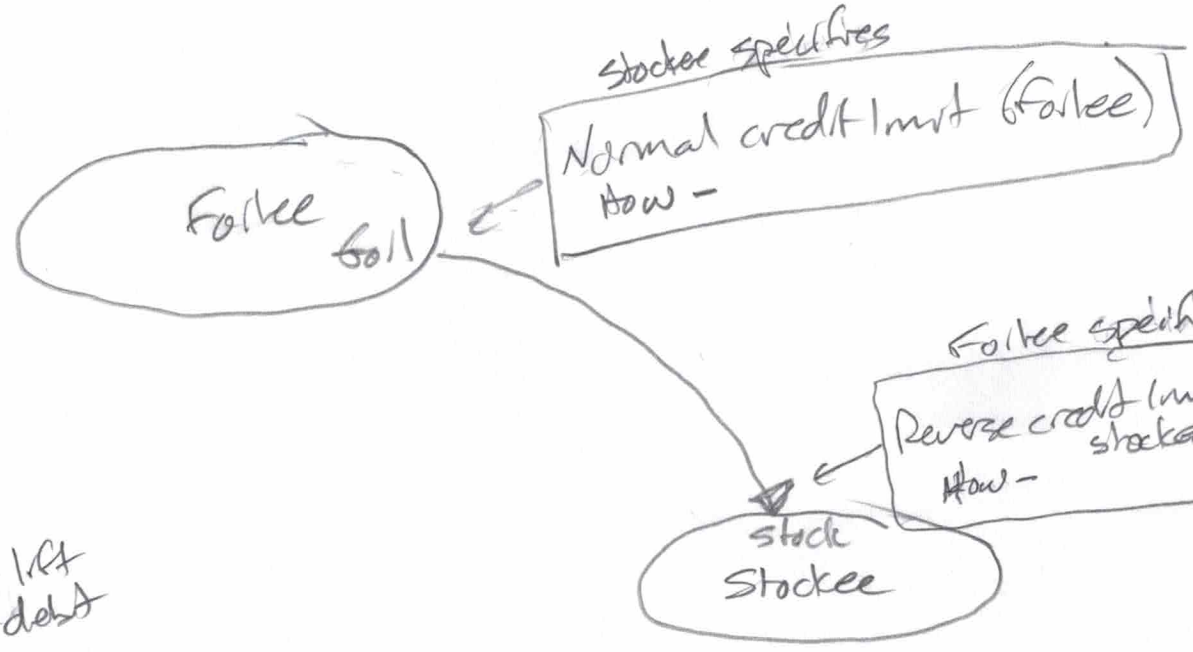
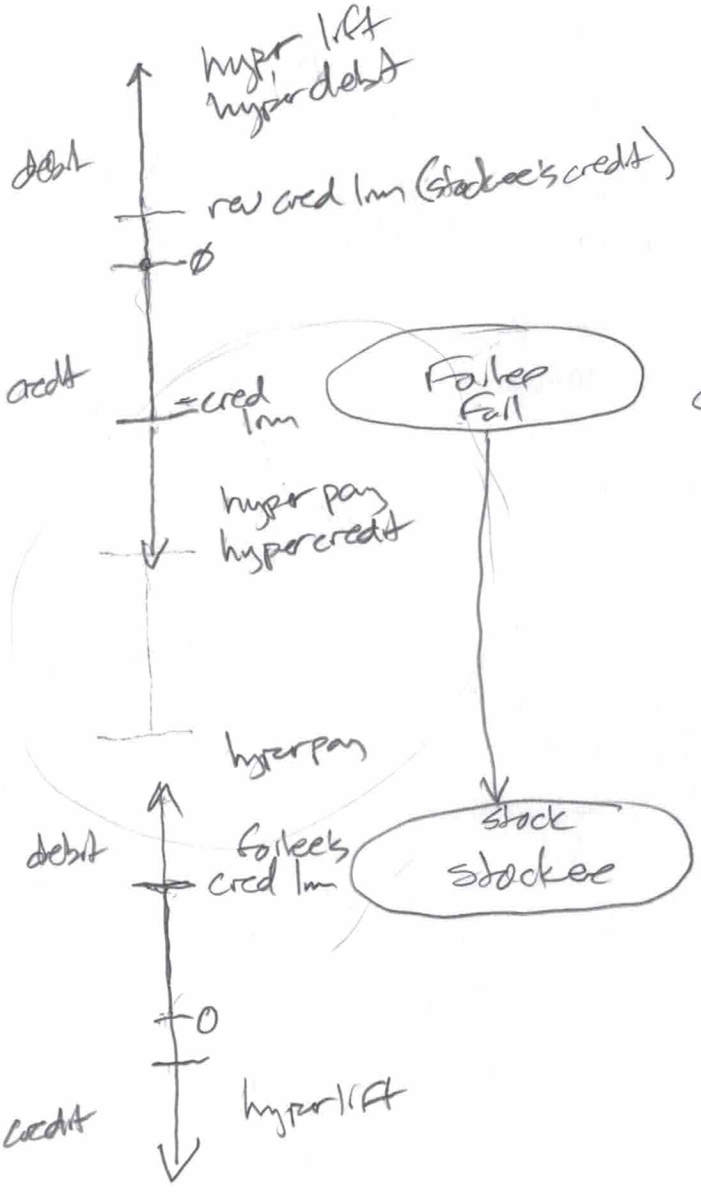
MyCHIPS

