 of the table 用户表

|           |             |
|-----------|-------------|
| Name      | 用户邮箱        |
| Code      | email       |
| Data Type | varchar(20) |
| Mandatory | No          |

5.2.1.10.16.2 Check constraint name of the column 用户邮箱 of the table 用户表

CK\_email

5.2.1.10.16.3 Check of the column 用户邮箱 of the table 用户表

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.10.16.4 Server validation rule of the column 用户邮箱 of the table 用户表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.10.16.5 List of all dependencies of the table column 用户邮箱

| Name | Code  | Class Name   |
|------|-------|--------------|
| 用户邮箱 | email | Index Column |

5.2.1.10.16.6 List of extended attributes of the table column 用户邮箱

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.10.17 Column 创建时间 of the table 用户表

5.2.1.10.17.1 Card of the column 创建时间 of the table 用户表

|           |            |
|-----------|------------|
| Name      | 创建时间       |
| Code      | registered |
| Data Type | datetime   |
| Mandatory | No         |

5.2.1.10.17.2 Check constraint name of the column 创建时间 of the table 用户表

CK\_registered

**5.2.1.10.17.3 Check of the column 创建时间 of the table 用户表**

|                |                   |
|----------------|-------------------|
| Minimum Value  |                   |
| Maximum Value  |                   |
| Default Value  | CURRENT_TIMESTAMP |
| Unit           |                   |
| Format         |                   |
| Cannot Modify  | No                |
| List Of Values |                   |

**5.2.1.10.17.4 Server validation rule of the column 创建时间 of the table 用户表**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

**5.2.1.10.17.5 List of extended attributes of the table column 创建时间**

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

**5.2.1.10.18 Column 用户状态 of the table 用户表****5.2.1.10.18.1 Card of the column 用户状态 of the table 用户表**

|           |               |
|-----------|---------------|
| Name      | 用户状态          |
| Code      | status        |
| Data Type | enum('1','2') |
| Mandatory | Yes           |

**5.2.1.10.18.2 Check constraint name of the column 用户状态 of the table 用户表**

CK\_status

**5.2.1.10.18.3 Check of the column 用户状态 of the table 用户表**

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  | 2  |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

**5.2.1.10.18.4 Server validation rule of the column 用户状态 of the table 用户表**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

**5.2.1.10.18.5 List of extended attributes of the table column 用户状态**

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

**5.2.1.10.19 List of keys of the table 用户表**

| <i>Name</i> | <i>Code</i> | <i>Primary</i> |
|-------------|-------------|----------------|
| Key_1       | Key_1       | X              |

**5.2.1.10.20 Key Key\_1 of the table 用户表****5.2.1.10.20.1 Card of the key Key\_1 of the table 用户表**

|              |       |
|--------------|-------|
| <i>Name</i>  | Key_1 |
| <i>Code</i>  | Key_1 |
| <i>Table</i> | 用户表   |

**5.2.1.10.20.2 Code preview of the key Key\_1 of the table 用户表**

```
use coal_trading;
```

```
alter table ct_users
 drop primary key;
```

**5.2.1.10.20.3 List of columns of the table key Key\_1**

| <i>Name</i> | <i>Code</i> |
|-------------|-------------|
| 用户ID        | id          |

**5.2.1.10.20.4 List of all dependencies of the table key Key\_1**

| <i>Name</i>     | <i>Code</i>     | <i>Class Name</i> |
|-----------------|-----------------|-------------------|
| CU_REF_USER     | CU_REF_USER     | Reference         |
| FL_REF_USER     | FL_REF_USER     | Reference         |
| FU_REF_USER_1   | FU_REF_USER_1   | Reference         |
| FU_REF_USER_2   | FU_REF_USER_2   | Reference         |
| NEWS_REF_USER_1 | NEWS_REF_USER_1 | Reference         |
| NEWS_REF_USER_2 | NEWS_REF_USER_2 | Reference         |
| ORDER_REF_USER  | ORDER_REF_USER  | Reference         |
| REQ_REF_USER_1  | REQ_REF_USER_1  | Reference         |
| REQ_REF_USER_2  | REQ_REF_USER_2  | Reference         |
| UM_REF_USER_1   | UM_REF_USER_1   | Reference         |
| UM_REF_USER_2   | UM_REF_USER_2   | Reference         |
| UR_REF_USER     | UR_REF_USER     | Reference         |

**5.2.1.10.20.5 List of extended attributes of the table key Key\_1**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| ExtUnique   | (Boolean)        | false        | MySQL 5.7          |

**5.2.1.10.21 List of indexes of the table 用户表**

| <i>Name</i>      | <i>Code</i>      | <i>Unique</i> | <i>Cluster</i> | <i>Primary</i> | <i>Foreign Key</i> | <i>Alternate Key</i> |
|------------------|------------------|---------------|----------------|----------------|--------------------|----------------------|
| Index_user_login | Index_user_login | X             |                |                |                    |                      |
| Index_user_email | Index_user_email |               |                |                |                    |                      |

**5.2.1.10.22 Index Index\_user\_login of the table 用户表****5.2.1.10.22.1 Card of the index Index\_user\_login of the table 用户表**

|             |                  |
|-------------|------------------|
| <i>Name</i> | Index_user_login |
|-------------|------------------|

|               |                  |
|---------------|------------------|
| Code          | Index_user_login |
| Unique        | Yes              |
| Cluster       | No               |
| Primary       | No               |
| Foreign Key   | No               |
| Alternate Key | No               |
| Table         | 用户表              |

5.2.1.10.22.2 Code preview of the index Index\_user\_login of the table 用户表

```
use coal_trading;

use coal_trading;

/*=====*/
/* Index: Index_user_login */
/*=====*/
create unique index Index_user_login on ct_users
(
 login
);
```

5.2.1.10.22.3 List of index columns of the table index Index\_user\_login

| Name | Code  | Sort      |
|------|-------|-----------|
| 登录名  | login | Ascending |

5.2.1.10.22.4 List of extended attributes of the table index Index\_user\_login

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |

5.2.1.10.23 Index Index\_user\_email of the table 用户表

5.2.1.10.23.1 Card of the index Index\_user\_email of the table 用户表

|               |                  |
|---------------|------------------|
| Name          | Index_user_email |
| Code          | Index_user_email |
| Unique        | No               |
| Cluster       | No               |
| Primary       | No               |
| Foreign Key   | No               |
| Alternate Key | No               |
| Table         | 用户表              |

5.2.1.10.23.2 Code preview of the index Index\_user\_email of the table 用户表

```
use coal_trading;

use coal_trading;

/*=====*/
/* Index: Index_user_email */
/*=====*/
create index Index_user_email on ct_users
(
 email
);
```

5.2.1.10.23.3 List of index columns of the table index Index\_user\_email

| Name | Code  | Sort      |
|------|-------|-----------|
| 用户邮箱 | email | Ascending |

5.2.1.10.23.4 List of extended attributes of the table index Index\_user\_email

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |

5.2.1.11 Table 用户角色表

5.2.1.11.1 Card of table 用户角色表

|      |                            |
|------|----------------------------|
| Name | 用户角色表                      |
| Code | ct_user_role_relationships |
| DBMS | MySQL 5.7                  |

5.2.1.11.2 Check constraint name of the table 用户角色表

TK\_ct\_user\_role\_relationships

5.2.1.11.3 Server validation rule of the table 用户角色表

%RULES%

5.2.1.11.4 Options of the table 用户角色表

engine = InnoDB

5.2.1.11.5 End script of the table 用户角色表

INSERT INTO ct\_user\_role\_relationships(`user\_id`,`role\_id`)  
VALUES(1, 1),(2,2),(3,3),(4,4),(5,5),(6,6),(7, 7),(8,9),(9,8),(10,9);

5.2.1.11.6 Code preview of the table 用户角色表

```
use coal_trading;

drop table if exists ct_user_role_relationships;

/*=====*/
/* Table: ct_user_role_relationships */
/*=====*/
create table ct_user_role_relationships
(
 user_id bigint(20) not null comment '用户ID',
 role_id bigint(20) not null comment '角色ID',
 primary key (role_id, user_id)
)
engine = InnoDB;

INSERT INTO ct_user_role_relationships(`user_id`,`role_id`)
VALUES(1, 1),(2,2),(3,3),(4,4),(5,5),(6,6),(7, 7),(8,9),(9,8),(10,9);

/*=====*/
/* Index: Index_user_role */
/*=====*/
create index Index_user_role on ct_user_role_relationships
(
 role_id
);

/*=====*/
/* Index: Index_user_id */
/*=====*/
```



```
create unique index Index_user_id on ct_user_role_relationships
(
 user_id
);

alter table ct_user_role_relationships add constraint FK_UR_REF_ROLE foreign key (role_id)
references ct_userrole (id) on delete restrict on update restrict;

alter table ct_user_role_relationships add constraint FK_UR_REF_USER foreign key (user_id)
references ct_users (id) on delete restrict on update restrict;
```

5.2.1.11.7 List of diagrams containing the table 用户角色表

| Name   | Code |
|--------|------|
| 国煤交易系统 | pdp  |

5.2.1.11.8 List of outgoing references of the table 用户角色表

| Name        | Code        | Foreign Key Columns |
|-------------|-------------|---------------------|
| UR_REF_ROLE | UR_REF_ROLE | 角色ID                |
| UR_REF_USER | UR_REF_USER | 用户ID                |

5.2.1.11.9 List of all dependencies of the table 用户角色表

| Name        | Code        | Class Name |
|-------------|-------------|------------|
| UR_REF_ROLE | UR_REF_ROLE | Reference  |
| UR_REF_USER | UR_REF_USER | Reference  |

5.2.1.11.10 List of extended attributes of the table 用户角色表

| Name      | Data Type | Value | Target Name |
|-----------|-----------|-------|-------------|
| Temporary | (Boolean) | false | MySQL 5.7   |

