《鲲鹏云实践》课程大作业

参考答案

目录

[1 文件管理系统 2](#_Toc57126188)

[1.1 系统功能要求 2](#_Toc57126189)

[1.2 作业要求 2](#_Toc57126190)

[1.3 实验环境 2](#_Toc57126191)

[1.4 实验操作步骤 3](#_Toc57126192)

[1.4.1 登录华为云 3](#_Toc57126193)

[1.4.2 创建VPC 3](#_Toc57126194)

[1.4.3 购买ECS 3](#_Toc57126195)

[1.4.4 购买PostgreSQL服务 4](#_Toc57126196)

[1.4.5 安装文件管理系统 20](#_Toc57126197)

[1.4.6 基本功能验证 21](#_Toc57126198)

[1.4.7 应用打包 21](#_Toc57126199)

[1.4.8 购买SFS服务 23](#_Toc57126200)

[1.4.9 挂载SFS 23](#_Toc57126201)

[1.4.10 导入文件 24](#_Toc57126202)

[1.4.11 制作ECS镜像 24](#_Toc57126203)

[1.4.12 配置ELB 25](#_Toc57126204)

[1.4.13 配置AS 25](#_Toc57126205)

[1.4.14 通过Dockerfile构建系统镜像 26](#_Toc57126206)

[1.4.15 镜像上传至华为镜像服务SWR 27](#_Toc57126207)

[1.4.16 CCE鲲鹏集群创建 27](#_Toc57126208)

[1.4.17 CCE部署文件系统 28](#_Toc57126209)

# 文件管理系统

## 系统功能要求

该系统主要通过前端页面和后台服务程序实现简单的在线文件管理功能。功能包括：文档上传、文档在线编辑、全文检索、文档分享、文档点评、文档在线审批和自动归档等。

文件管理系统参考：

* <https://github.com/sismics/docs>
* <https://gitee.com/github-5407963/docs-pgsql.git>

## 作业要求

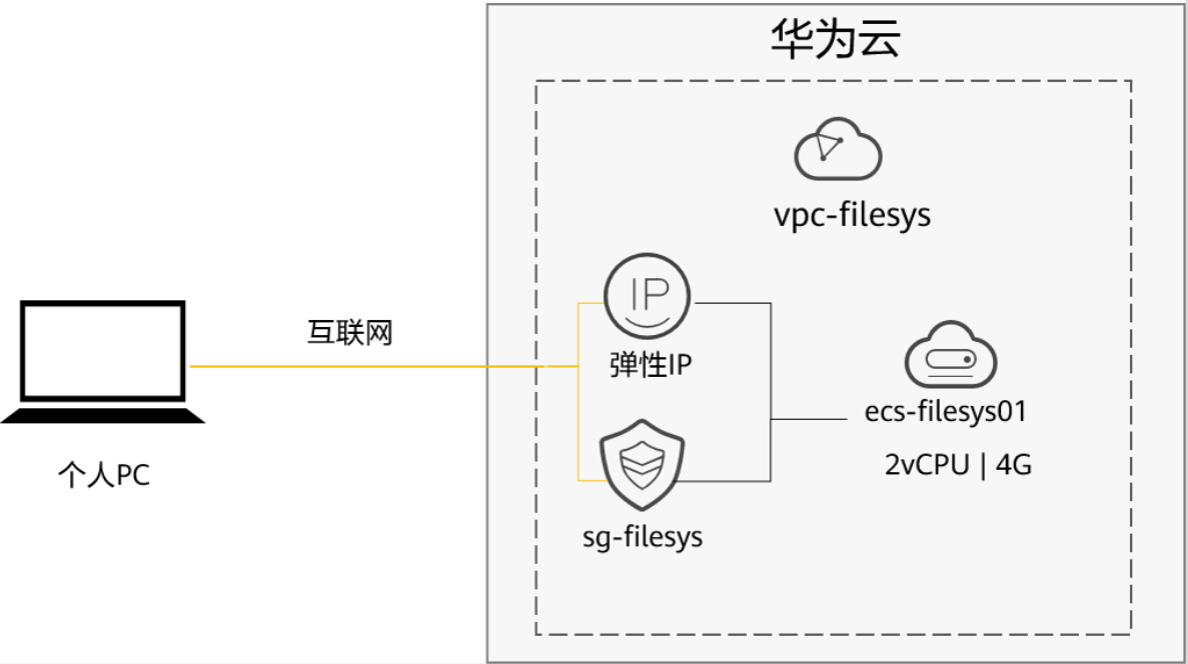
本次作业除了要实现基本的文件管理系统ECS高可用部署，还要求通过容器化部署。涉及的技术要求及具体细节如下：

1. **技术要求**：鲲鹏ECS、RDS for PostgreSQL、SFS、IMS、ELB、AS、SWR、CCE

2. **作业提交要求**：系统架构图、作业截图。

## 实验环境

本实验需要使用一台安装了openEuler 20.03操作系统的鲲鹏计算架构的弹性云服务器ECS；同时还需要使用虚拟私有云VPC服务和弹性公网IP服务来为该ECS提供网络访问的能力。