Jan 7, 2019





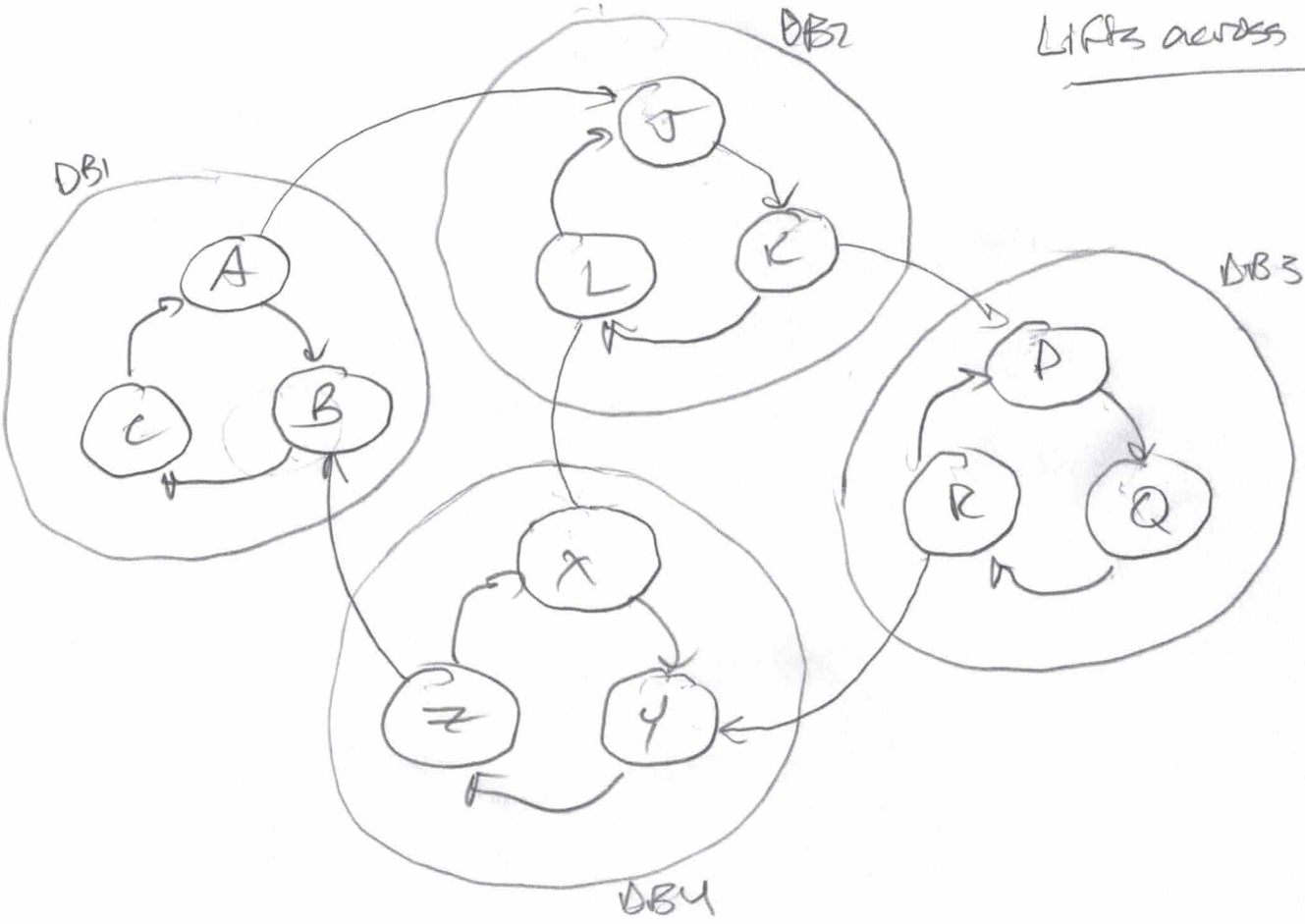
contract; How + : reverse pay
var ; How + ; hyper lifts
How - ; reverse lifts