5.2.1.11.11 List of columns of the table 用户角色表

| Name | Code    |
|------|---------|
| 用户ID | user_id |
| 角色ID | role_id |

5.2.1.11.12 Column 用户ID of the table 用户角色表

5.2.1.11.12.1 Card of the column 用户ID of the table 用户角色表

|           |            |
|-----------|------------|
| Name      | 用户ID       |
| Code      | user_id    |
| Data Type | bigint(20) |
| Mandatory | Yes        |

5.2.1.11.12.2 Check constraint name of the column 用户ID of the table 用户角色表

CK\_user\_id

5.2.1.11.12.3 Check of the column 用户ID of the table 用户角色表

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.11.12.4 Server validation rule of the column 用户ID of the table 用户角色表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.11.12.5 List of all dependencies of the table column 用户ID

| Name  | Code    | Class Name     |
|-------|---------|----------------|
| Key_1 | Key_1   | Key            |
| 用户ID  | user_id | Index Column   |
| ?     | ?       | Reference Join |

5.2.1.11.12.6 List of extended attributes of the table column 用户ID

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.11.13 Column 角色ID of the table 用户角色表

5.2.1.11.13.1 Card of the column 角色ID of the table 用户角色表

|           |            |
|-----------|------------|
| Name      | 角色ID       |
| Code      | role_id    |
| Data Type | bigint(20) |
| Mandatory | Yes        |

5.2.1.11.13.2 Check constraint name of the column 角色ID of the table 用户角色表

CK\_role\_id

5.2.1.11.13.3 Check of the column 角色ID of the table 用户角色表

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.11.13.4 Server validation rule of the column 角色ID of the table 用户角色表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.11.13.5 List of all dependencies of the table column 角色ID

| Name  | Code    | Class Name     |
|-------|---------|----------------|
| Key_1 | Key_1   | Key            |
| 角色ID  | role_id | Index Column   |
| ?     | ?       | Reference Join |

5.2.1.11.13.6 List of extended attributes of the table column 角色ID

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.11.14 List of keys of the table 用户角色表

| Name  | Code  | Primary |
|-------|-------|---------|
| Key_1 | Key_1 | X       |

5.2.1.11.15 Key Key\_1 of the table 用户角色表

5.2.1.11.15.1 Card of the key Key\_1 of the table 用户角色表

|       |       |
|-------|-------|
| Name  | Key_1 |
| Code  | Key_1 |
| Table | 用户角色表 |

5.2.1.11.15.2 Code preview of the key Key\_1 of the table 用户角色表

```
use coal_trading;

alter table ct_user_role_relationships
 drop primary key;
```

5.2.1.11.15.3 List of columns of the table key Key\_1

| Name | Code    |
|------|---------|
| 角色ID | role_id |
| 用户ID | user_id |

5.2.1.11.15.4 List of extended attributes of the table key Key\_1

| Name      | Data Type | Value | Target Name |
|-----------|-----------|-------|-------------|
| ExtUnique | (Boolean) | true  | MySQL 5.7   |

5.2.1.11.16 List of indexes of the table 用户角色表

| Name          | Code            | Unique | Cluster | Primary | Foreign Key | Alternate Key |
|---------------|-----------------|--------|---------|---------|-------------|---------------|
| 用户角色索引        | Index_user_role |        |         |         |             |               |
| Index_user_id | Index_user_id   | X      |         |         |             |               |

5.2.1.11.17 Index 用户角色索引 of the table 用户角色表

5.2.1.11.17.1 Card of the index 用户角色索引 of the table 用户角色表

|               |                 |
|---------------|-----------------|
| Name          | 用户角色索引          |
| Code          | Index_user_role |
| Unique        | No              |
| Cluster       | No              |
| Primary       | No              |
| Foreign Key   | No              |
| Alternate Key | No              |
| Table         | 用户角色表           |

5.2.1.11.17.2 Code preview of the index 用户角色索引 of the table 用户角色表

```
use coal_trading;

use coal_trading;
```

```
/*=====*/
/* Index: Index_user_role */
/*=====*/
create index Index_user_role on ct_user_role_relationships
(
 role_id
);
```

5.2.1.11.17.3 List of index columns of the table index 用户角色索引

| Name | Code    | Sort      |
|------|---------|-----------|
| 角色ID | role_id | Ascending |

5.2.1.11.17.4 List of extended attributes of the table index 用户角色索引

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |

5.2.1.11.18 Index Index\_user\_id of the table 用户角色表

5.2.1.11.18.1 Card of the index Index\_user\_id of the table 用户角色表

|               |               |
|---------------|---------------|
| Name          | Index_user_id |
| Code          | Index_user_id |
| Unique        | Yes           |
| Cluster       | No            |
| Primary       | No            |
| Foreign Key   | No            |
| Alternate Key | No            |
| Table         | 用户角色表         |

5.2.1.11.18.2 Code preview of the index Index\_user\_id of the table 用户角色表

```
use coal_trading;

use coal_trading;

/*=====*/
/* Index: Index_user_id */
/*=====*/
create unique index Index_user_id on ct_user_role_relationships
(
 user_id
);
```

5.2.1.11.18.3 List of index columns of the table index Index\_user\_id

| Name | Code    | Sort      |
|------|---------|-----------|
| 用户ID | user_id | Ascending |

5.2.1.11.18.4 List of extended attributes of the table index Index\_user\_id

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |

5.2.1.12 Table 网站消息

5.2.1.12.1 Card of table 网站消息

|      |                    |
|------|--------------------|
| Name | 网站消息               |
| Code | ct_website_message |

|      |           |
|------|-----------|
| DBMS | MySQL 5.7 |
|------|-----------|

5.2.1.12.2 Check constraint name of the table 网站消息

TK\_ct\_website\_message

5.2.1.12.3 Server validation rule of the table 网站消息

%RULES%

5.2.1.12.4 Options of the table 网站消息

engine = InnoDB

5.2.1.12.5 Code preview of the table 网站消息

```
use coal_trading;

drop table if exists ct_website_message;

/*=====*/
/* Table: ct_website_message */
/*=====*/
create table ct_website_message
(
 id bigint(20) not null auto_increment comment '新闻主键',
 title varchar(50) not null comment '站内信标题',
 content varchar(1024) not null comment '站内信内容',
 modified datetime default CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP comment '修改时间',
 msg_type smallint not null comment '消息类型（1.系统消息）',
 created datetime default CURRENT_TIMESTAMP comment '发信时间',
 from_userid bigint(20) comment '发信人用户ID',
 from_username varchar(128) comment '发信人用户名',
 to_userid bigint(20) not null comment '收信人用户ID',
 to_username varchar(128) comment '收信人用户名',
 read_status enum('1','2') not null default '1' comment '是否已读（1.未读；2.已读）',
 primary key (id)
)
engine = InnoDB;

/*=====*/
/* Index: Index_to_userid */
/*=====*/
create index Index_to_userid on ct_website_message
(
 to_userid
);

alter table ct_website_message add constraint FK_UM_REF_USER_1 foreign key (from_userid)
references ct_users (id) on delete restrict on update restrict;

alter table ct_website_message add constraint FK_UM_REF_USER_2 foreign key (to_userid)
references ct_users (id) on delete restrict on update restrict;
```

5.2.1.12.6 List of diagrams containing the table 网站消息

| Name   | Code |
|--------|------|
| 国煤交易系统 | pdp  |

5.2.1.12.7 List of outgoing references of the table 网站消息

| Name          | Code          | Foreign Key Columns |
|---------------|---------------|---------------------|
| UM_REF_USER_1 | UM_REF_USER_1 | 发信人用户ID             |
| UM_REF_USER_2 | UM_REF_USER_2 | 收信人ID               |

5.2.1.12.8 List of all dependencies of the table 网站消息

| Name          | Code          | Class Name |
|---------------|---------------|------------|
| UM_REF_USER_1 | UM_REF_USER_1 | Reference  |
| UM_REF_USER_2 | UM_REF_USER_2 | Reference  |

5.2.1.12.9 List of extended attributes of the table 网站消息

| Name      | Data Type | Value | Target Name |
|-----------|-----------|-------|-------------|
| Temporary | (Boolean) | false | MySQL 5.7   |

5.2.1.12.10 List of columns of the table 网站消息

| Name    | Code          |
|---------|---------------|
| 新闻ID    | id            |
| 站内信标题   | title         |
| 站内信内容   | content       |
| 修改时间    | modified      |
| 消息类型    | msg_type      |
| 发信时间    | created       |
| 发信人用户ID | from_userid   |
| 发信人用户名  | from_username |
| 收信人ID   | to_userid     |
| 收信人用户名  | to_username   |
| 是否已读    | read_status   |

5.2.1.12.11 Column 新闻ID of the table 网站消息

5.2.1.12.11.1 Card of the column 新闻ID of the table 网站消息

|           |            |
|-----------|------------|
| Name      | 新闻ID       |
| Code      | id         |
| Data Type | bigint(20) |
| Mandatory | Yes        |

5.2.1.12.11.2 Check constraint name of the column 新闻ID of the table 网站消息

CK\_id

5.2.1.12.11.3 Check of the column 新闻ID of the table 网站消息

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.12.11.4 Server validation rule of the column 新闻ID of the table 网站消息

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.12.11.5 List of all dependencies of the table column 新闻ID

| Name  | Code  | Class Name |
|-------|-------|------------|
| Key_1 | Key_1 | Key        |

5.2.1.12.11.6 List of extended attributes of the table column 新闻ID

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.12.12 Column 站内信标题 of the table 网站消息

5.2.1.12.12.1 Card of the column 站内信标题 of the table 网站消息

|           |             |
|-----------|-------------|
| Name      | 站内信标题       |
| Code      | title       |
| Data Type | varchar(50) |
| Mandatory | Yes         |

