



Using Kamailio/OpenSER To White Label VoIP Products.

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Established In 1996.

Leading data and voice wholesaler.

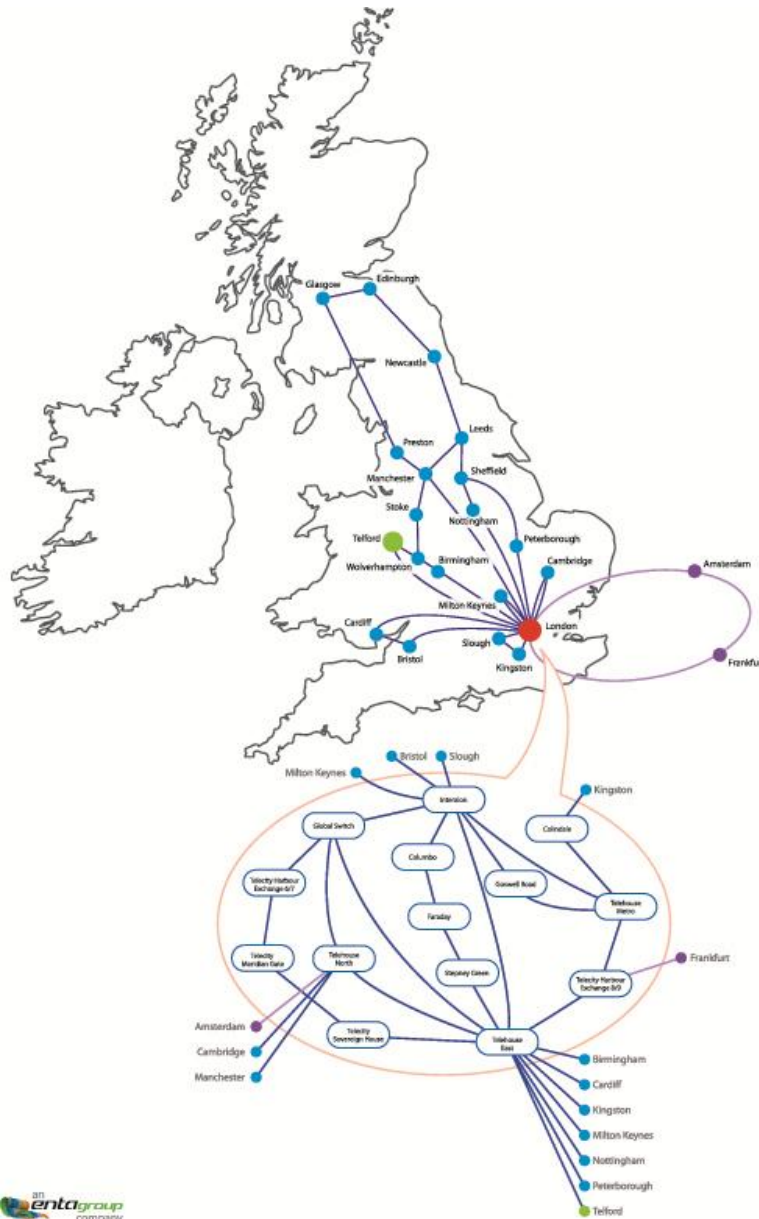
xDSL, leased lines and PWAN.

WLR,CPS and VoIP.

Only non BT company to take 21CN WBC.

Part of the Entagroup of companies.

Entanet's 21 CN Network.  
Runs at 10Gb/s in London.  
Between 10Gb/s and 1Gb/s elsewhere.



L2TP delivered broadband.  
Metro Ethernet.  
Leased lines and PWAN.  
Transit and peering.

## VoIP Products

VoIP Express – Prepay single SIP account

VoIP Enrich – Asterisk based hosted PBX platform

VoIP Easy Access – SIP trunking.

Only sold through partners

White-labelling a main sales driver

Our Partners like to run things as their own product even if they are reselling.

Includes web based control panels and signup procedures.

Also the billing (even if we are processing it on their behalf).

SIP URI could expose wholesaler.

Advantage to have host part of URI as Partners domain name.

## Approaches To Multi-Domain URI Hosting

### 1. Aliases in opener.cfg.

```
alias="proxy.entacall.com"  
alias="proxy.voipuserportal.co.uk"  
alias="sip.seriouslyvocal.co.uk"  
alias="sip.seriouslyinternet.com"
```

### Disadvantages to this approach

Have to restart server for every change.

Inefficient use of opener.cfg

## Approaches To Multi-Domain URI Hosting

### 2. Use Domain Module.

```
.....  
loadmodule "/usr/local/lib/openser/modules/mysql.so"  
loadmodule "/usr/local/lib/openser/modules/domain.so"  
.....  
.....  
modparam("usrloc|auth_db|domain", "db_url", "mysql://user:pass@localhost/openser")  
modparam("usrloc", "db_mode", 2)  
modparam("domain", "db_mode", 0)  
modparam("auth_db", "use_domain", 1)  
modparam("registrar", "use_domain", 1)  
modparam("usrloc", "use_domain", 1)
```

### Advantages to this approach

Realtime DB adds, changes and deletions.

No server restart

## White-labelling Approach to Hosted PBX

Asterisk used for media relay and PBX functions.

OpenSER used for registration and SIP routing.

Each customer instance has unique SIP URI host.

cust1.whitelabelvoip.tel

cust2.whitelabelvoip.tel

Multiple username support.

500@cust1.whitelabelvoip.tel

500@cust2.whitelabelvoip.tel



## White-labelling Approach to Hosted PBX

User details are stored in DB.

Adding new host domain is entry into domain table (domain required in subscriber).

Web based signup is easy (in theory).

Partners like approach especially if end user is self provisioning.

Individual server capable of many domain entries.

## Other Advantages To This Approach To White Labelling

Works equally well with aliases, good for SIP trunking products.

SIP URI can be used by Asterisk AGI to provide billing and other services.

Extra security through obscurity.

# Questions ?

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