## 实验操作步骤

### 登录华为云

打开浏览器，访问www.huaweicloud.com。

点击右上角的 登录 ，进入登录页面。

在登录页面中，点击 IAM用户登录 ，打开IAM用户登录窗口。

在IAM登录窗口中，依次输入 账号名、用户名、密码 ，然后点击 登录 ，登录华为云。

登录华为云后，点击右上角的 控制台 ，进入云资源控制台。

检查当前所在区是否是在 北京四 ，如果不是，请切换到 北京四 。

### 创建VPC

进入华为云资源控制台，将鼠标移动到左上角如图所示处，在滑出的菜单中点击 网络 下面的 虚拟私有云VPC，进入VPC控制台。

在VPC控制台中点击右上角的 创建虚拟私有云 ，打开创建私有云配置界面。

创建虚拟私有云资源（vpc）。配置完成后，点击右下角 立即创建 ，完成VPC的创建。

完成VPC创建后，会自动回到VPC控制台。点击左侧导航栏的 访问控制 --> 安全组 ，进入安全组控制台。

点击右上角的 创建安全组 ，打开创建安全组的界面。

按照下表配置安全组，然后点击 确定 。

创建完成安全组后，系统会自动回到安全组控制台。

### 购买ECS

点击左上角的 控制台 ，进入华为云资源控制台。点击 弹性云服务器ECS ，进入ECS控制台。

点击弹性云服务器控制台右上角的 购买弹性云服务器 ，进入弹性云服务器购买界面。

在 基础配置 页面中配置弹性云服务器资源。

参数配置正确后，点击右下角的 下一步：网络配置。

在 网络配置 页面中按照如下表配置弹性云服务器网络资源。

配置完成后，点击 下一步：高级配置 。

配置好相关参数后，点击右下角的 下一步：确认配置 。

确认信息时候无误，如正确，请勾选 我已阅读并同意《华为镜像免责声明》 ，然后点击 立即购买。

点击 返回云服务器列表 ，回到ECS控制台，等待云服务器创建完成。

### 购买PostgreSQL服务

回到华为云ECS控制台，点击 服务列表 --> 云数据库RDS ，进入云数据库RDS控制台。

点击右上角的 购买数据库实例 ，设置数据库服务参数，配置完成后点击右下角的 立即购买，并在规格确认页点击右下角的 提交 。

购买完成后返回云数据库RDS-->实例管理，点击刚刚创建的实例名称，进入实例管理页。

在实例信息管理页可以看到内网链接地址，请记住该地址查看方法，后续会用到该地址。

在云数据库RDS-->实例管理页面，在实例列表中，点击上一步创建的实例后面的 登录 ，打开登录实例窗口。

在数据库登录窗口输入用户名、数据库以及密码，登录数据库。

点击左上角的 新建数据库 ，新建一个名为docs的数据库，字符集保持默认，然后点击 确定 ，完成数据库创建。

点击新建的docs数据库名称，进入docs数据库。然后点击名为 public 的Schema。

点击 SQL窗口 ，打开SQL窗口页面。

清空SQL语句窗口中的信息，复制如下信息并输入该窗口中，然后点击 执行SQL(F8） 。

create table T\_AUTHENTICATION\_TOKEN ( AUT\_ID\_C varchar(36) not null, AUT\_IDUSER\_C varchar(36) not null, AUT\_LONGLASTED\_B bool not null, AUT\_CREATIONDATE\_D timestamp not null, AUT\_LASTCONNECTIONDATE\_D timestamp, AUT\_IP\_C varchar(45), AUT\_UA\_C varchar(1000), primary key (AUT\_ID\_C) );

create table T\_BASE\_FUNCTION ( BAF\_ID\_C varchar(20) not null, primary key (BAF\_ID\_C) );

create table T\_FILE ( FIL\_ID\_C varchar(36) not null, FIL\_IDDOC\_C varchar(36), FIL\_IDUSER\_C varchar(36) not null, FIL\_MIMETYPE\_C varchar(100) not null, FIL\_CREATEDATE\_D timestamp, FIL\_DELETEDATE\_D timestamp, FIL\_ORDER\_N int, FIL\_CONTENT\_C text, primary key (FIL\_ID\_C) );

create table T\_CONFIG ( CFG\_ID\_C varchar(50) not null, CFG\_VALUE\_C varchar(250) not null, primary key (CFG\_ID\_C) );

create table T\_LOCALE ( LOC\_ID\_C varchar(10) not null, primary key (LOC\_ID\_C) );

create table T\_DOCUMENT ( DOC\_ID\_C varchar(36) not null, DOC\_IDUSER\_C varchar(36) not null, DOC\_TITLE\_C varchar(100) not null, DOC\_DESCRIPTION\_C varchar(4000), DOC\_CREATEDATE\_D timestamp, DOC\_DELETEDATE\_D timestamp, DOC\_LANGUAGE\_C varchar(3) default 'fra' not null, primary key (DOC\_ID\_C) );

create table T\_USER ( USE\_ID\_C varchar(36) not null, USE\_IDLOCALE\_C varchar(10) not null, USE\_IDROLE\_C varchar(36) not null, USE\_USERNAME\_C varchar(50) not null, USE\_PASSWORD\_C varchar(60) not null, USE\_EMAIL\_C varchar(100) not null, USE\_THEME\_C varchar(100) not null, USE\_FIRSTCONNECTION\_B bool not null, USE\_CREATEDATE\_D timestamp not null, USE\_DELETEDATE\_D timestamp, USE\_PRIVATEKEY\_C varchar(100) default '' not null, primary key (USE\_ID\_C) );

create table T\_ROLE ( ROL\_ID\_C varchar(36) not null, ROL\_NAME\_C varchar(36) not null, ROL\_CREATEDATE\_D timestamp not null, ROL\_DELETEDATE\_D timestamp, primary key (ROL\_ID\_C) );

create table T\_ROLE\_BASE\_FUNCTION ( RBF\_ID\_C varchar(36) not null, RBF\_IDROLE\_C varchar(36) not null, RBF\_IDBASEFUNCTION\_C varchar(20) not null, RBF\_CREATEDATE\_D timestamp not null, RBF\_DELETEDATE\_D timestamp, primary key (RBF\_ID\_C) );

create table T\_TAG ( TAG\_ID\_C varchar(36) not null, TAG\_IDUSER\_C varchar(36) not null, TAG\_NAME\_C varchar(36) not null, TAG\_CREATEDATE\_D timestamp, TAG\_DELETEDATE\_D timestamp, TAG\_COLOR\_C varchar(7) default '#3a87ad' not null, primary key (TAG\_ID\_C) );

create table T\_DOCUMENT\_TAG ( DOT\_ID\_C varchar(36) not null, DOT\_IDDOCUMENT\_C varchar(36) not null, DOT\_IDTAG\_C varchar(36) not null, DOT\_DELETEDATE\_D timestamp, primary key (DOT\_ID\_C) );

create table T\_ACL ( ACL\_ID\_C varchar(36) not null, ACL\_PERM\_C varchar(30) not null, ACL\_SOURCEID\_C varchar(36) not null, ACL\_TARGETID\_C varchar(36) not null, ACL\_DELETEDATE\_D timestamp, primary key (ACL\_ID\_C) );

create table T\_SHARE ( SHA\_ID\_C varchar(36) not null, SHA\_NAME\_C varchar(36), SHA\_CREATEDATE\_D timestamp, SHA\_DELETEDATE\_D timestamp, primary key (SHA\_ID\_C) );

create table T\_AUDIT\_LOG ( LOG\_ID\_C varchar(36) not null, LOG\_IDENTITY\_C varchar(36) not null, LOG\_CLASSENTITY\_C varchar(50) not null, LOG\_TYPE\_C varchar(50) not null, LOG\_MESSAGE\_C varchar(1000), LOG\_CREATEDATE\_D timestamp, primary key (LOG\_ID\_C) );

alter table T\_AUTHENTICATION\_TOKEN add constraint FK\_AUT\_IDUSER\_C foreign key (AUT\_IDUSER\_C) references T\_USER (USE\_ID\_C) on delete restrict on update restrict;

alter table T\_DOCUMENT add constraint FK\_DOC\_IDUSER\_C foreign key (DOC\_IDUSER\_C) references T\_USER (USE\_ID\_C) on delete restrict on update restrict;

alter table T\_FILE add constraint FK\_FIL\_IDDOC\_C foreign key (FIL\_IDDOC\_C) references T\_DOCUMENT (DOC\_ID\_C) on delete restrict on update restrict;

alter table T\_FILE add constraint FK\_FIL\_IDUSER\_C foreign key (FIL\_IDUSER\_C) references T\_USER (USE\_ID\_C) on delete restrict on update restrict;

alter table T\_USER add constraint FK\_USE\_IDLOCALE\_C foreign key (USE\_IDLOCALE\_C) references T\_LOCALE (LOC\_ID\_C) on delete restrict on update restrict;

alter table T\_USER add constraint FK\_USE\_IDROLE\_C foreign key (USE\_IDROLE\_C) references T\_ROLE (ROL\_ID\_C) on delete restrict on update restrict;

alter table T\_TAG add constraint FK\_TAG\_IDUSER\_C foreign key (TAG\_IDUSER\_C) references T\_USER (USE\_ID\_C) on delete restrict on update restrict;

alter table T\_DOCUMENT\_TAG add constraint FK\_DOT\_IDDOCUMENT\_C foreign key (DOT\_IDDOCUMENT\_C) references T\_DOCUMENT (DOC\_ID\_C) on delete restrict on update restrict;

