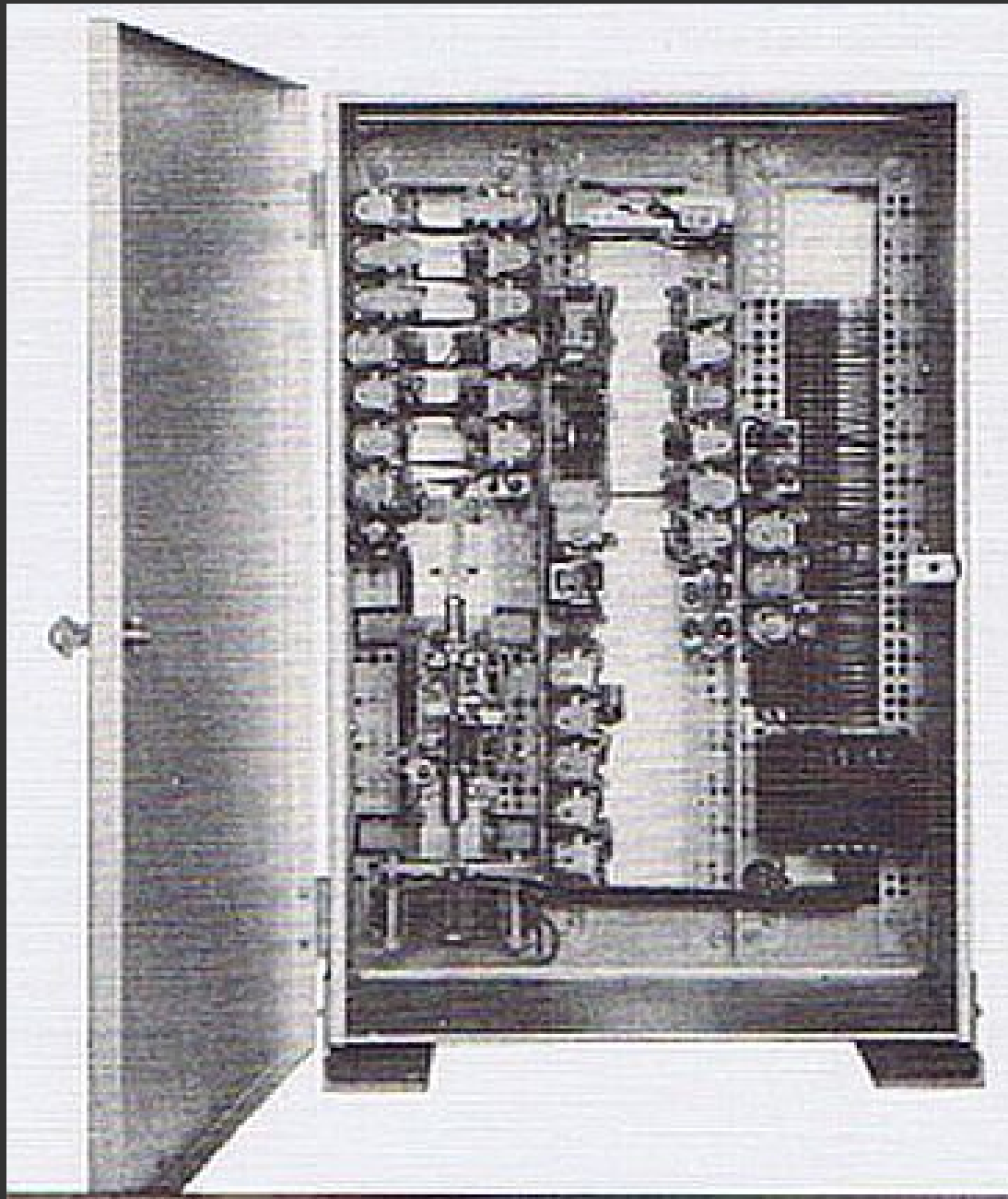


Fun With Asterisk Dialplans





<http://www.flickr.com/photos/9479603@N02/4114420413/>



fit-pc2.com

So, what's a dialplan?