5.2.1.12.12.2 Check constraint name of the column 站内信标题 of the table 网站消息

CK\_title

5.2.1.12.12.3 Check of the column 站内信标题 of the table 网站消息

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.12.12.4 Server validation rule of the column 站内信标题 of the table 网站消息

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.12.12.5 List of extended attributes of the table column 站内信标题

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.12.13 Column 站内信内容 of the table 网站消息

5.2.1.12.13.1 Card of the column 站内信内容 of the table 网站消息

|           |               |
|-----------|---------------|
| Name      | 站内信内容         |
| Code      | content       |
| Data Type | varchar(1024) |
| Mandatory | Yes           |

5.2.1.12.13.2 Check constraint name of the column 站内信内容 of the table 网站消息

CK\_content

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.12.13.4 Server validation rule of the column 站内信内容 of the table 网站消息

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.12.13.5 List of extended attributes of the table column 站内信内容

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.12.14 Column 修改时间 of the table 网站消息

5.2.1.12.14.1 Card of the column 修改时间 of the table 网站消息

|           |          |
|-----------|----------|
| Name      | 修改时间     |
| Code      | modified |
| Data Type | datetime |
| Mandatory | No       |

5.2.1.12.14.2 Check constraint name of the column 修改时间 of the table 网站消息

CK\_modified

5.2.1.12.14.3 Check of the column 修改时间 of the table 网站消息

|                |                                               |
|----------------|-----------------------------------------------|
| Minimum Value  |                                               |
| Maximum Value  |                                               |
| Default Value  | CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP |
| Unit           |                                               |
| Format         |                                               |
| Cannot Modify  | No                                            |
| List Of Values |                                               |

5.2.1.12.14.4 Server validation rule of the column 修改时间 of the table 网站消息

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.12.14.5 List of extended attributes of the table column 修改时间

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.12.15 Column 消息类型 of the table 网站消息



5.2.1.12.15.1 Card of the column 消息类型 of the table 网站消息

|           |          |
|-----------|----------|
| Name      | 消息类型     |
| Code      | msg_type |
| Data Type | smallint |
| Mandatory | Yes      |

5.2.1.12.15.2 Check constraint name of the column 消息类型 of the table 网站消息

CK\_msg\_type

5.2.1.12.15.3 Check of the column 消息类型 of the table 网站消息

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.12.15.4 Server validation rule of the column 消息类型 of the table 网站消息

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.12.15.5 List of extended attributes of the table column 消息类型

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.12.16 Column 发信时间 of the table 网站消息

5.2.1.12.16.1 Card of the column 发信时间 of the table 网站消息

|           |          |
|-----------|----------|
| Name      | 发信时间     |
| Code      | created  |
| Data Type | datetime |
| Mandatory | No       |

5.2.1.12.16.2 Check constraint name of the column 发信时间 of the table 网站消息

CK\_created

5.2.1.12.16.3 Check of the column 发信时间 of the table 网站消息

|                |                   |
|----------------|-------------------|
| Minimum Value  |                   |
| Maximum Value  |                   |
| Default Value  | CURRENT_TIMESTAMP |
| Unit           |                   |
| Format         |                   |
| Cannot Modify  | No                |
| List Of Values |                   |

5.2.1.12.16.4 Server validation rule of the column 发信时间 of the table 网站消息

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.12.16.5 List of extended attributes of the table column 发信时间

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.12.17 Column 发信人用户ID of the table 网站消息

5.2.1.12.17.1 Card of the column 发信人用户ID of the table 网站消息

|           |             |
|-----------|-------------|
| Name      | 发信人用户ID     |
| Code      | from_userid |
| Data Type | bigint(20)  |
| Mandatory | No          |

5.2.1.12.17.2 Check constraint name of the column 发信人用户ID of the table 网站消息

CK\_from\_userid

5.2.1.12.17.3 Check of the column 发信人用户ID of the table 网站消息

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.12.17.4 Server validation rule of the column 发信人用户ID of the table 网站消息

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.12.17.5 List of all dependencies of the table column 发信人用户ID

| Name | Code | Class Name     |
|------|------|----------------|
| ?    | ?    | Reference Join |

5.2.1.12.17.6 List of extended attributes of the table column 发信人用户ID

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.12.18 Column 发信人用户名 of the table 网站消息

5.2.1.12.18.1 Card of the column 发信人用户名 of the table 网站消息

|           |               |
|-----------|---------------|
| Name      | 发信人用户名        |
| Code      | from_username |
| Data Type | varchar(128)  |
| Mandatory | No            |

5.2.1.12.18.2 Check constraint name of the column 发信人用户名 of the table 网站消息

CK\_from\_username

5.2.1.12.18.3 Check of the column 发信人用户名 of the table 网站消息

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.12.18.4 Server validation rule of the column 发信人用户名 of the table 网站消息

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.12.18.5 List of extended attributes of the table column 发信人用户名

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.12.19 Column 收信人ID of the table 网站消息

5.2.1.12.19.1 Card of the column 收信人ID of the table 网站消息

|           |            |
|-----------|------------|
| Name      | 收信人ID      |
| Code      | to_userid  |
| Data Type | bigint(20) |
| Mandatory | Yes        |

5.2.1.12.19.2 Check constraint name of the column 收信人ID of the table 网站消息

CK\_to\_userid

5.2.1.12.19.3 Check of the column 收信人ID of the table 网站消息

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.12.19.4 Server validation rule of the column 收信人ID of the table 网站消息

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.12.19.5 List of all dependencies of the table column 收信人ID

| Name  | Code      | Class Name     |
|-------|-----------|----------------|
| 收信人ID | to_userid | Index Column   |
| ?     | ?         | Reference Join |

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.12.20 Column 收信人用户名 of the table 网站消息

5.2.1.12.20.1 Card of the column 收信人用户名 of the table 网站消息

|           |              |
|-----------|--------------|
| Name      | 收信人用户名       |
| Code      | to_username  |
| Data Type | varchar(128) |
| Mandatory | No           |

5.2.1.12.20.2 Check constraint name of the column 收信人用户名 of the table 网站消息

CK\_to\_username

5.2.1.12.20.3 Check of the column 收信人用户名 of the table 网站消息

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.12.20.4 Server validation rule of the column 收信人用户名 of the table 网站消息

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.12.20.5 List of extended attributes of the table column 收信人用户名

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.12.21 Column 是否已读 of the table 网站消息

5.2.1.12.21.1 Card of the column 是否已读 of the table 网站消息

|           |               |
|-----------|---------------|
| Name      | 是否已读          |
| Code      | read_status   |
| Data Type | enum('1','2') |
| Mandatory | Yes           |

5.2.1.12.21.2 Check constraint name of the column 是否已读 of the table 网站消息

CK\_read\_status

5.2.1.12.21.3 Check of the column 是否已读 of the table 网站消息

|               |  |
|---------------|--|
| Minimum Value |  |
| Maximum Value |  |

|                       |    |
|-----------------------|----|
| <i>Default Value</i>  | 1  |
| <i>Unit</i>           |    |
| <i>Format</i>         |    |
| <i>Cannot Modify</i>  | No |
| <i>List Of Values</i> |    |

**5.2.1.12.21.4 Server validation rule of the column 是否已读 of the table 网站消息**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

**5.2.1.12.21.5 List of extended attributes of the table column 是否已读**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| CharSet     | CharSets         |              | MySQL 5.7          |
| Collate     | (String)         |              | MySQL 5.7          |
| National    | (Boolean)        | false        | MySQL 5.7          |
| Unsigned    | (Boolean)        | false        | MySQL 5.7          |
| ZeroFill    | (Boolean)        | false        | MySQL 5.7          |

**5.2.1.12.22 List of keys of the table 网站消息**

| <i>Name</i> | <i>Code</i> | <i>Primary</i> |
|-------------|-------------|----------------|
| Key_1       | Key_1       | X              |

**5.2.1.12.23 Key Key\_1 of the table 网站消息****5.2.1.12.23.1 Card of the key Key\_1 of the table 网站消息**

|              |       |
|--------------|-------|
| <i>Name</i>  | Key_1 |
| <i>Code</i>  | Key_1 |
| <i>Table</i> | 网站消息  |

**5.2.1.12.23.2 Code preview of the key Key\_1 of the table 网站消息**

```
use coal_trading;
```

```
alter table ct_website_message
 drop primary key;
```

**5.2.1.12.23.3 List of columns of the table key Key\_1**

| <i>Name</i> | <i>Code</i> |
|-------------|-------------|
| 新闻ID        | id          |

**5.2.1.12.23.4 List of extended attributes of the table key Key\_1**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| ExtUnique   | (Boolean)        | false        | MySQL 5.7          |

**5.2.1.12.24 List of indexes of the table 网站消息**

| <i>Name</i>     | <i>Code</i>     | <i>Unique</i> | <i>Cluster</i> | <i>Primary</i> | <i>Foreign Key</i> | <i>Alternate Key</i> |
|-----------------|-----------------|---------------|----------------|----------------|--------------------|----------------------|
| Index_to_userid | Index_to_userid |               |                |                |                    |                      |

**5.2.1.12.25 Index Index\_to\_userid of the table 网站消息****5.2.1.12.25.1 Card of the index Index\_to\_userid of the table 网站消息**

|             |                 |
|-------------|-----------------|
| <i>Name</i> | Index_to_userid |
| <i>Code</i> | Index_to_userid |

|               |      |
|---------------|------|
| Unique        | No   |
| Cluster       | No   |
| Primary       | No   |
| Foreign Key   | No   |
| Alternate Key | No   |
| Table         | 网站消息 |

5.2.1.12.25.2 Code preview of the index Index to userid of the table 网站消息

```
use coal_trading;

use coal_trading;

/*=====*/
/* Index: Index_to_userid */
/*=====*/
create index Index_to_userid on ct_website_message
(
 to_userid
);
```