alter table T\_DOCUMENT\_TAG add constraint FK\_DOT\_IDTAG\_C foreign key (DOT\_IDTAG\_C) references T\_TAG (TAG\_ID\_C) on delete restrict on update restrict;

alter table T\_ROLE\_BASE\_FUNCTION add constraint FK\_RBF\_IDROLE\_C foreign key (RBF\_IDROLE\_C) references T\_ROLE (ROL\_ID\_C) on delete restrict on update restrict;

alter table T\_ROLE\_BASE\_FUNCTION add constraint FK\_RBF\_IDBASEFUNCTION\_C foreign key (RBF\_IDBASEFUNCTION\_C) references T\_BASE\_FUNCTION (BAF\_ID\_C) on delete restrict on update restrict;

create index IDX\_DOC\_TITLE\_C on T\_DOCUMENT (DOC\_TITLE\_C);

create index IDX\_DOC\_CREATEDATE\_D on T\_DOCUMENT (DOC\_CREATEDATE\_D);

create index IDX\_DOC\_LANGUAGE\_C on T\_DOCUMENT (DOC\_LANGUAGE\_C);

create index IDX\_ACL\_SOURCEID\_C on T\_ACL (ACL\_SOURCEID\_C);

create index IDX\_ACL\_TARGETID\_C on T\_ACL (ACL\_TARGETID\_C);

create index IDX\_LOG\_IDENTITY\_C on T\_AUDIT\_LOG (LOG\_IDENTITY\_C);

insert into T\_CONFIG(CFG\_ID\_C, CFG\_VALUE\_C) values('DB\_VERSION', '0');

insert into T\_CONFIG(CFG\_ID\_C, CFG\_VALUE\_C) values('LUCENE\_DIRECTORY\_STORAGE', 'FILE');

insert into T\_BASE\_FUNCTION(BAF\_ID\_C) values('ADMIN');

insert into T\_LOCALE(LOC\_ID\_C) values('en');

insert into T\_LOCALE(LOC\_ID\_C) values('fr');

insert into T\_ROLE(ROL\_ID\_C, ROL\_NAME\_C, ROL\_CREATEDATE\_D) values('admin', 'Admin', NOW());

insert into T\_ROLE(ROL\_ID\_C, ROL\_NAME\_C, ROL\_CREATEDATE\_D) values('user', 'User', NOW());

insert into T\_ROLE\_BASE\_FUNCTION(RBF\_ID\_C, RBF\_IDROLE\_C, RBF\_IDBASEFUNCTION\_C, RBF\_CREATEDATE\_D) values('admin\_ADMIN', 'admin', 'ADMIN', NOW());

insert into T\_USER(USE\_ID\_C, USE\_IDLOCALE\_C, USE\_IDROLE\_C, USE\_USERNAME\_C, USE\_PASSWORD\_C, USE\_EMAIL\_C, USE\_THEME\_C, USE\_FIRSTCONNECTION\_B, USE\_CREATEDATE\_D, USE\_PRIVATEKEY\_C) values('admin', 'en', 'admin', 'admin', '$2a$05$6Ny3TjrW3aVAL1or2SlcR.fhuDgPKp5jp.P9fBXwVNePgeLqb4i3C', 'admin@localhost', 'default.less', true, NOW(), 'AdminPk');

alter table T\_USER drop column USE\_IDLOCALE\_C;

alter table T\_USER drop column USE\_THEME\_C;

alter table T\_USER drop column USE\_FIRSTCONNECTION\_B;

drop table T\_LOCALE;

update T\_CONFIG set CFG\_VALUE\_C = '1' where CFG\_ID\_C = 'DB\_VERSION';

alter table T\_TAG add column TAG\_IDPARENT\_C varchar(36);

update T\_CONFIG set CFG\_VALUE\_C = '2' where CFG\_ID\_C = 'DB\_VERSION';

create table T\_COMMENT ( COM\_ID\_C varchar(36) not null, COM\_IDDOC\_C varchar(36) not null, COM\_IDUSER\_C varchar(36) not null, COM\_CONTENT\_C varchar(4000) not null, COM\_CREATEDATE\_D timestamp, COM\_DELETEDATE\_D timestamp, primary key (COM\_ID\_C) );

alter table T\_COMMENT add constraint FK\_COM\_IDDOC\_C foreign key (COM\_IDDOC\_C) references T\_DOCUMENT (DOC\_ID\_C) on delete restrict on update restrict;

alter table T\_COMMENT add constraint FK\_COM\_IDUSER\_C foreign key (COM\_IDUSER\_C) references T\_USER (USE\_ID\_C) on delete restrict on update restrict;

update T\_CONFIG set CFG\_VALUE\_C = '3' where CFG\_ID\_C = 'DB\_VERSION';

alter table T\_USER add column USE\_STORAGEQUOTA\_N bigint not null default 10000000000;

alter table T\_USER add column USE\_STORAGECURRENT\_N bigint not null default 0;

update T\_CONFIG set CFG\_VALUE\_C = '4' where CFG\_ID\_C = 'DB\_VERSION';

alter table T\_FILE alter column FIL\_IDUSER\_C set not null;

update T\_CONFIG set CFG\_VALUE\_C = '5' where CFG\_ID\_C = 'DB\_VERSION';

alter table T\_DOCUMENT add column DOC\_SUBJECT\_C varchar(500);

alter table T\_DOCUMENT add column DOC\_IDENTIFIER\_C varchar(500);

alter table T\_DOCUMENT add column DOC\_PUBLISHER\_C varchar(500);

alter table T\_DOCUMENT add column DOC\_FORMAT\_C varchar(500);

alter table T\_DOCUMENT add column DOC\_SOURCE\_C varchar(500);

alter table T\_DOCUMENT add column DOC\_TYPE\_C varchar(500);

alter table T\_DOCUMENT add column DOC\_COVERAGE\_C varchar(500);

alter table T\_DOCUMENT add column DOC\_RIGHTS\_C varchar(500);

alter table T\_AUDIT\_LOG add column LOG\_IDUSER\_C varchar(36) not null default 'admin';

create table T\_VOCABULARY ( VOC\_ID\_C varchar(36) not null, VOC\_NAME\_C varchar(50) not null, VOC\_VALUE\_C varchar(500) not null, VOC\_ORDER\_N int not null, primary key (VOC\_ID\_C) );

create table T\_CONTRIBUTOR ( CTR\_ID\_C varchar(36) not null, CTR\_IDUSER\_C varchar(36) not null, CTR\_IDDOC\_C varchar(36) not null, primary key (CTR\_ID\_C) );