A script to execute when a pattern is matched against what buttons have been pressed in a given context

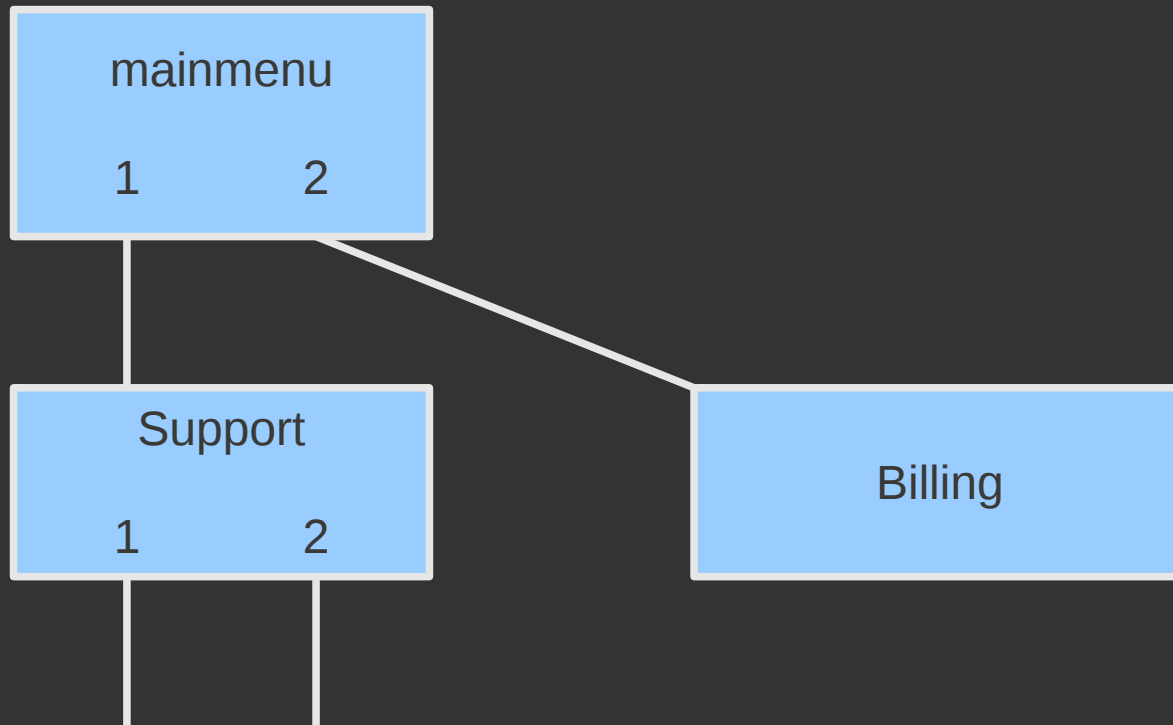
So, what's a dialplan?

ie., “Press 1 for technical support” - what happens when you press that “1”

And a context?

A context is like a small piece of that menu. “1” has different meanings in different contexts.