5.2.1.12.25.3 List of index columns of the table index Index to userid

| Name  | Code      | Sort      |
|-------|-----------|-----------|
| 收信人ID | to_userid | Ascending |

5.2.1.12.25.4 List of extended attributes of the table index Index to userid

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |

5.2.1.13 Table 角色权限表

5.2.1.13.1 Card of table 角色权限表

|      |                                  |
|------|----------------------------------|
| Name | 角色权限表                            |
| Code | ct_role_permission_relationships |
| DBMS | MySQL 5.7                        |

5.2.1.13.2 Check constraint name of the table 角色权限表

TK\_ct\_role\_permission\_relationships

5.2.1.13.3 Server validation rule of the table 角色权限表

%RULES%

5.2.1.13.4 Options of the table 角色权限表

engine = InnoDB

5.2.1.13.5 End script of the table 角色权限表

```
/*role_id, permission*/
INSERT INTO ct_role_permission_relationships VALUES(1,1);
INSERT INTO ct_role_permission_relationships VALUES(1,7);
INSERT INTO ct_role_permission_relationships VALUES(2,2);
INSERT INTO ct_role_permission_relationships VALUES(3,3);
INSERT INTO ct_role_permission_relationships VALUES(4,4);
INSERT INTO ct_role_permission_relationships VALUES(5,5);
INSERT INTO ct_role_permission_relationships VALUES(6,6);
INSERT INTO ct_role_permission_relationships VALUES(7,8);
INSERT INTO ct_role_permission_relationships VALUES(8,9);
```

5.2.1.13.6 Code preview of the table 角色权限表

```
use coal_trading;

drop table if exists ct_role_permission_relationships;

/*=====*/
/* Table: ct_role_permission_relationships */
/*=====*/

create table ct_role_permission_relationships
(
 role_id bigint(20) not null comment '角色ID',
 permission_id bigint(20) not null comment '权限ID',
 primary key (role_id, permission_id)
)
engine = InnoDB;

alter table ct_role_permission_relationships comment '1个角色可以对应1个权限';

/*role_id, permission*/
INSERT INTO ct_role_permission_relationships VALUES(1,1);
INSERT INTO ct_role_permission_relationships VALUES(1,7);
INSERT INTO ct_role_permission_relationships VALUES(2,2);
INSERT INTO ct_role_permission_relationships VALUES(3,3);
INSERT INTO ct_role_permission_relationships VALUES(4,4);
INSERT INTO ct_role_permission_relationships VALUES(5,5);
INSERT INTO ct_role_permission_relationships VALUES(6,6);
INSERT INTO ct_role_permission_relationships VALUES(7,8);
INSERT INTO ct_role_permission_relationships VALUES(8,9);

/*=====*/
/* Index: Index_role_pri_id */
/*=====*/

create unique index Index_role_pri_id on ct_role_permission_relationships
(
 role_id,
 permission_id
);

alter table ct_role_permission_relationships add constraint FK_RP_REF_PERMISSION foreign key (permission_id)
references ct_permissions (id) on delete restrict on update restrict;

alter table ct_role_permission_relationships add constraint FK_RP_REF_ROLE foreign key (role_id)
references ct_userrole (id) on delete restrict on update restrict;
```

5.2.1.13.7 List of diagrams containing the table 角色权限表

| Name   | Code |
|--------|------|
| 国煤交易系统 | pdp  |

5.2.1.13.8 List of outgoing references of the table 角色权限表

| Name              | Code              | Foreign Key Columns |
|-------------------|-------------------|---------------------|
| RP_REF_PERMISSION | RP_REF_PERMISSION | 权限ID                |
| RP_REF_ROLE       | RP_REF_ROLE       | 角色ID                |

5.2.1.13.9 List of all dependencies of the table 角色权限表

| Name              | Code              | Class Name |
|-------------------|-------------------|------------|
| RP_REF_PERMISSION | RP_REF_PERMISSION | Reference  |
| RP_REF_ROLE       | RP_REF_ROLE       | Reference  |

**5.2.1.13.10 List of extended attributes of the table 角色权限表**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| Temporary   | (Boolean)        | false        | MySQL 5.7          |

**5.2.1.13.11 List of columns of the table 角色权限表**

| <i>Name</i> | <i>Code</i>   |
|-------------|---------------|
| 角色ID        | role_id       |
| 权限ID        | permission_id |

**5.2.1.13.12 Column 角色ID of the table 角色权限表****5.2.1.13.12.1 Card of the column 角色ID of the table 角色权限表**

|                  |            |
|------------------|------------|
| <i>Name</i>      | 角色ID       |
| <i>Code</i>      | role_id    |
| <i>Data Type</i> | bigint(20) |
| <i>Mandatory</i> | Yes        |

**5.2.1.13.12.2 Check constraint name of the column 角色ID of the table 角色权限表**

CK\_role\_id

**5.2.1.13.12.3 Check of the column 角色ID of the table 角色权限表**

|                       |    |
|-----------------------|----|
| <i>Minimum Value</i>  |    |
| <i>Maximum Value</i>  |    |
| <i>Default Value</i>  |    |
| <i>Unit</i>           |    |
| <i>Format</i>         |    |
| <i>Cannot Modify</i>  | No |
| <i>List Of Values</i> |    |

**5.2.1.13.12.4 Server validation rule of the column 角色ID of the table 角色权限表**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

**5.2.1.13.12.5 List of all dependencies of the table column 角色ID**

| <i>Name</i> | <i>Code</i> | <i>Class Name</i> |
|-------------|-------------|-------------------|
| Key_1       | Key_1       | Key               |
| 角色ID        | role_id     | Index Column      |
| ?           | ?           | Reference Join    |

**5.2.1.13.12.6 List of extended attributes of the table column 角色ID**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| CharSet     | Charsets         |              | MySQL 5.7          |
| Collate     | (String)         |              | MySQL 5.7          |
| National    | (Boolean)        | false        | MySQL 5.7          |
| Unsigned    | (Boolean)        | false        | MySQL 5.7          |
| ZeroFill    | (Boolean)        | false        | MySQL 5.7          |

**5.2.1.13.13 Column 权限ID of the table 角色权限表****5.2.1.13.13.1 Card of the column 权限ID of the table 角色权限表**

|             |               |
|-------------|---------------|
| <i>Name</i> | 权限ID          |
| <i>Code</i> | permission_id |



|                  |            |
|------------------|------------|
| <i>Data Type</i> | bigint(20) |
| <i>Mandatory</i> | Yes        |

**5.2.1.13.13.2 Check constraint name of the column 权限ID of the table 角色权限表**

CK\_permission\_id

**5.2.1.13.13.3 Check of the column 权限ID of the table 角色权限表**

|                       |    |
|-----------------------|----|
| <i>Minimum Value</i>  |    |
| <i>Maximum Value</i>  |    |
| <i>Default Value</i>  |    |
| <i>Unit</i>           |    |
| <i>Format</i>         |    |
| <i>Cannot Modify</i>  | No |
| <i>List Of Values</i> |    |

**5.2.1.13.13.4 Server validation rule of the column 权限ID of the table 角色权限表**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

**5.2.1.13.13.5 List of all dependencies of the table column 权限ID**

| <i>Name</i> | <i>Code</i>   | <i>Class Name</i> |
|-------------|---------------|-------------------|
| Key_1       | Key_1         | Key               |
| 权限ID        | permission_id | Index Column      |
| ?           | ?             | Reference Join    |

**5.2.1.13.13.6 List of extended attributes of the table column 权限ID**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| CharSet     | Charsets         |              | MySQL 5.7          |
| Collate     | (String)         |              | MySQL 5.7          |
| National    | (Boolean)        | false        | MySQL 5.7          |
| Unsigned    | (Boolean)        | false        | MySQL 5.7          |
| ZeroFill    | (Boolean)        | false        | MySQL 5.7          |

**5.2.1.13.14 List of keys of the table 角色权限表**

| <i>Name</i> | <i>Code</i> | <i>Primary</i> |
|-------------|-------------|----------------|
| Key_1       | Key_1       | X              |

**5.2.1.13.15 Key Key\_1 of the table 角色权限表****5.2.1.13.15.1 Card of the key Key\_1 of the table 角色权限表**

|              |       |
|--------------|-------|
| <i>Name</i>  | Key_1 |
| <i>Code</i>  | Key_1 |
| <i>Table</i> | 角色权限表 |

**5.2.1.13.15.2 Code preview of the key Key\_1 of the table 角色权限表**

use coal\_trading;

```
alter table ct_role_permission_relationships
 drop primary key;
```

**5.2.1.13.15.3 List of columns of the table key Key\_1**

| <i>Name</i> | <i>Code</i> |
|-------------|-------------|
|-------------|-------------|

| Name | Code          |
|------|---------------|
| 角色ID | role_id       |
| 权限ID | permission_id |

5.2.1.13.15.4 List of extended attributes of the table key Key\_1

| Name      | Data Type | Value | Target Name |
|-----------|-----------|-------|-------------|
| ExtUnique | (Boolean) | false | MySQL 5.7   |

5.2.1.13.16 List of indexes of the table 角色权限表

| Name              | Code              | Unique | Cluster | Primary | Foreign Key | Alternate Key |
|-------------------|-------------------|--------|---------|---------|-------------|---------------|
| Index_role_pri_id | Index_role_pri_id | X      |         |         |             |               |

5.2.1.13.17 Index Index\_role\_pri\_id of the table 角色权限表

5.2.1.13.17.1 Card of the index Index\_role\_pri\_id of the table 角色权限表

|               |                   |
|---------------|-------------------|
| Name          | Index_role_pri_id |
| Code          | Index_role_pri_id |
| Unique        | Yes               |
| Cluster       | No                |
| Primary       | No                |
| Foreign Key   | No                |
| Alternate Key | No                |
| Table         | 角色权限表             |