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('type-collection', 'type', 'Collection', 0);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('type-dataset', 'type', 'Dataset', 1);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('type-event', 'type', 'Event', 2);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('type-image', 'type', 'Image', 3);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('type-interactive-resource', 'type', 'Interactive Resource', 4);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('type-moving-image', 'type', 'Moving Image', 5);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('type-physical-object', 'type', 'Physical Object', 6);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('type-service', 'type', 'Service', 7);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('type-software', 'type', 'Software', 8);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('type-sound', 'type', 'Sound', 9);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('type-still-image', 'type', 'Still Image', 10);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('type-text', 'type', 'Text', 11);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-afg', 'coverage', 'Afghanistan', 0);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-ala', 'coverage', 'Åland Islands', 1);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-alb', 'coverage', 'Albania', 2);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-dza', 'coverage', 'Algeria', 3);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-asm', 'coverage', 'American Samoa', 4);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-and', 'coverage', 'Andorra', 5);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-ago', 'coverage', 'Angola', 6);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-aia', 'coverage', 'Anguilla', 7);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-ata', 'coverage', 'Antarctica', 8);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-atg', 'coverage', 'Antigua and Barbuda', 9);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-arg', 'coverage', 'Argentina', 10);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-arm', 'coverage', 'Armenia', 11);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-abw', 'coverage', 'Aruba', 12);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-aus', 'coverage', 'Australia', 13);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-aut', 'coverage', 'Austria', 14);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-aze', 'coverage', 'Azerbaijan', 15);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-bhs', 'coverage', 'Bahamas', 16);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-bhr', 'coverage', 'Bahrain', 17);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-bgd', 'coverage', 'Bangladesh', 18);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-brb', 'coverage', 'Barbados', 19);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-blr', 'coverage', 'Belarus', 20);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-bel', 'coverage', 'Belgium', 21);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-blz', 'coverage', 'Belize', 22);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-ben', 'coverage', 'Benin', 23);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-bmu', 'coverage', 'Bermuda', 24);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-btn', 'coverage', 'Bhutan', 25);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-bol', 'coverage', 'Bolivia (Plurinational State of)', 26);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-bes', 'coverage', 'Bonaire, Sint Eustatius and Saba', 27);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-bih', 'coverage', 'Bosnia and Herzegovina', 28);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-bwa', 'coverage', 'Botswana', 29);

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insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-mnp', 'coverage', 'Northern Mariana Islands', 164);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-nor', 'coverage', 'Norway', 165);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-omn', 'coverage', 'Oman', 166);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-pak', 'coverage', 'Pakistan', 167);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-plw', 'coverage', 'Palau', 168);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-pse', 'coverage', 'Palestine, State of', 169);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-pan', 'coverage', 'Panama', 170);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-png', 'coverage', 'Papua New Guinea', 171);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-pry', 'coverage', 'Paraguay', 172);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-per', 'coverage', 'Peru', 173);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-phl', 'coverage', 'Philippines', 174);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-pcn', 'coverage', 'Pitcairn', 175);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-pol', 'coverage', 'Poland', 176);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-prt', 'coverage', 'Portugal', 177);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-pri', 'coverage', 'Puerto Rico', 178);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-qat', 'coverage', 'Qatar', 179);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-reu', 'coverage', 'Réunion', 180);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-rou', 'coverage', 'Romania', 181);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-rus', 'coverage', 'Russian Federation', 182);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-rwa', 'coverage', 'Rwanda', 183);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-blm', 'coverage', 'Saint Barthélemy', 184);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-shn', 'coverage', 'Saint Helena, Ascension and Tristan da Cunha', 185);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-kna', 'coverage', 'Saint Kitts and Nevis', 186);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-lca', 'coverage', 'Saint Lucia', 187);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-maf', 'coverage', 'Saint Martin (French part)', 188);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-spm', 'coverage', 'Saint Pierre and Miquelon', 189);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-vct', 'coverage', 'Saint Vincent and the Grenadines', 190);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-wsm', 'coverage', 'Samoa', 191);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-smr', 'coverage', 'San Marino', 192);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-stp', 'coverage', 'Sao Tome and Principe', 193);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-sau', 'coverage', 'Saudi Arabia', 194);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-sen', 'coverage', 'Senegal', 195);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-srb', 'coverage', 'Serbia', 196);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-syc', 'coverage', 'Seychelles', 197);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-sle', 'coverage', 'Sierra Leone', 198);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-sgp', 'coverage', 'Singapore', 199);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-sxm', 'coverage', 'Sint Maarten (Dutch part)', 200);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-svk', 'coverage', 'Slovakia', 201);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-svn', 'coverage', 'Slovenia', 202);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-slb', 'coverage', 'Solomon Islands', 203);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-som', 'coverage', 'Somalia', 204);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-zaf', 'coverage', 'South Africa', 205);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-sgs', 'coverage', 'South Georgia and the South Sandwich Islands', 206);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-ssd', 'coverage', 'South Sudan', 207);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-esp', 'coverage', 'Spain', 208);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-lka', 'coverage', 'Sri Lanka', 209);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-sdn', 'coverage', 'Sudan', 210);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-sur', 'coverage', 'Suriname', 211);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-sjm', 'coverage', 'Svalbard and Jan Mayen', 212);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-swz', 'coverage', 'Swaziland', 213);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-swe', 'coverage', 'Sweden', 214);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-che', 'coverage', 'Switzerland', 215);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-syr', 'coverage', 'Syrian Arab Republic', 216);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-twn', 'coverage', 'Taiwan, Province of China', 217);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-tjk', 'coverage', 'Tajikistan', 218);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-tza', 'coverage', 'Tanzania, United Republic of', 219);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-tha', 'coverage', 'Thailand', 220);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-tls', 'coverage', 'Timor-Leste', 221);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-tgo', 'coverage', 'Togo', 222);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-tkl', 'coverage', 'Tokelau', 223);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-ton', 'coverage', 'Tonga', 224);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-tto', 'coverage', 'Trinidad and Tobago', 225);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-tun', 'coverage', 'Tunisia', 226);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-tur', 'coverage', 'Turkey', 227);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-tkm', 'coverage', 'Turkmenistan', 228);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-tca', 'coverage', 'Turks and Caicos Islands', 229);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-tuv', 'coverage', 'Tuvalu', 230);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-uga', 'coverage', 'Uganda', 231);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-ukr', 'coverage', 'Ukraine', 232);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-are', 'coverage', 'United Arab Emirates', 233);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-gbr', 'coverage', 'United Kingdom of Great Britain and Northern Ireland', 234);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-usa', 'coverage', 'United States of America', 235);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-umi', 'coverage', 'United States Minor Outlying Islands', 236);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-ury', 'coverage', 'Uruguay', 237);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-uzb', 'coverage', 'Uzbekistan', 238);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-vut', 'coverage', 'Vanuatu', 239);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-ven', 'coverage', 'Venezuela (Bolivarian Republic of)', 240);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-vnm', 'coverage', 'Viet Nam', 241);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-vgb', 'coverage', 'Virgin Islands (British)', 242);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-vir', 'coverage', 'Virgin Islands (U.S.)', 243);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-wlf', 'coverage', 'Wallis and Futuna', 244);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-esh', 'coverage', 'Western Sahara', 245);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-yem', 'coverage', 'Yemen', 246);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-zmb', 'coverage', 'Zambia', 247);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('coverage-zwe', 'coverage', 'Zimbabwe', 248);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('rights-all-rights-reserved', 'rights', 'All Rights Reserved', 0);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('rights-pubic-domain', 'rights', 'Public Domain', 1);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('rights-cc-ancsa', 'rights', 'Attribution-NonCommercial-ShareAlike License', 2);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('rights-cc-anc', 'rights', 'Attribution-NonCommercial License', 3);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('rights-cc-ancnd', 'rights', 'Attribution-NonCommercial-NoDerivs License', 4);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('rights-cc-a', 'rights', 'Attribution License', 5);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('rights-cc-asa', 'rights', 'Attribution-ShareAlike License', 6);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('rights-cc-and', 'rights', 'Attribution-NoDerivs License', 7);

insert into T\_VOCABULARY(VOC\_ID\_C, VOC\_NAME\_C, VOC\_VALUE\_C, VOC\_ORDER\_N) values('rights-no-copyright', 'rights', 'No known copyright restrictions', 8);

