# 安装软件

Opensips安装

Openxcap安装

Openxcap Client安装

# Xcap数据表

用户表subscriber

|  |  |
| --- | --- |
| **字段** | **类型** |
| id | int(10) |
| username | char(64) |
| domain | char(64) |
| password | char(25) |
| email\_address | char(64) |
| ha1 | char(64) |
| ha1b | char(64) |
| rpid | char(64) |

xcap数据表xcap

|  |  |
| --- | --- |
| **字段** | **类型** |
| id | int(10) |
| username | char(64) |
| domain | char(64) |
| doc | blob |
| doc\_typ | int(11) |
| etag | char(64) |
| source | int(11) |
| doc\_url | char(128) |
| port | int(11) |
|  |  |

# 配置文件

opensip配置文件: /usr/local/etc/opensips/opensips.cfg

openxcap配置文件: /etc/openxcap/config.ini

# 创建用户

## root登录

密码slieer

## 生成创建用户SQL

./usr/share/doc/openxcap/add-openxcap-user.py username domain password

Domain value：[www.borqs.com](http://www.borqs.com)

生成SQL 语句。

## 打开opensips数据库

mysql -uopensips –popensipsrw

use opensips

执行所生成的SQL语句

## 配置openxcap client

创建~/.xcapclient.ini

# 操作数据文件

~/rls.xml

~/userlist.xml

~/xcap/\*.xml

# 启动openxcap

service mysql start

/usr/local/sbin/opensipsctl start

/etc/init.d/openxcap start

# Xcap操作

## Get Xcap-caps MetaData

执行命令:

root@bogon:~# xcapclient --app xcap-caps get

输出xcap-caps支持命名空间和AUID

输出数据：

get http://www.borqs.com/xcap-root/xcap-caps/global/index

etag: "7b8d20bdec825e3f96662a77b9b969b8"

content-type: application/xcap-caps+xml

content-length: 1209

<?xml version='1.0' encoding='UTF-8'?>

<xcap-caps xmlns="urn:ietf:params:xml:ns:xcap-caps">

<auids>

<auid>org.openxcap.watchers</auid>

<auid>org.openmobilealliance.pres-rules</auid>

<auid>rls-services</auid>

<auid>resource-lists</auid>

<auid>xcap-caps</auid>

<auid>org.openxcap.dialog-rules</auid>

<auid>test-app</auid>

<auid>oma\_status-icon</auid>

<auid>pidf-manipulation</auid>

<auid>pres-rules</auid>

<auid>org.openmobilealliance.xcap-directory</auid>

</auids>

<extensions/>

<namespaces>

<namespace>http://openxcap.org/ns/watchers</namespace>

<namespace>urn:ietf:params:xml:ns:pres-rules</namespace>

<namespace>urn:ietf:params:xml:ns:rls-services</namespace>

<namespace>urn:ietf:params:xml:ns:resource-lists</namespace>

<namespace>urn:ietf:params:xml:ns:xcap-caps</namespace>

<namespace>http://openxcap.org/ns/dialog-rules</namespace>

<namespace>test-app</namespace>

<namespace>urn:oma:xml:prs:pres-content</namespace>

<namespace>urn:ietf:params:xml:ns:pidf</namespace>

<namespace>urn:ietf:params:xml:ns:pres-rules</namespace>

<namespace>urn:oma:xml:xdm:xcap-directory</namespace>

</namespaces>

</xcap-caps>

## PUT User XML Data

执行命令：

root@bogon:~# xcapclient -i rls.xml put

输出:

put <http://www.borqs.com/xcap-root/rls-services/users/sip:alice@www.borqs.com/index>

201 Created

etag: "54c4993b025d646df65bd9720ed6aa4b"

content-type: application/rls-services+xml

## Get User XML By AUID

root@bogon:~# xcapclient --app rls-services get

get http://www.borqs.com/xcap-root/rls-services/users/sip:alice@www.borqs.com/index

etag: "54c4993b025d646df65bd9720ed6aa4b"

content-type: application/rls-services+xml

content-length: 151

<rls-services xmlns="urn:ietf:params:xml:ns:rls-services"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

</rls-services>

root@bogon:~#

## Delete User XML By AUID

root@bogon:~# xcapclient --app rls-services delete

delete http://www.borqs.com/xcap-root/rls-services/users/sip:alice@www.borqs.com/index

200 OK

content-type: application/rls-services+xml

## Put

root@bogon:~# xcapclient -i userlist.xml put

put http://www.borqs.com/xcap-root/resource-lists/users/sip:alice@www.borqs.com/index

201 Created

etag: "4b3751a1a9e1263469b10db7cb5588b7"

content-type: application/resource-lists+xml

## Get

root@bogon:~# xcapclient --app resource-lists get

get http://www.borqs.com/xcap-root/resource-lists/users/sip:alice@www.borqs.com/index

etag: "4b3751a1a9e1263469b10db7cb5588b7"

content-type: application/resource-lists+xml

content-length: 150

<resource-lists xmlns="urn:ietf:params:xml:ns:resource-lists"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

</resource-lists>

root@bogon:~# xcapclient -i useradd.xml put '/resource-lists/list[@name="jefry"]'

put http://www.borqs.com/xcap-root/resource-lists/users/sip:alice@www.borqs.com/index/~~/resource-lists/list[@name="jefry"]

201 Created

etag: "5a09a2635b353300f534323813c6ff95"

content-type: application/xcap-el+xml

# Openxcap源码分析

Xcapclient 命令执行

/usr/share/pyshared/xcaplib/xcapclient.py

Client.py get\_url 构造URL

Client.py 根据用户名，密码验证，发送请求

XcapServer

/usr/share/pyshared/xcap

/etc/init.d/openxcap/config

allow\_external\_references 置为yes

**resource.py 用于定义在服务端对文档和文档结点的操作**

enable\_publish\_xcapdiff 需要opensips

http://tools.ietf.org/html/draft-urpalainen-sip-xcap-diff-event-03

添加AppUsage

1. xcap\appusage 定义类，并继承ApplicationUsage
2. xcap\appusage\xml-schemas 定义schemas文件，可选
3. xcap\appusage\\_\_init\_\_.py 加入定义好的AppUsage

\_\_all\_\_, applications

# Twisted python非阻塞异步服务器网络编程

<http://www.ibm.com/developerworks/cn/linux/network/l-twist/part1/index.html>