5.2.1.13.17.2 Code preview of the index Index\_role\_pri\_id of the table 角色权限表

```
use coal_trading;

use coal_trading;

/*=====*/
/* Index: Index_role_pri_id */
/*=====*/
create unique index Index_role_pri_id on ct_role_permission_relationships
(
 role_id,
 permission_id
);
```

5.2.1.13.17.3 List of index columns of the table index Index\_role\_pri\_id

| Name | Code          | Sort      |
|------|---------------|-----------|
| 角色ID | role_id       | Ascending |
| 权限ID | permission_id | Ascending |

5.2.1.13.17.4 List of extended attributes of the table index Index\_role\_pri\_id

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |

5.2.1.14 Table 角色表

5.2.1.14.1 Card of table 角色表

|      |             |
|------|-------------|
| Name | 角色表         |
| Code | ct_userrole |

|      |           |
|------|-----------|
| DBMS | MySQL 5.7 |
|------|-----------|

5.2.1.14.2 Check constraint name of the table 角色表

TK\_ct\_userrole

5.2.1.14.3 Server validation rule of the table 角色表

%RULES%

5.2.1.14.4 Options of the table 角色表

engine = InnoDB

5.2.1.14.5 End script of the table 角色表

```
/*
1. 几种管理员：
 a. 超级管理员
 b. 资讯编辑员
 c. 资讯审核员
 d. 资讯维护员
 e. 注册用户审核员
 f. 交易审核员
2. 交易用户[供应商,采购商]
3. 财务用户
*/
INSERT INTO ct_userrole(`id`,`name`,`mark`,`type`) VALUES
(1,"超级管理员","SUPER_ADMIN","admin"),
(2,"资讯编辑员","NEWS_EDITOR","admin"),
(3,"资讯审核员","NEWS_AUDITOR","admin"),
(4,"资讯维护员","NEWS_MANAGER","admin"),
(5,"注册用户审核员","USER_REG_AUDITOR","admin"),
(6,"交易审核员","TRADE_AUDITOR","admin"),
(7,"供应商","USER_SALE","user"),
(8,"采购商","USER_BUY","user"),
(9,"财务用户","USER_MONEY","user");
```

5.2.1.14.6 Code preview of the table 角色表

```
use coal_trading;

drop table if exists ct_userrole;

/*=====*/
/* Table: ct_userrole */
/*=====*/
create table ct_userrole
(
 id bigint(20) not null comment '角色ID',
 mark varchar(20) comment '角色标记',
 name varchar(20) comment '角色名',
 type varchar(10) comment '角色类型',
 primary key (id)
)
engine = InnoDB;

alter table ct_userrole comment '1. 几种管理员：
 a. 资讯编辑员
 b. 资讯审核员
';

/*
1. 几种管理员：
 a. 超级管理员
```

- b. 资讯编辑员
- c. 资讯审核员
- d. 资讯维护员
- e. 注册用户审核员
- f. 交易审核员

- 2. 交易用户[供应商,采购商]
  - 3. 财务用户
- \*/

```
INSERT INTO ct_userrole(`id`,`name`,`mark`,`type`) VALUES
(1,"超级管理员","SUPER_ADMIN","admin"),
(2,"资讯编辑员","NEWS_EDITOR","admin"),
(3,"资讯审核员","NEWS_AUDITOR","admin"),
(4,"资讯维护员","NEWS_MANAGER","admin"),
(5,"注册用户审核员","USER_REG_AUDITOR","admin"),
(6,"交易审核员","TRADE_AUDITOR","admin"),
(7,"供应商","USER_SALE","user"),
(8,"采购商","USER_BUY","user"),
(9,"财务用户","USER_MONEY","user");

/*=====*/
/* Index: Index_role_id */
/*=====*/
create index Index_role_id on ct_userrole
(
 id
);
```

5.2.1.14.7 List of diagrams containing the table 角色表

| Name   | Code |
|--------|------|
| 国煤交易系统 | pdp  |

5.2.1.14.8 List of incoming references of the table 角色表

| Name        | Code        |
|-------------|-------------|
| RP_REF_ROLE | RP_REF_ROLE |
| UR_REF_ROLE | UR_REF_ROLE |

5.2.1.14.9 List of all dependencies of the table 角色表

| Name        | Code        | Class Name |
|-------------|-------------|------------|
| RP_REF_ROLE | RP_REF_ROLE | Reference  |
| UR_REF_ROLE | UR_REF_ROLE | Reference  |

5.2.1.14.10 List of extended attributes of the table 角色表

| Name      | Data Type | Value | Target Name |
|-----------|-----------|-------|-------------|
| Temporary | (Boolean) | false | MySQL 5.7   |

5.2.1.14.11 List of columns of the table 角色表

| Name | Code |
|------|------|
| 角色ID | id   |
| 角色标记 | mark |
| 角色名  | name |
| 角色类型 | type |

5.2.1.14.12 Column 角色ID of the table 角色表

|                  |            |
|------------------|------------|
| <i>Name</i>      | 角色ID       |
| <i>Code</i>      | id         |
| <i>Data Type</i> | bigint(20) |
| <i>Mandatory</i> | Yes        |

**5.2.1.14.12.2 Check constraint name of the column 角色ID of the table 角色表**

CK\_id

**5.2.1.14.12.3 Check of the column 角色ID of the table 角色表**

|                       |    |
|-----------------------|----|
| <i>Minimum Value</i>  |    |
| <i>Maximum Value</i>  |    |
| <i>Default Value</i>  |    |
| <i>Unit</i>           |    |
| <i>Format</i>         |    |
| <i>Cannot Modify</i>  | No |
| <i>List Of Values</i> |    |

**5.2.1.14.12.4 Server validation rule of the column 角色ID of the table 角色表**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

**5.2.1.14.12.5 List of all dependencies of the table column 角色ID**

| <i>Name</i> | <i>Code</i> | <i>Class Name</i> |
|-------------|-------------|-------------------|
| Key_1       | Key_1       | Key               |
| 角色ID        | id          | Index Column      |
| ?           | ?           | Reference Join    |
| ?           | ?           | Reference Join    |

**5.2.1.14.12.6 List of extended attributes of the table column 角色ID**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| CharSet     | Charsets         |              | MySQL 5.7          |
| Collate     | (String)         |              | MySQL 5.7          |
| National    | (Boolean)        | false        | MySQL 5.7          |
| Unsigned    | (Boolean)        | false        | MySQL 5.7          |
| ZeroFill    | (Boolean)        | false        | MySQL 5.7          |

**5.2.1.14.13 Column 角色标记 of the table 角色表****5.2.1.14.13.1 Card of the column 角色标记 of the table 角色表**

|                  |             |
|------------------|-------------|
| <i>Name</i>      | 角色标记        |
| <i>Code</i>      | mark        |
| <i>Data Type</i> | varchar(20) |
| <i>Mandatory</i> | No          |

**5.2.1.14.13.2 Check constraint name of the column 角色标记 of the table 角色表**

CK\_mark

**5.2.1.14.13.3 Check of the column 角色标记 of the table 角色表**

|                      |  |
|----------------------|--|
| <i>Minimum Value</i> |  |
| <i>Maximum Value</i> |  |
| <i>Default Value</i> |  |
| <i>Unit</i>          |  |

|                |    |
|----------------|----|
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.14.13.4 Server validation rule of the column 角色标记 of the table 角色表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.14.13.5 List of extended attributes of the table column 角色标记

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.14.14 Column 角色名 of the table 角色表

5.2.1.14.14.1 Card of the column 角色名 of the table 角色表

|           |             |
|-----------|-------------|
| Name      | 角色名         |
| Code      | name        |
| Data Type | varchar(20) |
| Mandatory | No          |

5.2.1.14.14.2 Check constraint name of the column 角色名 of the table 角色表

CK\_name

5.2.1.14.14.3 Check of the column 角色名 of the table 角色表

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.14.14.4 Server validation rule of the column 角色名 of the table 角色表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.14.14.5 List of extended attributes of the table column 角色名

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.14.15 Column 角色类型 of the table 角色表

5.2.1.14.15.1 Card of the column 角色类型 of the table 角色表

|           |             |
|-----------|-------------|
| Name      | 角色类型        |
| Code      | type        |
| Data Type | varchar(10) |

|                  |    |
|------------------|----|
| <i>Mandatory</i> | No |
|------------------|----|

**5.2.1.14.15.2 Check constraint name of the column 角色类型 of the table 角色表**

CK\_type

**5.2.1.14.15.3 Check of the column 角色类型 of the table 角色表**

|                       |    |
|-----------------------|----|
| <i>Minimum Value</i>  |    |
| <i>Maximum Value</i>  |    |
| <i>Default Value</i>  |    |
| <i>Unit</i>           |    |
| <i>Format</i>         |    |
| <i>Cannot Modify</i>  | No |
| <i>List Of Values</i> |    |

**5.2.1.14.15.4 Server validation rule of the column 角色类型 of the table 角色表**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

**5.2.1.14.15.5 List of extended attributes of the table column 角色类型**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| CharSet     | CharSets         |              | MySQL 5.7          |
| Collate     | (String)         |              | MySQL 5.7          |
| National    | (Boolean)        | false        | MySQL 5.7          |
| Unsigned    | (Boolean)        | false        | MySQL 5.7          |
| ZeroFill    | (Boolean)        | false        | MySQL 5.7          |

**5.2.1.14.16 List of keys of the table 角色表**

| <i>Name</i> | <i>Code</i> | <i>Primary</i> |
|-------------|-------------|----------------|
| Key_1       | Key_1       | X              |