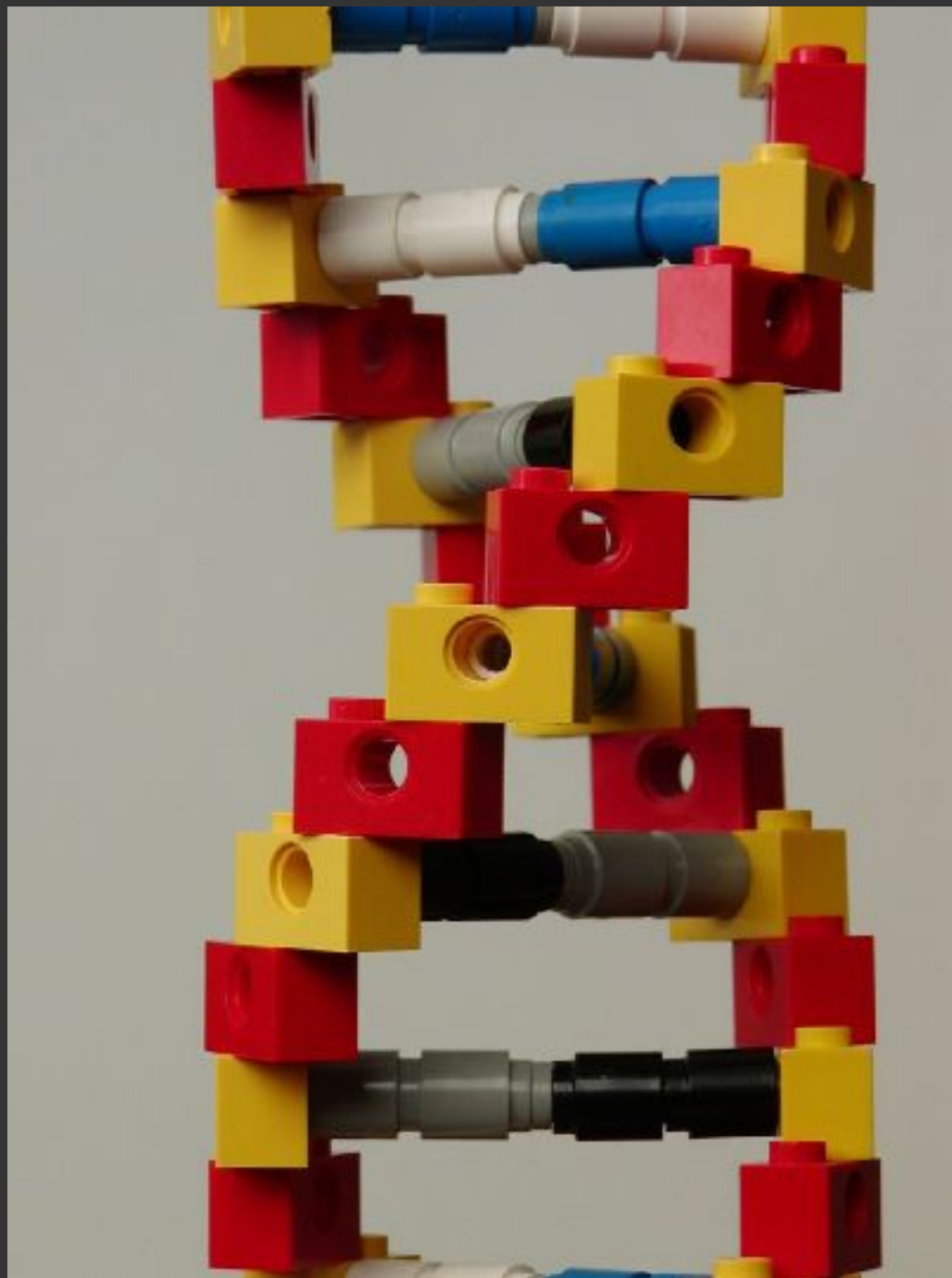
Overview



What can you do?



<http://www.flickr.com/photos/marc-lagneau/3811468954/>



<http://www.flickr.com/photos/mknowles/47457221/>



<http://www.flickr.com/photos/jurvetson/335626691/>

Dialplan syntax

[mainmenu]

exten => s,1,Playback(welcome)

exten => s,2,WaitForExten()

exten => 1,1,Goto(techsupp)

exten => 2,1,Goto(billing)

Notice the “s” starting extension?

Dialplan syntax

[mainmenu]

exten => s,1,Playback(welcome)

exten => s,2,WaitForExten()

exten => 1,1,Goto(techsupp)

exten => 2,1,Goto(billing)

[techsupp]

exten => s,1,Playback(dsl-or-dialup)

exten => s,2,WaitForExten()

exten => 1,1,Dial(SIP/alice)

exten => 2,1,Dial(SIP/bob)

[billing]

exten => s,1,Dial(SIP/ivan)

SIP/myext?

SIP module, extension “myext”

Outbound: SIP/08xxxxx@vspname

Next Brick: Sequences

[billing]

exten => s,1,Dial(SIP/ivan,30)

exten => s,2,Dial(SIP/charlie,30)

Next Brick: Dial's “&”

[billing]

exten => s,1,Dial(SIP/ivan&SIP/charlie,30)

Includes

[inbound]

include => not_here,17:00-09:00,*,*,*

include => mainmenu

[not_here]

exten => s,1,Playback(opening_hours)

Exten => s,n,Hangup()

CallerID handling

exten => s/0491570156,1,Set(CDR(accountcode)=ivan)

exten => s/0491570156,n,Goto(outbound,s,1)

Conditionals, Special Variables

```
exten => h,1,GotOlf("${DIALSTATUS}" = "ANSWER"?done)
exten => h,n,System(mail -s "Missed Call From
    ${CALLERID(num)}" mibus@mibus.org <
    /home/mibus/Documents/missed-call.msg)
exten => h,n(done),NoOp()
```

Patterns, Variables

[game]

exten => s,1,NoOp(GameSTART)

exten => s,n,Set(num1=\${RAND(1,8)});

exten => s,n,Set(maxnum2=\${9-\${num1}})

exten => s,n,Set(num2=\${RAND(1,\${maxnum2})})

exten => s,n,Set(total=\${\${num1}+\${num2}})

exten => s,n(quest),SayNumber(\${num1})

exten => s,n,Playback(letters/plus)

exten => s,n,SayNumber(\${num2})

exten => s,n,WaitExten

exten => _X,1,NoOp(GameHazDigits)

exten => _X,n,GotoIf(\${\${EXTEN} = \${total}}?GotItRight)

exten => _X,n(GotItWrong),NoOp(Awww)

exten => _X,n,Playback(privacy-incorrect)

exten => _X,n,Playback(pls-try-again)

exten => _X,n,Goto(s,quest)

exten => _X,n(GotItRight),NoOp(YAY)

exten => _X,n,Playback(yes-dear2)

exten => _X,n,Goto(s,1)

exten => t,1,Goto(s,quest)

exten => i,1,Goto(s,quest)

