#### Moving an Existing IP PBX to the Cloud

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#### pascom... who?





#### Nothing but forest - hopefully you can understand me ;-)



#### About **20 guys** proudly working on our software pbx - **mobydick** (most of the time)



### mobydick... what?

#### mobydick your software PBX on your own server





#### Client for Windows, Mac, Linux, Android and iPhone



## Moving to the Cloud Why?

#### Because our partners asked ;-)

#### Easy deployment for City Carriers and Hosting Companies



## Moving to the Cloud **1st Idea**



### Select only the **mobydick filet** cut & build a **new** multi-tenant cloud solution



#### Drawbacks

Patches, Individual Modules, 3rd Party Integration, Scripting, Security?

No more **individual** mobydick instances per **customer** 

### STARTED REFACTORING

# GOULDN'T STOP

A lot of refactoring work to do = expensive, dangerous



#### ...and most importantly - a sad whale



## Moving to the Cloud **2nd Idea**



#### start a virtual machine per customer



#### Drawbacks





#### Hard to manage, scale and secure



#### Waste of **resources**



### Moving to the Cloud What we actually did



#### Three Design Goals



### Everything should be hosted in containers

#### Easy to maintain and distribute!

#### Try to design ephemeral containers



### SIMPLE IS BEAUTIFUL.

Keep it simple and inexpensive (in terms of technology, hardware and license costs)



#### General Idea

Host A	SBC		mobydick	mobydick	
Host B	SBC	Clustered DB & Management	mobydick	mobydick	
Host C	SBC		mobydick	mobydick	

#### System only accessible trough SBC ephemeral Containers



#### Close up of the SBC



### Easy routing of requests via DNS names

Contact: <sip:user@customerA.isp.com>

Kamailio (sbc1)

#### Contact: <sip:user@sbc1;xmd=0b43782d21fa9....>

mobydick	mobydick	mobydick	
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#### Kamailio as ephemeral container - no location DB





#### Kamailio as security layer



### Advantage of single containers





#### mobydick NEW

mobydick OLD

### Enabled the update of individual customers by exchanging images



#### Patches, Individual Modules, 3rd Party Integration, Scripting, Security!

#### No problem, thanks to per **customer containers**



#### Why don't we use a **Docker**?! Because we already have a whale ;-)



#### Q&A pascom.net