update T\_CONFIG set CFG\_VALUE\_C = '6' where CFG\_ID\_C = 'DB\_VERSION';

create table T\_RELATION ( REL\_ID\_C varchar(36) not null, REL\_IDDOCFROM\_C varchar(36) not null, REL\_IDDOCTO\_C varchar(36) not null, REL\_DELETEDATE\_D timestamp, primary key (REL\_ID\_C) );

update T\_CONFIG set CFG\_VALUE\_C = '7' where CFG\_ID\_C = 'DB\_VERSION';

create table T\_GROUP ( GRP\_ID\_C varchar(36) not null, GRP\_IDPARENT\_C varchar(36), GRP\_NAME\_C varchar(50) not null, GRP\_IDROLE\_C varchar(36), GRP\_DELETEDATE\_D timestamp, primary key (GRP\_ID\_C) );

create table T\_USER\_GROUP ( UGP\_ID\_C varchar(36) not null, UGP\_IDUSER\_C varchar(36) not null, UGP\_IDGROUP\_C varchar(36) not null, UGP\_DELETEDATE\_D timestamp, primary key (UGP\_ID\_C) );

insert into T\_GROUP(GRP\_ID\_C, GRP\_NAME\_C, GRP\_IDROLE\_C) values('administrators', 'administrators', 'admin');

insert into T\_USER\_GROUP(UGP\_ID\_C, UGP\_IDUSER\_C, UGP\_IDGROUP\_C) values('admin-administrators', 'admin', 'administrators');

update T\_CONFIG set CFG\_VALUE\_C = '8' where CFG\_ID\_C = 'DB\_VERSION';

alter table T\_USER add column USE\_TOTPKEY\_C varchar(100);

update T\_CONFIG set CFG\_VALUE\_C = '9' where CFG\_ID\_C = 'DB\_VERSION';

insert into T\_CONFIG(CFG\_ID\_C, CFG\_VALUE\_C) values('GUEST\_LOGIN', 'false');

insert into T\_USER(USE\_ID\_C, USE\_IDROLE\_C, USE\_USERNAME\_C, USE\_PASSWORD\_C, USE\_EMAIL\_C, USE\_CREATEDATE\_D, USE\_PRIVATEKEY\_C) values('guest', 'user', 'guest', '', 'guest@localhost', NOW(), 'GuestPk');

update T\_CONFIG set CFG\_VALUE\_C = '10' where CFG\_ID\_C = 'DB\_VERSION';

alter table T\_FILE add column FIL\_NAME\_C varchar(200);

update T\_CONFIG set CFG\_VALUE\_C = '11' where CFG\_ID\_C = 'DB\_VERSION';

--!H2!alter table T\_DOCUMENT alter column DOC\_LANGUAGE\_C varchar(7) default 'eng' not null;

alter table T\_DOCUMENT alter column DOC\_LANGUAGE\_C type varchar(7);

alter table T\_DOCUMENT alter column DOC\_LANGUAGE\_C set default 'eng';

alter table T\_DOCUMENT alter column DOC\_LANGUAGE\_C set not null;

update T\_CONFIG set CFG\_VALUE\_C = '12' where CFG\_ID\_C = 'DB\_VERSION';

create table T\_PASSWORD\_RECOVERY ( PWR\_ID\_C varchar(36) not null, PWR\_USERNAME\_C varchar(50) not null, PWR\_CREATEDATE\_D timestamp, PWR\_DELETEDATE\_D timestamp, primary key (PWR\_ID\_C) );

update T\_CONFIG set CFG\_VALUE\_C = '13' where CFG\_ID\_C = 'DB\_VERSION';

alter table T\_USER add column USE\_DISABLEDATE\_D timestamp;

update T\_CONFIG set CFG\_VALUE\_C = '14' where CFG\_ID\_C = 'DB\_VERSION';

create table T\_ROUTE\_MODEL ( RTM\_ID\_C varchar(36) not null, RTM\_NAME\_C varchar(50) not null, RTM\_STEPS\_C varchar(5000) not null, RTM\_CREATEDATE\_D timestamp not null, RTM\_DELETEDATE\_D timestamp, primary key (RTM\_ID\_C) );

create table T\_ROUTE ( RTE\_ID\_C varchar(36) not null, RTE\_IDDOCUMENT\_C varchar(36) not null, RTE\_NAME\_C varchar(50) not null, RTE\_CREATEDATE\_D timestamp not null, RTE\_DELETEDATE\_D timestamp, primary key (RTE\_ID\_C) );

create table T\_ROUTE\_STEP ( RTP\_ID\_C varchar(36) not null, RTP\_IDROUTE\_C varchar(36) not null, RTP\_NAME\_C varchar(200) not null, RTP\_TYPE\_C varchar(50) not null, RTP\_TRANSITION\_C varchar(50), RTP\_COMMENT\_C varchar(500), RTP\_IDTARGET\_C varchar(36) not null, RTP\_IDVALIDATORUSER\_C varchar(36), RTP\_ORDER\_N int not null, RTP\_CREATEDATE\_D timestamp not null, RTP\_ENDDATE\_D timestamp, RTP\_DELETEDATE\_D timestamp, primary key (RTP\_ID\_C) );

alter table T\_ACL add column ACL\_TYPE\_C varchar(30) not null default 'USER';

alter table T\_ROUTE add constraint FK\_RTE\_IDDOCUMENT\_C foreign key (RTE\_IDDOCUMENT\_C) references T\_DOCUMENT (DOC\_ID\_C) on delete restrict on update restrict;

alter table T\_ROUTE\_STEP add constraint FK\_RTP\_IDROUTE\_C foreign key (RTP\_IDROUTE\_C) references T\_ROUTE (RTE\_ID\_C) on delete restrict on update restrict;

alter table T\_ROUTE\_STEP add constraint FK\_RTP\_IDVALIDATORUSER\_C foreign key (RTP\_IDVALIDATORUSER\_C) references T\_USER (USE\_ID\_C) on delete restrict on update restrict;

insert into T\_ROUTE\_MODEL (RTM\_ID\_C, RTM\_NAME\_C, RTM\_STEPS\_C, RTM\_CREATEDATE\_D) values ('default-document-review', 'Document review', '[{"type":"VALIDATE","target":{"name":"administrators","type":"GROUP"},"name":"Check the document''s metadata"},{"type":"VALIDATE","target":{"name":"administrators","type":"GROUP"},"name":"Add relevant files to the document"},{"type":"APPROVE","target":{"name":"administrators","type":"GROUP"},"name":"Approve the document"}]', now());

insert into T\_ACL (ACL\_ID\_C, ACL\_PERM\_C, ACL\_SOURCEID\_C, ACL\_TARGETID\_C) values ('acl-admin-default-route-read', 'READ', 'default-document-review', 'administrators');

insert into T\_ACL (ACL\_ID\_C, ACL\_PERM\_C, ACL\_SOURCEID\_C, ACL\_TARGETID\_C) values ('acl-admin-default-route-write', 'WRITE', 'default-document-review', 'administrators');

update T\_CONFIG set CFG\_VALUE\_C = '15' where CFG\_ID\_C = 'DB\_VERSION';

insert into T\_CONFIG(CFG\_ID\_C, CFG\_VALUE\_C) values('DEFAULT\_LANGUAGE', 'eng');