**5.2.1.14.17 Key Key\_1 of the table 角色表****5.2.1.14.17.1 Card of the key Key\_1 of the table 角色表**

|              |       |
|--------------|-------|
| <i>Name</i>  | Key_1 |
| <i>Code</i>  | Key_1 |
| <i>Table</i> | 角色表   |

**5.2.1.14.17.2 Code preview of the key Key\_1 of the table 角色表**

use coal\_trading;

alter table ct\_userrole

drop primary key;

**5.2.1.14.17.3 List of columns of the table key Key\_1**

| <i>Name</i> | <i>Code</i> |
|-------------|-------------|
| 角色ID        | id          |

**5.2.1.14.17.4 List of all dependencies of the table key Key\_1**

| <i>Name</i> | <i>Code</i> | <i>Class Name</i> |
|-------------|-------------|-------------------|
| RP_REF_ROLE | RP_REF_ROLE | Reference         |
| UR_REF_ROLE | UR_REF_ROLE | Reference         |

| Name      | Data Type | Value | Target Name |
|-----------|-----------|-------|-------------|
| ExtUnique | (Boolean) | false | MySQL 5.7   |

5.2.1.14.18 List of indexes of the table 角色表

| Name          | Code          | Unique | Cluster | Primary | Foreign Key | Alternate Key |
|---------------|---------------|--------|---------|---------|-------------|---------------|
| Index_role_id | Index_role_id |        |         |         |             |               |

5.2.1.14.19 Index Index\_role\_id of the table 角色表

5.2.1.14.19.1 Card of the index Index\_role\_id of the table 角色表

|               |               |
|---------------|---------------|
| Name          | Index_role_id |
| Code          | Index_role_id |
| Unique        | No            |
| Cluster       | No            |
| Primary       | No            |
| Foreign Key   | No            |
| Alternate Key | No            |
| Table         | 角色表           |

5.2.1.14.19.2 Code preview of the index Index\_role\_id of the table 角色表

use coal\_trading;

use coal\_trading;

```
/*=====*/
/* Index: Index_role_id */
/*=====*/
create index Index_role_id on ct_userrole
(
 id
);
```

5.2.1.14.19.3 List of index columns of the table index Index\_role\_id

| Name | Code | Sort      |
|------|------|-----------|
| 角色ID | id   | Ascending |

5.2.1.14.19.4 List of extended attributes of the table index Index\_role\_id

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |

5.2.1.15 Table 订单表

5.2.1.15.1 Card of table 订单表

|      |           |
|------|-----------|
| Name | 订单表       |
| Code | ct_order  |
| DBMS | MySQL 5.7 |

5.2.1.15.2 Check constraint name of the table 订单表

TK\_ct\_order

5.2.1.15.3 Server validation rule of the table 订单表

%RULES%



**5.2.1.15.4 Options of the table 订单表**

engine = InnoDB

**5.2.1.15.5 Code preview of the table 订单表**

```
use coal_trading;
```

```
drop table if exists ct_order;
```

```
/*=====*/
/* Table: ct_order */
/*=====*/
```

```
create table ct_order
```

```
(
 id bigint(20) not null auto_increment comment '订单ID',
 num varchar(30) not null comment '订单号',
 req_id bigint(20) comment '需求ID',
 user_id bigint(20) comment '用户ID',
 created_time datetime comment '创建时间',
 status enum('1','2','3','4') not null comment '订单状态:
 1. 进行中
 2. 超时
 3. 完成
 4. 取消',
 primary key (id)
)
```

```
engine = InnoDB;
```

```
/*=====*/
/* Index: Index_user_id */
/*=====*/
```

```
create index Index_user_id on ct_order
```

```
(
 user_id
);
```

```
/*=====*/
/* Index: Index_req_id */
/*=====*/
```

```
create index Index_req_id on ct_order
```

```
(
 req_id
);
```

```
/*=====*/
/* Index: Index_order_id */
/*=====*/
```

```
create unique index Index_order_id on ct_order
```

```
(
 id
);
```

```
/*=====*/
/* Index: Index_order_num */
/*=====*/
```

```
create unique index Index_order_num on ct_order
```

```
(
 num
);
```

```
alter table ct_order add constraint FK_ORDER_REF_REQ foreign key (req_id)
 references ct_request (id) on delete restrict on update restrict;
```

```
alter table ct_order add constraint FK_ORDER_REF_USER foreign key (user_id)
references ct_users (id) on delete restrict on update restrict;
```

**5.2.1.15.6 List of diagrams containing the table 订单表**

| Name   | Code |
|--------|------|
| 国煤交易系统 | pdp  |

**5.2.1.15.7 List of outgoing references of the table 订单表**

| Name           | Code           | Foreign Key Columns |
|----------------|----------------|---------------------|
| ORDER_REF_REQ  | ORDER_REF_REQ  | 需求ID                |
| ORDER_REF_USER | ORDER_REF_USER | 用户ID                |

**5.2.1.15.8 List of all dependencies of the table 订单表**

| Name           | Code           | Class Name |
|----------------|----------------|------------|
| ORDER_REF_REQ  | ORDER_REF_REQ  | Reference  |
| ORDER_REF_USER | ORDER_REF_USER | Reference  |

**5.2.1.15.9 List of extended attributes of the table 订单表**

| Name      | Data Type | Value | Target Name |
|-----------|-----------|-------|-------------|
| Temporary | (Boolean) | false | MySQL 5.7   |

**5.2.1.15.10 List of columns of the table 订单表**

| Name | Code         |
|------|--------------|
| 订单ID | id           |
| 订单号  | num          |
| 需求ID | req_id       |
| 用户ID | user_id      |
| 创建时间 | created_time |
| 订单状态 | status       |

**5.2.1.15.11 Column 订单ID of the table 订单表****5.2.1.15.11.1 Card of the column 订单ID of the table 订单表**

|           |            |
|-----------|------------|
| Name      | 订单ID       |
| Code      | id         |
| Data Type | bigint(20) |
| Mandatory | Yes        |

**5.2.1.15.11.2 Check constraint name of the column 订单ID of the table 订单表**

CK\_id

**5.2.1.15.11.3 Check of the column 订单ID of the table 订单表**

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

**5.2.1.15.11.4 Server validation rule of the column 订单ID of the table 订单表**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.15.11.5 List of all dependencies of the table column 订单ID

| Name  | Code  | Class Name   |
|-------|-------|--------------|
| Key_1 | Key_1 | Key          |
| 订单ID  | id    | Index Column |

5.2.1.15.11.6 List of extended attributes of the table column 订单ID

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.15.12 Column 订单号 of the table 订单表

5.2.1.15.12.1 Card of the column 订单号 of the table 订单表

|           |             |
|-----------|-------------|
| Name      | 订单号         |
| Code      | num         |
| Data Type | varchar(30) |
| Mandatory | Yes         |

5.2.1.15.12.2 Check constraint name of the column 订单号 of the table 订单表

CK\_num

5.2.1.15.12.3 Check of the column 订单号 of the table 订单表

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.15.12.4 Server validation rule of the column 订单号 of the table 订单表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.15.12.5 List of all dependencies of the table column 订单号

| Name | Code | Class Name   |
|------|------|--------------|
| 订单号  | num  | Index Column |

5.2.1.15.12.6 List of extended attributes of the table column 订单号

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.15.13 Column 需求ID of the table 订单表

|           |            |
|-----------|------------|
| Name      | 需求ID       |
| Code      | req_id     |
| Data Type | bigint(20) |
| Mandatory | No         |

5.2.1.15.13.2 Check constraint name of the column 需求ID of the table 订单表

CK\_req\_id

5.2.1.15.13.3 Check of the column 需求ID of the table 订单表

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.15.13.4 Server validation rule of the column 需求ID of the table 订单表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.15.13.5 List of all dependencies of the table column 需求ID

| Name | Code   | Class Name     |
|------|--------|----------------|
| 需求ID | req_id | Index Column   |
| ?    | ?      | Reference Join |

5.2.1.15.13.6 List of extended attributes of the table column 需求ID

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | Charsets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.15.14 Column 用户ID of the table 订单表

5.2.1.15.14.1 Card of the column 用户ID of the table 订单表

|           |            |
|-----------|------------|
| Name      | 用户ID       |
| Code      | user_id    |
| Data Type | bigint(20) |
| Mandatory | No         |

5.2.1.15.14.2 Check constraint name of the column 用户ID of the table 订单表

CK\_user\_id

5.2.1.15.14.3 Check of the column 用户ID of the table 订单表

|               |    |
|---------------|----|
| Minimum Value |    |
| Maximum Value |    |
| Default Value |    |
| Unit          |    |
| Format        |    |
| Cannot Modify | No |

|                |  |
|----------------|--|
| List Of Values |  |
|----------------|--|

5.2.1.15.14.4 Server validation rule of the column 用户ID of the table 订单表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.15.14.5 List of all dependencies of the table column 用户ID

| Name | Code    | Class Name     |
|------|---------|----------------|
| 用户ID | user_id | Index Column   |
| ?    | ?       | Reference Join |

5.2.1.15.14.6 List of extended attributes of the table column 用户ID

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.15.15 Column 创建时间 of the table 订单表

5.2.1.15.15.1 Card of the column 创建时间 of the table 订单表

|           |              |
|-----------|--------------|
| Name      | 创建时间         |
| Code      | created_time |
| Data Type | datetime     |
| Mandatory | No           |

5.2.1.15.15.2 Check constraint name of the column 创建时间 of the table 订单表

CK\_created\_time

5.2.1.15.15.3 Check of the column 创建时间 of the table 订单表

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.15.15.4 Server validation rule of the column 创建时间 of the table 订单表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.15.15.5 List of extended attributes of the table column 创建时间