MySQL

exten => 23,1,Answer()

exten => 23,n,MYSQL(Connect connid localhost asterisk mypasswd asterisk)

exten => 23,n,GotoIf(["\${connid}" = ""]?nodb)

exten => 23,n,MYSQL(Query resultid \${connid} select floor(cost) from nodephone_cost)

exten => 23,n,MYSQL(Fetch fetchid \${resultid} dollars)

exten => 23,n,MYSQL(Clear \${resultid})

exten => 23,n,MYSQL(Query resultid \${connid} select round(100*(cost-floor(cost))) from nodephone_cost)

exten => 23,n,MYSQL(Fetch fetchid \${resultid} cents)

exten => 23,n,MYSQL(Clear \${resultid})

exten => 23,n,MYSQL(Disconnect \${connid})

exten => 23,n,Playback(astcc-account-balance-is)

exten => 23,n,SayNumber(\${dollars})

exten => 23,n,Playback(digits/dollars)

exten => 23,n,Playback(and)

exten => 23,n,SayNumber(\${cents})

exten => 23,n,Playback(cents)

exten => 23,n,Hangup()

exten => 23,n(nodb),NoOp(DoneDB)

exten => 23,n,Playback(weasels-eaten-phonesys)

exten => 23,n,Hangup()

MySQL

```
CREATE TABLE addressbook (  
    phone_number VARCHAR(40),  
    name VARCHAR(40),  
    PRIMARY KEY(phone_number)  
);  
INSERT INTO addressbook VALUES  
('08XXXXXXXXX1', 'Bob');  
INSERT INTO addressbook VALUES  
('08XXXXXXXXX2', 'Mary');
```

MySQL

exten => 99,1,NoOp(Inbound)

exten => 99,n,MYSQL(Connect connid localhost asterisk
mypassword asterisk)

exten => 99,n,GotoIf(["\${connid}" = ""]?nodb)

exten => 99,n,MYSQL(Query resultid \${connid} SELECT\
name\ FROM\ addressbook\ WHERE\ phone_number="\$\
{CALLERID(num)}"\ LIMIT\ 1)

exten => 99,n,MYSQL(Fetch fetchid \${resultid} name)

exten => 99,n,MYSQL(Clear \${resultid})

exten => 99,n,Set(CALLERID(name)=\${name})

exten => 99,n,MYSQL(Disconnect \${connid})

exten => 99,n(nodb),NoOp(DoneDB)

exten => 99,n,Dial(SIP/myphone,30,)

exten => 99,n,Congestion()

Outbound!

```
exten => _XX.,1,Dial(SIP/${EXTEN}@nodephone,,)
```


Outbound!

```
exten => 0855501234,1,Dial(SIP/0491570156@nodephone,,)
```

```
exten => 2154,1,Dial(SIP/alice)
```

```
exten => 2155,1,Dial(SIP/ivan)
```

```
exten => _XX.,1,Dial(SIP/${EXTEN}@nodephone,,)
```

Outbound!

```
exten => _04XXXXXXXX,1,Answer
exten => _04XXXXXXXX,n,Playback(this-call-will-cost)
exten => _04XXXXXXXX,n,Playback(digits/20)
exten => _04XXXXXXXX,n,Playback(digits/9)
exten => _04XXXXXXXX,n,Playback(cents-per-minute)
exten => _04XXXXXXXX,n,
    Set(LIMIT_WARNING_FILE=beep)
exten => _04XXXXXXXX,n,Dial(SIP/${EXTEN}@nodephone,,
    L(36000000:36000000:60000))
```

Instant Messaging

exten => _XX.,1,Ringing()

exten => _XX.,n,JABBERSend(asterisk,mibus@mibus.org,
Outgoing calling-card call to \${EXTEN})

exten => _XX.,n,Dial(SIP/\${EXTEN}@nodephone,,)

Scripted Calls

Channel: SIP/gigaset

MaxRetries: 60

RetryTime: 900

WaitTime: 30

Callerid: Call Rob Please <(049) 157-0156>

Context: rmibus_late

Extension: s

Priority: 1

[rmibus_late]

exten => s,1,Playback(vm-youhave)

exten => s,n,Playback(vm-message)

exten => s,n,Playback(custom/missy-call-rob-please)

exten => s,n,Hangup()



Asterisk!

Questions?

2010-06

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