update T\_CONFIG set CFG\_VALUE\_C = '16' where CFG\_ID\_C = 'DB\_VERSION';

insert into T\_CONFIG(CFG\_ID\_C, CFG\_VALUE\_C) values('INBOX\_ENABLED', 'false');

insert into T\_CONFIG(CFG\_ID\_C, CFG\_VALUE\_C) values('INBOX\_HOSTNAME', '');

insert into T\_CONFIG(CFG\_ID\_C, CFG\_VALUE\_C) values('INBOX\_PORT', '993');

insert into T\_CONFIG(CFG\_ID\_C, CFG\_VALUE\_C) values('INBOX\_USERNAME', '');

insert into T\_CONFIG(CFG\_ID\_C, CFG\_VALUE\_C) values('INBOX\_PASSWORD', '');

insert into T\_CONFIG(CFG\_ID\_C, CFG\_VALUE\_C) values('INBOX\_TAG', '');

update T\_CONFIG set CFG\_VALUE\_C = '17' where CFG\_ID\_C = 'DB\_VERSION';

alter table T\_DOCUMENT add column DOC\_UPDATEDATE\_D timestamp;

update T\_DOCUMENT set DOC\_UPDATEDATE\_D = DOC\_CREATEDATE\_D;

--!H2!alter table T\_DOCUMENT alter column DOC\_UPDATEDATE\_D timestamp not null;

alter table T\_DOCUMENT alter column DOC\_UPDATEDATE\_D type timestamp;

alter table T\_DOCUMENT alter column DOC\_UPDATEDATE\_D set not null;

alter table T\_ROUTE\_STEP add column RTP\_TRANSITIONS\_C varchar(2000);

update T\_CONFIG set CFG\_VALUE\_C = '18' where CFG\_ID\_C = 'DB\_VERSION';

create index IDX\_DOT\_COMPOSITE on T\_DOCUMENT\_TAG (DOT\_IDDOCUMENT\_C, DOT\_IDTAG\_C, DOT\_DELETEDATE\_D);

update T\_CONFIG set CFG\_VALUE\_C = '19' where CFG\_ID\_C = 'DB\_VERSION';

create table T\_WEBHOOK ( WHK\_ID\_C varchar(36) not null, WHK\_EVENT\_C varchar(50) not null, WHK\_URL\_C varchar(1024) not null, WHK\_CREATEDATE\_D timestamp not null, WHK\_DELETEDATE\_D timestamp, primary key (WHK\_ID\_C) );

update T\_CONFIG set CFG\_VALUE\_C = '20' where CFG\_ID\_C = 'DB\_VERSION';

alter table T\_DOCUMENT add column DOC\_IDFILE\_C varchar(36);

alter table T\_DOCUMENT add constraint FK\_DOC\_IDFILE\_C foreign key (DOC\_IDFILE\_C) references T\_FILE (FIL\_ID\_C) on delete restrict on update restrict;

update T\_CONFIG set CFG\_VALUE\_C = '21' where CFG\_ID\_C = 'DB\_VERSION';

alter table T\_FILE add column FIL\_VERSION\_N int not null default 0;

alter table T\_FILE add column FIL\_LATESTVERSION\_B bool not null default true;

alter table T\_FILE add column FIL\_IDVERSION\_C varchar(36);

update T\_CONFIG set CFG\_VALUE\_C = '22' where CFG\_ID\_C = 'DB\_VERSION';

alter table T\_USER add column USE\_ONBOARDING\_B bool not null default true;

update T\_CONFIG set CFG\_VALUE\_C = '23' where CFG\_ID\_C = 'DB\_VERSION';

create table T\_METADATA ( MET\_ID\_C varchar(36) not null, MET\_NAME\_C varchar(50) not null, MET\_TYPE\_C varchar(20) not null, MET\_DELETEDATE\_D timestamp, primary key (MET\_ID\_C) );

create table T\_DOCUMENT\_METADATA ( DME\_ID\_C varchar(36) not null, DME\_IDDOCUMENT\_C varchar(36) not null, DME\_IDMETADATA\_C varchar(36) not null, DME\_VALUE\_C varchar(4000) null, primary key (DME\_ID\_C) );

alter table T\_DOCUMENT\_METADATA add constraint FK\_DME\_IDDOCUMENT\_C foreign key (DME\_IDDOCUMENT\_C) references T\_DOCUMENT (DOC\_ID\_C) on delete restrict on update restrict;

alter table T\_DOCUMENT\_METADATA add constraint FK\_DME\_IDMETADATA\_C foreign key (DME\_IDMETADATA\_C) references T\_METADATA (MET\_ID\_C) on delete restrict on update restrict;

update T\_CONFIG set CFG\_VALUE\_C = '24' where CFG\_ID\_C = 'DB\_VERSION';

### 安装文件管理系统

在ECS控制台找到自己创建的ECS，点击后面的 远程登录 。此时系统会打开一个新的网页，显示ECS的控制台。

输入用户名root及购买ECS时设置的密码，登录ECS。

输入如下命令，下载Teedy源码到本地opt目录。

cd /opt/

git clone https://gitee.com/github-5407963/docs-pgsql.git

执行如下操作安装openJDK和Maven，以及Maven换源。

yum -y install java

mkdir /usr/local/maven

cd /usr/local/maven

wget https://mirrors.huaweicloud.com/apache/maven/maven-3/3.6.3/binaries/apache-maven-3.6.3-bin.tar.gz

tar -xvf apache-maven-3.6.3-bin.tar.gz

#需要修改环境变量才能使Maven生效

vim /etc/profile

#按i，进入插入模式；在文件的最后添加新的行，加入如下信息：

MAVEN\_HOME=/usr/local/maven/apache-maven-3.6.3

export PATH=$PATH:$MAVEN\_HOME/bin

export MAVEN\_HOME

#完成后按“Esc”键退出插入模式，再输入“:wq” （冒号wq），按回车键保存退出。

source /etc/profile

mvn -v

cd apache-maven-3.6.3/conf/

mv settings.xml settings.xml.bak

curl -o settings.xml https://mirrors.huaweicloud.com/v1/configurations/maven?

执行如下步骤安装npm。

cd /opt/

wget https://mirrors.huaweicloud.com/nodejs/v10.16.0/node-v10.16.0-linux-arm64.tar.xz

tar -xvf node-v10.16.0-linux-arm64.tar.xz

ln -s /opt/node-v10.16.0-linux-arm64/bin/node /usr/local/bin/node

ln -s /opt/node-v10.16.0-linux-arm64/bin/npm /usr/local/bin/npm

npm -v

配置PostgreSQL驱动路径。

vim docs-pgsql/pom.xml

#按“:461”并回车，进入第461行

#按i进入插入模式，将<systemPath>修改为本地驱动路径

<systemPath>/opt/docs-pgsql/docs-core/src/main/resources/db/postgresql-42.2.11.jar</systemPath>

#完成后按“Esc”键退出插入模式，再输入“:wq” （冒号wq），按回车键保存退出。

修改hibernate.properties文件的数据库配置信息。

vim docs-pgsql/docs-web/src/dev/resources/hibernate.properties

#修改如下信息：

hibernate.connection.url=jdbc:postgresql://10.1.2.205:5432/docs #此处IP地址为RDS for PostgreSQL实例内网IP，可以在云数据库列表中查看

hibernate.connection.username=root

hibernate.connection.password= #密码为创建RDS for PostgreSQL时设置的密码

执行如下命令编译安装Teedy。

cd docs-pgsql/

mvn clean -DskipTests install

执行如下命令运行Teedy服务。

cd docs-web

mvn jetty:run

查看ecs-filesys01-kunpeng的弹性公网IP地址，打开浏览器，地址栏输入http://弹性公网IP地址:8080/docs-web/src ，即可打开登录界面。