contract: How + : reg pay
var : How + : reverse lifts
; How - ; hyper lifts

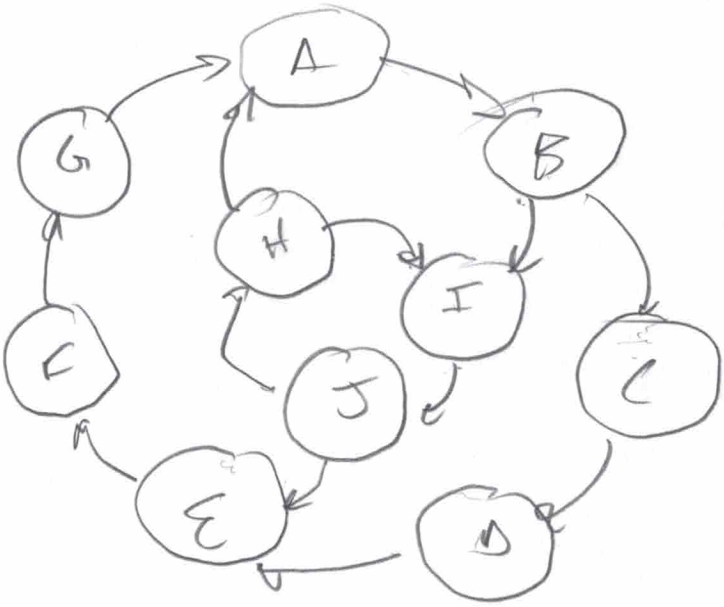
MyCoolDB

Jan 8, 2019

Lifts across databases



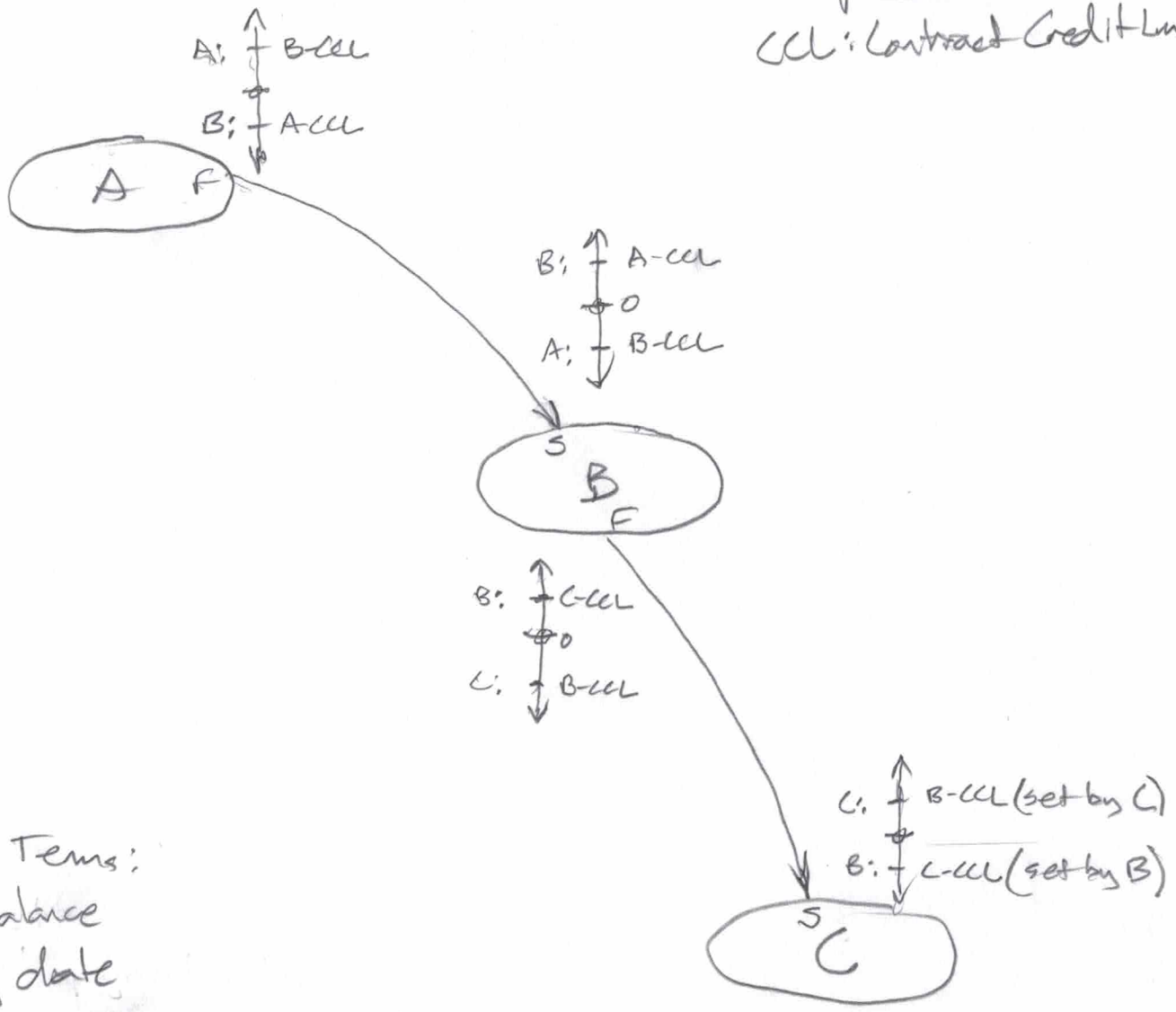
Multiple Lift Paths



MyCHIPS

Jan 8, 2019

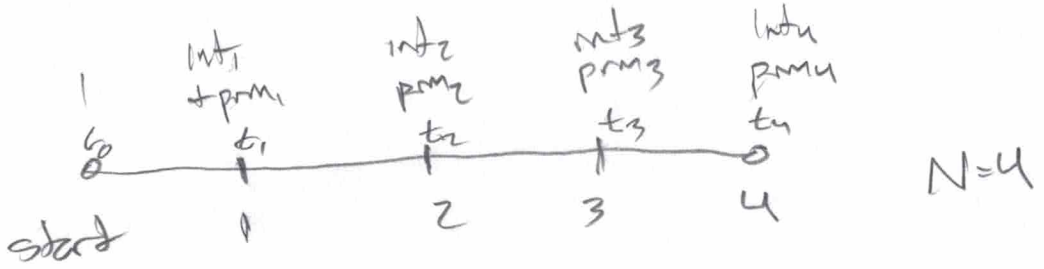
CCL: Contract Credit Line



Credit Terms:
- max balance
- ending date
- interest on remaining principal
- default interest?
- min principal pay rate
- max principal pay rate

Int : 10%/per = R

Bal : 100



loan amount $= \sum_{1}^{N} q_n = q_1 + q_2 + q_3 + q_4 = A$

$i_1 = R\Delta t A_0 \quad i_2 = R\Delta t A_1 \quad i_3 = R\Delta t A_2 \quad i_4 = R\Delta t A_3$

$i_1 = R(t_1 - t_0)A_0$

$i_n = R(t_n - t_{n-1})A_{n-1}$ $\quad q_n + i_n = p$ (payment)