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.15.16 Column 订单状态 of the table 订单表

|                  |                       |
|------------------|-----------------------|
| <i>Name</i>      | 订单状态                  |
| <i>Code</i>      | status                |
| <i>Data Type</i> | enum('1','2','3','4') |
| <i>Mandatory</i> | Yes                   |

**5.2.1.15.16.2 Check constraint name of the column 订单状态 of the table 订单表**

CK\_status

**5.2.1.15.16.3 Check of the column 订单状态 of the table 订单表**

|                       |    |
|-----------------------|----|
| <i>Minimum Value</i>  |    |
| <i>Maximum Value</i>  |    |
| <i>Default Value</i>  |    |
| <i>Unit</i>           |    |
| <i>Format</i>         |    |
| <i>Cannot Modify</i>  | No |
| <i>List Of Values</i> |    |

**5.2.1.15.16.4 Server validation rule of the column 订单状态 of the table 订单表**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

**5.2.1.15.16.5 List of extended attributes of the table column 订单状态**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| CharSet     | CharSets         |              | MySQL 5.7          |
| Collate     | (String)         |              | MySQL 5.7          |
| National    | (Boolean)        | false        | MySQL 5.7          |
| Unsigned    | (Boolean)        | false        | MySQL 5.7          |
| ZeroFill    | (Boolean)        | false        | MySQL 5.7          |

**5.2.1.15.17 List of keys of the table 订单表**

| <i>Name</i> | <i>Code</i> | <i>Primary</i> |
|-------------|-------------|----------------|
| Key_1       | Key_1       | X              |

**5.2.1.15.18 Key Key\_1 of the table 订单表****5.2.1.15.18.1 Card of the key Key\_1 of the table 订单表**

|              |       |
|--------------|-------|
| <i>Name</i>  | Key_1 |
| <i>Code</i>  | Key_1 |
| <i>Table</i> | 订单表   |

**5.2.1.15.18.2 Code preview of the key Key\_1 of the table 订单表**

use coal\_trading;

```
alter table ct_order
drop primary key;
```

**5.2.1.15.18.3 List of columns of the table key Key\_1**

| <i>Name</i> | <i>Code</i> |
|-------------|-------------|
| 订单ID        | id          |

**5.2.1.15.18.4 List of extended attributes of the table key Key\_1**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
|-------------|------------------|--------------|--------------------|

| Name      | Data Type | Value | Target Name |
|-----------|-----------|-------|-------------|
| ExtUnique | (Boolean) | false | MySQL 5.7   |

5.2.1.15.19 List of indexes of the table 订单表

| Name            | Code            | Unique | Cluster | Primary | Foreign Key | Alternate Key |
|-----------------|-----------------|--------|---------|---------|-------------|---------------|
| Index_user_id   | Index_user_id   |        |         |         |             |               |
| Index_req_id    | Index_req_id    |        |         |         |             |               |
| Index_order_id  | Index_order_id  | X      |         |         |             |               |
| Index_order_num | Index_order_num | X      |         |         |             |               |

5.2.1.15.20 Index Index user id of the table 订单表

5.2.1.15.20.1 Card of the index Index user id of the table 订单表

|               |               |
|---------------|---------------|
| Name          | Index_user_id |
| Code          | Index_user_id |
| Unique        | No            |
| Cluster       | No            |
| Primary       | No            |
| Foreign Key   | No            |
| Alternate Key | No            |
| Table         | 订单表           |

5.2.1.15.20.2 Code preview of the index Index user id of the table 订单表

```
use coal_trading;

use coal_trading;

/*=====*/
/* Index: Index_user_id */
/*=====*/
create index Index_user_id on ct_order
(
 user_id
);
```

5.2.1.15.20.3 List of index columns of the table index Index\_user\_id

| Name | Code    | Sort      |
|------|---------|-----------|
| 用户ID | user_id | Ascending |

5.2.1.15.20.4 List of extended attributes of the table index Index\_user\_id

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |

5.2.1.15.21 Index Index req\_id of the table 订单表

5.2.1.15.21.1 Card of the index Index req\_id of the table 订单表

|         |              |
|---------|--------------|
| Name    | Index_req_id |
| Code    | Index_req_id |
| Unique  | No           |
| Cluster | No           |
| Primary | No           |

|               |     |
|---------------|-----|
| Foreign Key   | No  |
| Alternate Key | No  |
| Table         | 订单表 |

5.2.1.15.21.2 Code preview of the index Index\_req\_id of the table 订单表

```
use coal_trading;

use coal_trading;

/*=====*/
/* Index: Index_req_id */
/*=====*/
create index Index_req_id on ct_order
(
 req_id
);
```

5.2.1.15.21.3 List of index columns of the table index Index\_req\_id

| Name | Code   | Sort      |
|------|--------|-----------|
| 需求ID | req_id | Ascending |

5.2.1.15.21.4 List of extended attributes of the table index Index\_req\_id

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |

5.2.1.15.22 Index Index\_order\_id of the table 订单表

5.2.1.15.22.1 Card of the index Index\_order\_id of the table 订单表

|               |                |
|---------------|----------------|
| Name          | Index_order_id |
| Code          | Index_order_id |
| Unique        | Yes            |
| Cluster       | No             |
| Primary       | No             |
| Foreign Key   | No             |
| Alternate Key | No             |
| Table         | 订单表            |

5.2.1.15.22.2 Code preview of the index Index\_order\_id of the table 订单表

```
use coal_trading;

use coal_trading;

/*=====*/
/* Index: Index_order_id */
/*=====*/
create unique index Index_order_id on ct_order
(
 id
);
```

5.2.1.15.22.3 List of index columns of the table index Index\_order\_id

| Name | Code | Sort      |
|------|------|-----------|
| 订单ID | id   | Ascending |



5.2.1.15.22.4 List of extended attributes of the table index Index\_order\_id

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |

5.2.1.15.23 Index Index\_order\_num of the table 订单表

5.2.1.15.23.1 Card of the index Index\_order\_num of the table 订单表

|               |                 |
|---------------|-----------------|
| Name          | Index_order_num |
| Code          | Index_order_num |
| Unique        | Yes             |
| Cluster       | No              |
| Primary       | No              |
| Foreign Key   | No              |
| Alternate Key | No              |
| Table         | 订单表             |

5.2.1.15.23.2 Code preview of the index Index\_order\_num of the table 订单表

```
use coal_trading;

use coal_trading;

/*=====*/
/* Index: Index_order_num */
/*=====*/

create unique index Index_order_num on ct_order
(
 num
);
```

5.2.1.15.23.3 List of index columns of the table index Index\_order\_num

| Name | Code | Sort      |
|------|------|-----------|
| 订单号  | num  | Ascending |

5.2.1.15.23.4 List of extended attributes of the table index Index\_order\_num

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |

5.2.1.16 Table 资金变动记录表

5.2.1.16.1 Card of table 资金变动记录表

|      |                |
|------|----------------|
| Name | 资金变动记录表        |
| Code | ct_finance_log |
| DBMS | MySQL 5.7      |

5.2.1.16.2 Check constraint name of the table 资金变动记录表

TK\_ct\_finance\_log

5.2.1.16.3 Server validation rule of the table 资金变动记录表

%RULES%

5.2.1.16.4 Options of the table 资金变动记录表

engine = InnoDB

5.2.1.16.5 Code preview of the table 资金变动记录表

```
use coal_trading;

drop table if exists ct_finance_log;

/*=====*/
/* Table: ct_finance_log */
/*=====*/
create table ct_finance_log
(
 user_id bigint(20) not null comment '用户ID',
 date datetime default CURRENT_TIMESTAMP comment '变动时间',
 log_type enum('1','2','3') comment '变动操作：
 1. 预存（增加）
 2. 缴纳给平台（冻结）
 3. 平台扣除指定额度的冻结款项（减少）
 ',
 quantity decimal(10,2) comment '金额数量',
 cert varchar(255) comment '交易凭证（文件）',
 primary key (user_id)
)
engine = InnoDB;

/*=====*/
/* Index: Index_user_id */
/*=====*/
create index Index_user_id on ct_finance_log
(
 user_id
);

/*=====*/
/* Index: Index_log_type */
/*=====*/
create index Index_log_type on ct_finance_log
(
 log_type
);

alter table ct_finance_log add constraint FK_FL_REF_USER foreign key (user_id)
 references ct_users (id) on delete restrict on update restrict;
```

5.2.1.16.6 List of diagrams containing the table 资金变动记录表

| Name   | Code |
|--------|------|
| 国煤交易系统 | pdp  |

5.2.1.16.7 List of outgoing references of the table 资金变动记录表

| Name        | Code        | Foreign Key Columns |
|-------------|-------------|---------------------|
| FL_REF_USER | FL_REF_USER | 用户ID                |

5.2.1.16.8 List of all dependencies of the table 资金变动记录表

| Name        | Code        | Class Name |
|-------------|-------------|------------|
| FL_REF_USER | FL_REF_USER | Reference  |

5.2.1.16.9 List of extended attributes of the table 资金变动记录表

| Name      | Data Type | Value | Target Name |
|-----------|-----------|-------|-------------|
| Temporary | (Boolean) | false | MySQL 5.7   |

5.2.1.16.10 List of columns of the table 资金变动记录表

| Name     | Code     |
|----------|----------|
| 用户ID     | user_id  |
| 变动时间     | date     |
| 变动操作     | log_type |
| 金额数量     | quantity |
| 交易凭证（文件） | cert     |

5.2.1.16.11 Column 用户ID of the table 资金变动记录表

5.2.1.16.11.1 Card of the column 用户ID of the table 资金变动记录表

|           |            |
|-----------|------------|
| Name      | 用户ID       |
| Code      | user_id    |
| Data Type | bigint(20) |
| Mandatory | Yes        |