### 基本功能验证

打开浏览器，登录Teedy文件管理系统的Web界面，输入用户名admin和默认的密码admin登录系统。

点击右上角的 设置 ，进入系统设置页。默认进入用户账号管理页签。请在此处修改系统默认密码并保存，当提示 账号更新成功 时，表示admin密码已修改。请牢记密码。

点击快速上传 添加文件。

### 应用打包

回到ECS控制台，打开本实验中创建的ECS远程登录界面，按下Ctrl+C，关闭服务。

在ECS远程登录窗口输入如下命令，添加Grunt命令。

npm install grunt-cli -g

ln -s /opt/node-v10.16.0-linux-arm64/bin/grunt /usr/local/bin/grunt

创建war包。

mvn -Pprod -DskipTests clean install

cd target

ls

antrun docs-web-1.8 generated-sources maven-archiver test-classes

classes docs-web-1.8.war generated-test-sources maven-status

# 可以看到此处已经有了war包

安装Tomcat。

cd /usr/local/src

wget https://mirrors.huaweicloud.com/apache/tomcat/tomcat-8/v8.5.41/bin/apache-tomcat-8.5.41.tar.gz #下载Tomcat

tar -xvf apache-tomcat-8.5.41.tar.gz

mv apache-tomcat-8.5.41 tomcat

sh /usr/local/src/tomcat/bin/startup.sh

打开浏览器，输入http://ecs-filesys01-kunpeng的EIP:8080，若能打开如下网页，表示安装成功。

部署war包。

sh /usr/local/src/tomcat/bin/shutdown.sh

mv /opt/docs-pgsql/docs-web/target/docs-web-1.8.war /opt/docs-pgsql/docs-web/target/docs-web.war

cp /opt/docs-pgsql/docs-web/target/docs-web.war /usr/local/src/tomcat/webapps/

sh /usr/local/src/tomcat/bin/startup.sh

浏览器输入http://ecs-filesys01-kunpeng的EIP:8080/docs-web，可以打开文件管理系统的登录窗口。

编写tomcat.service服务文件。

sh /usr/local/src/tomcat/bin/shutdown.sh

cd

vim /usr/local/src/tomcat/bin/catalina.sh

#输入冒号143(:143)后按回车键，进入143行，添加如下内容：

CATALINA\_PID="$CATALINA\_BASE/tomcat.pid"

#输入冒号wq(:wq)后按回车键保存退出

vim /usr/lib/systemd/system/tomcat.service

#内容如下：

[Unit]

Description=tomcat

After=syslog.target network.target remote-fs.target nss-lookup.target

[Service]

Type=forking

Environment=JAVA\_HOME=/usr/lib/jvm/jre

Environment=CATALINA\_PID=/usr/local/src/tomcat/temp/tomcat.pid

Environment=CATALINA\_HOME=/usr/local/src/tomcat

Environment=CATALINA\_BASE=/usr/local/src/tomcat

Environment='CATALINA\_OPTS=-Xms512M -Xmx1024M -server -XX:+UseParallelGC'

Environment='JAVA\_OPTS=-Djava.awt.headless=true -Djava.security.egd=file:/dev/./urandom'

ExecStart=/usr/local/src/tomcat/bin/startup.sh

ExecStop=/usr/local/src/tomcat/bin/shutdown.sh

[Install]

WantedBy=multi-user.target

#输入冒号wq(:wq)后按回车键保存退出

测试tomcat.service。

systemctl start tomcat #启动tomcat服务，web界面可以打开

systemctl status tomcat #查看tomcat服务，是running状态

设置Tomcat开机自动启动。

systemctl enable tomcat

在云服务器控制台页面，选择ecs-filesys01-kunpeng，点击最右更多 --> 重启 ，重新启动ECS。 稍作等待，当ECS状态变为“运行中”后，在浏览器中输入http://ecs-filesys01-kunpeng的EIP:8080/docs-web，可以打开文件管理系统的登录窗口。

### 购买SFS服务

重新回到控制台，点击 服务列表 --> 存储 --> 弹性文件服务 ，进入SFS控制台。

点击右上角的 +创建文件系统 ，配置文件系统参数。完成后点击右下角的 立即创建 ，并在资源确认页点击 提交 。

购买完成后，点击 返回文件系统列表 ，在SFS控制台点击刚刚创建的文件系统名称，进入文件系统信息页。

点击 挂载点信息 ，进入挂载点页签。

可以看到有Linux下挂载的方式。请记住该挂载方式查看方法，后续用到！

### 挂载SFS

在ecs-filesys01-kunpeng的远程登录控制台中，配置挂载SFS。

yum -y install nfs\*

mount -t nfs -o vers=3,timeo=600,nolock sfs-nas01.cn-north-4b.myhuaweicloud.com:/share-483b0b7b /var/docs

#中间的sfs-nas01.cn-north-4b.myhuaweicloud.com:/share-483b0b7b这个链接为创建SFS时查询到的挂载链接。

df -h #查看系统挂载情况

Filesystem Size Used Avail Use% Mounted on

devtmpfs 1.2G 0 1.2G 0% /dev

tmpfs 1.5G 0 1.5G 0% /dev/shm

tmpfs 1.5G 13M 1.5G 1% /run

tmpfs 1.5G 0 1.5G 0% /sys/fs/cgroup

/dev/vda2 39G 4.5G 32G 13% /

tmpfs 1.5G 128K 1.5G 1% /tmp

/dev/vda1 1022M 5.8M 1017M 1% /boot/efi

tmpfs 298M 0 298M 0% /run/user/0

sfs-nas01.cn-north-4b.myhuaweicloud.com:/share-483b0b7b 10P 0 10P 0% /var/docs

#可以看到最后一条就是SFS的挂载

配置SFS自动挂载。

vim /etc/fstab

#在文件的最后新增要挂载的文件系统信息，配置样例如下：

sfs-nas01.cn-north-4b.myhuaweicloud.com:/share-483b0b7b /var/docs nfs vers=3,timeo=600,nolock 0 0

#单击“Esc”，并输入:wq，按回车键保存文件并退出。完成上述配置后，当云服务器重启时，系统会从/etc/fstab文件中读取挂载信息，完成文件系统的自动挂载。

cat /etc/fstab #查看修改后的fstab文件内容。

### 导入文件

在ECS远程登录控制台中，输入如下命令启动系统。

systemctl stop tomcat #停止Tomcat服务，释放8080端口

cd /opt/docs-pgsql/docs-web #进入到指定目录

mvn jetty:run #使用Jetty启动Teedy服务

浏览器输入 http://ecs-filesys01的EIP:8080/docs-web/src打开文件管理系统登录界面，输入用户名admin和密码admin登录文件管理系统。

点击 添加文件 ，在弹出的文件选择窗口中，进入本地文件目录，按Ctrl+A组合键选择所有的文件，然后点击 打开 ，上传所有的文件。（建议上传100MB以上）

完成上传之后，返回SFS弹性文件服务页面，可以发现sfs-filesys的“已用容量”发生变化，说明SFS接入成功。

### 制作ECS镜像

点击ecs-filesys01-kunpeng后面的更多 --> 开机， 完成后点击 更多 --> 镜像/磁盘 --> 创建镜像 ，打开镜像创建页面。

配置镜像参数，然后点击 立即创建 ，在资源详情页勾选 我已阅读并同意《镜像制作承诺书》和《华为镜像免责声明》 ，然后点击 提交申请 ，完成镜像的创建。

点击完成后，系统会自动跳转到镜像服务控制台的私有镜像页签，可以看到一个正在进行的申请。

等待一段时间后，会看到镜像创建进度。等待镜像创建完成，本步骤操作完成。

### 配置ELB

点击 服务列表 --> 网络 --> 虚拟私有云VPC ，进入VPC控制台。

点击左侧导航栏的 弹性公网IP和带宽 --> 弹性公网IP ，进入弹性公网IP控制台，点击当前的弹性公网IP后面的 解绑 ，在弹出的提示框中点击 是 ，将弹性IP与ECS解绑。

点击 服务列表 --> 网络 --> 弹性负载均衡ELB ，进入ELB控制台。

点击右上角的 购买弹性负载均衡 ，若有弹窗提示选择负载均衡类型，直接关闭即可。

配置完成后，点击右下角的 立即购买 ，在详情页签中点击右下角的 提交 ，完成ELB的购买。

在ELB的控制台中，点击刚刚购买的ELB后面的 点我开始配置 。

在ELB配置页的监听器页签中，点击 添加监听器 。

在弹出的对话框中设置名称为listener-filesys-yourname ，设置前端协议/端口为TCP 8080，然后点击 下一步 。

配置后端服务器组参数。

配置完成后，点击 完成 ，耐心等待ELB创建。创建完成后，在对话框中点击 确定。

点击 后端服务器组 ，进入后端服务器组页签，点击 添加 ，添加服务器信息。

在添加后端服务器窗口中，勾选已有的鲲鹏服务器ecs-filesys01-kunpeng-yourname，然后点击 下一步 。

在批量添加端口中输入8080，然后点击 完成 。系统会自动回到后端服务器组页面。

等待一段时间后，可以看到后端服务器的健康检查结果是 正常 ，在浏览器中输入 http://EIP:8080/docs-web ，可以打开文件管理系统的web界面。

### 配置AS

点击 服务列表 --> 计算 --> 弹性伸缩AS ，进入AS控制台。

点击 创建伸缩配置 ，配置相关参数，配置完成后，点击 立即创建 。

创建完成后，返回弹性伸缩实例控制台，可以在伸缩配置页签中看到已创建的弹性伸缩配置。

点击 弹性伸缩组 ，在最右边点击更多 -> 更换伸缩配置。

选择伸缩配置as-config-kunpeng，点击确定，显示更换伸缩配置成功。

点击之前创建的弹性伸缩组后面的 查看伸缩策略 ，进入伸缩策略配置页。

点击 立即执行 ，在对话框中选择是。

### 通过Dockerfile构建系统镜像

若您安装过docker，需要先删掉，之后再安装依赖:。

yum remove docker docker-common docker-selinux docker-engine

yum install -y device-mapper-persistent-data lvm2

下载repo文件。

wget -O /etc/yum.repos.d/docker-ce.repo https://repo.huaweicloud.com/docker-ce/linux/centos/docker-ce.repo

软件仓库地址替换为以下。

sed -i 's+download.docker.com+repo.huaweicloud.com/docker-ce+' /etc/yum.repos.d/docker-ce.repo

更新索引文件并安装Docker。

yum makecache

yum install -y docker-ce --nobest

启动Docker 后台服务。

systemctl start docker

测试运行hello-world。

docker run hello-world

由于本地没有hello-world这个镜像，所以会下载一个hello-world的镜像，并在容器内运行。

查看下载的hello-world镜像。

docker images

到此步骤，说明docker下载并运行成功。

进入目录，创建Dockerfile。

vim Dockerfile

按"i"进入编辑模式，输入如下内容到Dockerfile中。完成后点击“Esc”键，然后输入“:wq”后按回车键，保存退出文档

FROM arm64v8/adoptopenjdk:8u252-b09-jre-hotspot

MAINTAINER kunpeng

ADD docs-web.war docs-web.war

EXPOSE 8080

ENTRYPOINT ["java","-jar","docs-web.war"]

配置镜像加速器，通过以下操作修改daemon配置文件“/etc/docker/daemon.json”来使用加速器。

mkdir -p /etc/docker

tee /etc/docker/daemon.json <<-'EOF'

{

"registry-mirrors": ["https://0961a4605080f5660f12c014b740c160.mirror.swr.myhuaweicloud.com"]

}

EOF

systemctl daemon-reload

systemctl restart docker

通过Dockerfile创建系统镜像，标签为1.0 。

查看创建的系统镜像。

### 镜像上传至华为镜像服务SWR

登录华为云官网，选择“产品 -> 基础服务 -> 容器服务 -> 容器镜像服务 SWR”，然后点击立即使用。

点击右上方“创建组织”。

输入自定义的组织名称，点击“确定”并确认。

进入容器镜像服务页面，点击“我的镜像 -> 客户端上传”。

页面会提出如下提示，点击“生成临时docker login指令”。

将docker login指令复制到ECS下的docker环境中。显示login Succeeded，说明登录成功。

对要上传的镜像进行命名打标签，命令如下：

docker tag [{镜像名称}:{版本名称}] swr.cn-north-4.myhuaweicloud.com/{组织名称}/{镜像名称}:{版本名称}

其中镜像名称和版本名称为之前设置的，组织名称为第3步所创建的。

docker tag … swr.cn-north-4.myhuaweicloud.com/{组织名称}/…

将打完标签的镜像上传。

docker push swr.cn-north-4.myhuaweicloud.com/{组织名称}/…

返回容器镜像服务页面，点击“我的镜像”，可以看到镜像已经上传成功。

### CCE鲲鹏集群创建

分别点击“产品 -> 基础服务 -> 云容器引擎CCE”。

在弹出的CCE界面中，单击“立即使用”并同意授权。

单击左上角区域下拉按钮，选择“华为-北京四”区域。分别单击“资源管理 -> 集群管理 -> 鲲鹏集群 -> 购买”。

单击"下一步：安装插件"，插件选择默认即可。

单击“下一步：配置确认”，勾选“我已知晓上述限制”，单击“提交”，完成资源的购买和初始化。

资源创建中，集群创建需要6-10分钟。

单击“返回集群管理”，等待集群的状态为正常

### CCE部署文件系统

返回云容器引擎页面，分别单击“工作负载 -> 有状态负载（StatefulSet） -> 创建有状态工作负载”。

设置工作负载基本信息，点击“下一步：容器设置”。

选择“添加容器”，点击“我的镜像”，然后选择之前上传至的镜像，点击“确定”。

默认参数配置设置镜像的版本信息、容器名称、容器规格。 单击“下一步：工作负载访问设置”。填写端口名称，容器端口。设置容器端口名称为：port , 端口为：8080

点击“添加服务”，选择参数，点击“确定”。

点击“下一步：高级设置”。

高级设置策略保持默认，单击“创建”。

单击“查看工作负载详情”。

待实例执行状态为安装成功后，单击“访问方式”，复制访问地址中的弹性公网IP。

通过弹性公网IP加8080端口访问文件系统。