5.2.1.16.11.2 Check constraint name of the column 用户ID of the table 资金变动记录表

CK\_user\_id

5.2.1.16.11.3 Check of the column 用户ID of the table 资金变动记录表

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.16.11.4 Server validation rule of the column 用户ID of the table 资金变动记录表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.16.11.5 List of all dependencies of the table column 用户ID

| Name  | Code    | Class Name     |
|-------|---------|----------------|
| Key_1 | Key_1   | Key            |
| 用户ID  | user_id | Index Column   |
| ?     | ?       | Reference Join |

5.2.1.16.11.6 List of extended attributes of the table column 用户ID

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.16.12 Column 变动时间 of the table 资金变动记录表

5.2.1.16.12.1 Card of the column 变动时间 of the table 资金变动记录表

|      |      |
|------|------|
| Name | 变动时间 |
| Code | date |

|                  |          |
|------------------|----------|
| <i>Data Type</i> | datetime |
| <i>Mandatory</i> | No       |

**5.2.1.16.12.2 Check constraint name of the column 变动时间 of the table 资金变动记录表**

CK\_date

**5.2.1.16.12.3 Check of the column 变动时间 of the table 资金变动记录表**

|                       |                   |
|-----------------------|-------------------|
| <i>Minimum Value</i>  |                   |
| <i>Maximum Value</i>  |                   |
| <i>Default Value</i>  | CURRENT_TIMESTAMP |
| <i>Unit</i>           |                   |
| <i>Format</i>         |                   |
| <i>Cannot Modify</i>  | No                |
| <i>List Of Values</i> |                   |

**5.2.1.16.12.4 Server validation rule of the column 变动时间 of the table 资金变动记录表**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

**5.2.1.16.12.5 List of extended attributes of the table column 变动时间**

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| CharSet     | Charsets         |              | MySQL 5.7          |
| Collate     | (String)         |              | MySQL 5.7          |
| National    | (Boolean)        | false        | MySQL 5.7          |
| Unsigned    | (Boolean)        | false        | MySQL 5.7          |
| ZeroFill    | (Boolean)        | false        | MySQL 5.7          |

**5.2.1.16.13 Column 变动操作 of the table 资金变动记录表**

**5.2.1.16.13.1 Card of the column 变动操作 of the table 资金变动记录表**

|                  |                   |
|------------------|-------------------|
| <i>Name</i>      | 变动操作              |
| <i>Code</i>      | log_type          |
| <i>Data Type</i> | enum('1','2','3') |
| <i>Mandatory</i> | No                |

**5.2.1.16.13.2 Check constraint name of the column 变动操作 of the table 资金变动记录表**

CK\_log\_type

**5.2.1.16.13.3 Check of the column 变动操作 of the table 资金变动记录表**

|                       |    |
|-----------------------|----|
| <i>Minimum Value</i>  |    |
| <i>Maximum Value</i>  |    |
| <i>Default Value</i>  |    |
| <i>Unit</i>           |    |
| <i>Format</i>         |    |
| <i>Cannot Modify</i>  | No |
| <i>List Of Values</i> |    |

**5.2.1.16.13.4 Server validation rule of the column 变动操作 of the table 资金变动记录表**

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

**5.2.1.16.13.5 List of all dependencies of the table column 变动操作**

| <i>Name</i> | <i>Code</i> | <i>Class Name</i> |
|-------------|-------------|-------------------|
| 变动操作        | log_type    | Index Column      |

5.2.1.16.13.6 List of extended attributes of the table column 变动操作

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.16.14 Column 金额数量 of the table 资金变动记录表

5.2.1.16.14.1 Card of the column 金额数量 of the table 资金变动记录表

|           |               |
|-----------|---------------|
| Name      | 金额数量          |
| Code      | quantity      |
| Data Type | decimal(10,2) |
| Mandatory | No            |

5.2.1.16.14.2 Check constraint name of the column 金额数量 of the table 资金变动记录表

CK\_quantity

5.2.1.16.14.3 Check of the column 金额数量 of the table 资金变动记录表

|                |    |
|----------------|----|
| Minimum Value  |    |
| Maximum Value  |    |
| Default Value  |    |
| Unit           |    |
| Format         |    |
| Cannot Modify  | No |
| List Of Values |    |

5.2.1.16.14.4 Server validation rule of the column 金额数量 of the table 资金变动记录表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

5.2.1.16.14.5 List of extended attributes of the table column 金额数量

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| CharSet  | CharSets  |       | MySQL 5.7   |
| Collate  | (String)  |       | MySQL 5.7   |
| National | (Boolean) | false | MySQL 5.7   |
| Unsigned | (Boolean) | false | MySQL 5.7   |
| ZeroFill | (Boolean) | false | MySQL 5.7   |

5.2.1.16.15 Column 交易凭证（文件） of the table 资金变动记录表

5.2.1.16.15.1 Card of the column 交易凭证（文件） of the table 资金变动记录表

|           |              |
|-----------|--------------|
| Name      | 交易凭证（文件）     |
| Code      | cert         |
| Data Type | varchar(255) |
| Mandatory | No           |

5.2.1.16.15.2 Check constraint name of the column 交易凭证（文件） of the table 资金变动记录表

CK\_cert

|                       |    |
|-----------------------|----|
| <i>Minimum Value</i>  |    |
| <i>Maximum Value</i>  |    |
| <i>Default Value</i>  |    |
| <i>Unit</i>           |    |
| <i>Format</i>         |    |
| <i>Cannot Modify</i>  | No |
| <i>List Of Values</i> |    |

#### 5.2.1.16.15.4 Server validation rule of the column 交易凭证（文件） of the table 资金变动记录表

%MINMAX% and %LISTVAL% and %CASE% and %RULES%

#### 5.2.1.16.15.5 List of extended attributes of the table column 交易凭证（文件）

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| CharSet     | Charsets         |              | MySQL 5.7          |
| Collate     | (String)         |              | MySQL 5.7          |
| National    | (Boolean)        | false        | MySQL 5.7          |
| Unsigned    | (Boolean)        | false        | MySQL 5.7          |
| ZeroFill    | (Boolean)        | false        | MySQL 5.7          |

#### 5.2.1.16.16 List of keys of the table 资金变动记录表

| <i>Name</i> | <i>Code</i> | <i>Primary</i> |
|-------------|-------------|----------------|
| Key_1       | Key_1       | X              |

#### 5.2.1.16.17 Key Key\_1 of the table 资金变动记录表

##### 5.2.1.16.17.1 Card of the key Key\_1 of the table 资金变动记录表

|              |         |
|--------------|---------|
| <i>Name</i>  | Key_1   |
| <i>Code</i>  | Key_1   |
| <i>Table</i> | 资金变动记录表 |

##### 5.2.1.16.17.2 Code preview of the key Key\_1 of the table 资金变动记录表

```
use coal_trading;
```

```
alter table ct_finance_log
drop primary key;
```

##### 5.2.1.16.17.3 List of columns of the table key Key\_1

| <i>Name</i> | <i>Code</i> |
|-------------|-------------|
| 用户ID        | user_id     |

##### 5.2.1.16.17.4 List of extended attributes of the table key Key\_1

| <i>Name</i> | <i>Data Type</i> | <i>Value</i> | <i>Target Name</i> |
|-------------|------------------|--------------|--------------------|
| ExtUnique   | (Boolean)        | false        | MySQL 5.7          |

#### 5.2.1.16.18 List of indexes of the table 资金变动记录表

| <i>Name</i>    | <i>Code</i>    | <i>Unique</i> | <i>Cluster</i> | <i>Primary</i> | <i>Foreign Key</i> | <i>Alternate Key</i> |
|----------------|----------------|---------------|----------------|----------------|--------------------|----------------------|
| Index_user_id  | Index_user_id  |               |                |                |                    |                      |
| Index_log_type | Index_log_type |               |                |                |                    |                      |

#### 5.2.1.16.19 Index Index user\_id of the table 资金变动记录表

5.2.1.16.19.1 Card of the index Index\_user\_id of the table 资金变动记录表

|               |               |
|---------------|---------------|
| Name          | Index_user_id |
| Code          | Index_user_id |
| Unique        | No            |
| Cluster       | No            |
| Primary       | No            |
| Foreign Key   | No            |
| Alternate Key | No            |
| Table         | 资金变动记录表       |

5.2.1.16.19.2 Code preview of the index Index\_user\_id of the table 资金变动记录表

```
use coal_trading;

use coal_trading;

/*=====*/
/* Index: Index_user_id */
/*=====*/
create index Index_user_id on ct_finance_log
(
 user_id
);
```

5.2.1.16.19.3 List of index columns of the table index Index\_user\_id

| Name | Code    | Sort      |
|------|---------|-----------|
| 用户ID | user_id | Ascending |

5.2.1.16.19.4 List of extended attributes of the table index Index\_user\_id

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |

5.2.1.16.20 Index Index\_log\_type of the table 资金变动记录表

5.2.1.16.20.1 Card of the index Index\_log\_type of the table 资金变动记录表

|               |                |
|---------------|----------------|
| Name          | Index_log_type |
| Code          | Index_log_type |
| Unique        | No             |
| Cluster       | No             |
| Primary       | No             |
| Foreign Key   | No             |
| Alternate Key | No             |
| Table         | 资金变动记录表        |

5.2.1.16.20.2 Code preview of the index Index\_log\_type of the table 资金变动记录表

```
use coal_trading;

use coal_trading;

/*=====*/
/* Index: Index_log_type */
/*=====*/
create index Index_log_type on ct_finance_log
(
```

log\_type  
);

5.2.1.16.20.3 List of index columns of the table index Index log\_type

| Name | Code     | Sort      |
|------|----------|-----------|
| 变动操作 | log_type | Ascending |

5.2.1.16.20.4 List of extended attributes of the table index Index log\_type

| Name     | Data Type | Value | Target Name |
|----------|-----------|-------|-------------|
| FullText | (Boolean) | false | MySQL 5.7   |