$A_{n-1} = A_n + q_n$

$A_n = A_{n-1} - q_n$

$$P_T = \sum_{n=1}^{N} P_n = \sum_{n=1}^{N} q_n + i_n = \sum_{n=1}^{N} q_n + R(t_n - t_{n-1})A_{n-1}$$

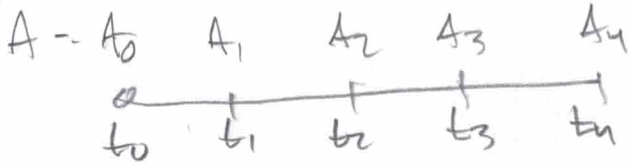
$$q_1 + R(t_1 - t_0)(A_1 + q_1) + q_2 + R(t_2 - t_1)(A_2 + q_2) + q_3 + R(t_3 - t_2)(A_3 + q_3) + q_4 + R(t_4 - t_3)(A_4 + q_4)$$

$$= \sum_{n=1}^{N} q_n + \sum_{n=1}^{N} R(t_n - t_{n-1})(A_n + q_n) - R\sum_{n=1}^{N} A_n t_n + q_n t_n - A_n t_{n-1} - q_n t_{n-1}$$

$$= \sum_{n=1}^{N} q_n + R\Delta t \sum_{n=1}^{N} A_n + R\Delta t \sum_{n=1}^{N} q_n \qquad R\Delta t \sum_{n=1}^{N} A_n = [R\Delta t - 1] \sum_{n=1}^{N} q_n$$

MyCMPS

Jan 8, 2019 (4)



$A_0 - A_1 = q_1$ $q_n = A_{n-1} - A_n$

$t_n - t_{n-1} = \Delta t$

P = payment
A = loan amount
A_n = principal balance

R = Int rate ~ 12%
I = monthly interest
$= \Delta t \cdot r A_n$

$$A = \sum_{n=1}^{N} q_n = \sum_{n=1}^{N} A_{n-1} - A_n \qquad (A_0 - A_1) + (A_1 - A_2) + (A_2 - A_3) + (A_3 - A_4)$$

$$= A_0 - A_4$$

$A_n = A_{n-1} - P + I_n$

$= I_n - P + A_{n-1}$

$A_1 = A_0 - [P - I_1]$

$A_1 = A_0 - P + I_1$ $A_4 =$

$A_n = A_{n-1} - q_n$

$A_4 = 0 = I_4 - P + I_3 - P + I_2 - P + I_1 - P + A_0$

$$A_0 = \sum_{n=1}^{N} q_n$$

$100 10% rate 4-1 year pmts

$P = L\left(\frac{1-r}{r - r^{n+1}}\right)$ Kahn Academy $= 31.55$

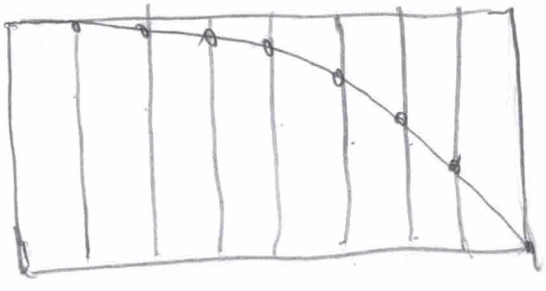
$r = \frac{1}{1+I} = \frac{1}{1.1} = r$

			100	A_0
31.55	10	-21.55	78.45	A_1
31.55	7.85	-23.70	54.75	A_2
31.55	5.47	-26.08	28.67	A_3
31.55	2.87	28.68	0	A_4

$A_n = A_{n-1} - P + A_{n-1} R \Delta t = A_{n-1}(1 + R\Delta t) - P$

$A_1 = A_0(1 + R\Delta t) - P$ $A_2 = -P + (1 + R\Delta t)\left[-P + A_0(1 + R\Delta t)\right]$

$$A = P \sum_{n=1}^{N} \frac{1}{(1 + \Delta t R)^n}$$



Remaining Balance:

$$FV = PV(1+r)^n - P\left[\frac{(1+r)^n - 1}{r}\right]$$

$100(1+.1)^3 - 31.55\left[\frac{1.1^3 - 1}{.1}\right] = 28.68$

finance formulas.net/
Remaining_Balance_Formula.html

Jan 9, 2019

MyGitHPS

referring to Jan 8, 2019 - ①:

Strings:

DB1: A-B-C

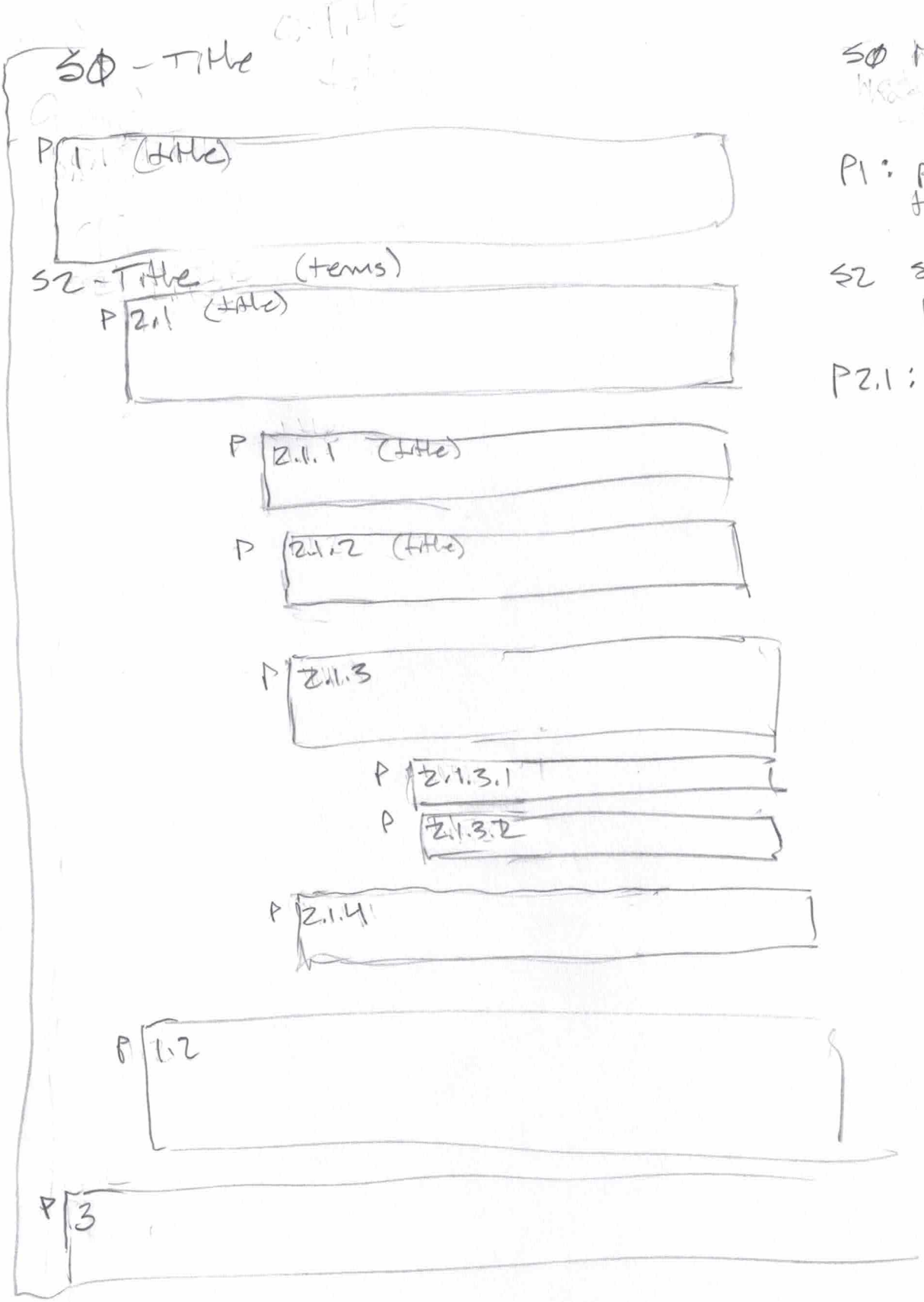
DB4-B-C-A-DB2

Multiple:

A-B-C-D-E-F-G-

A-B-I-J-H-A

I-J-H



S0 is a section : title
[P, S, P]

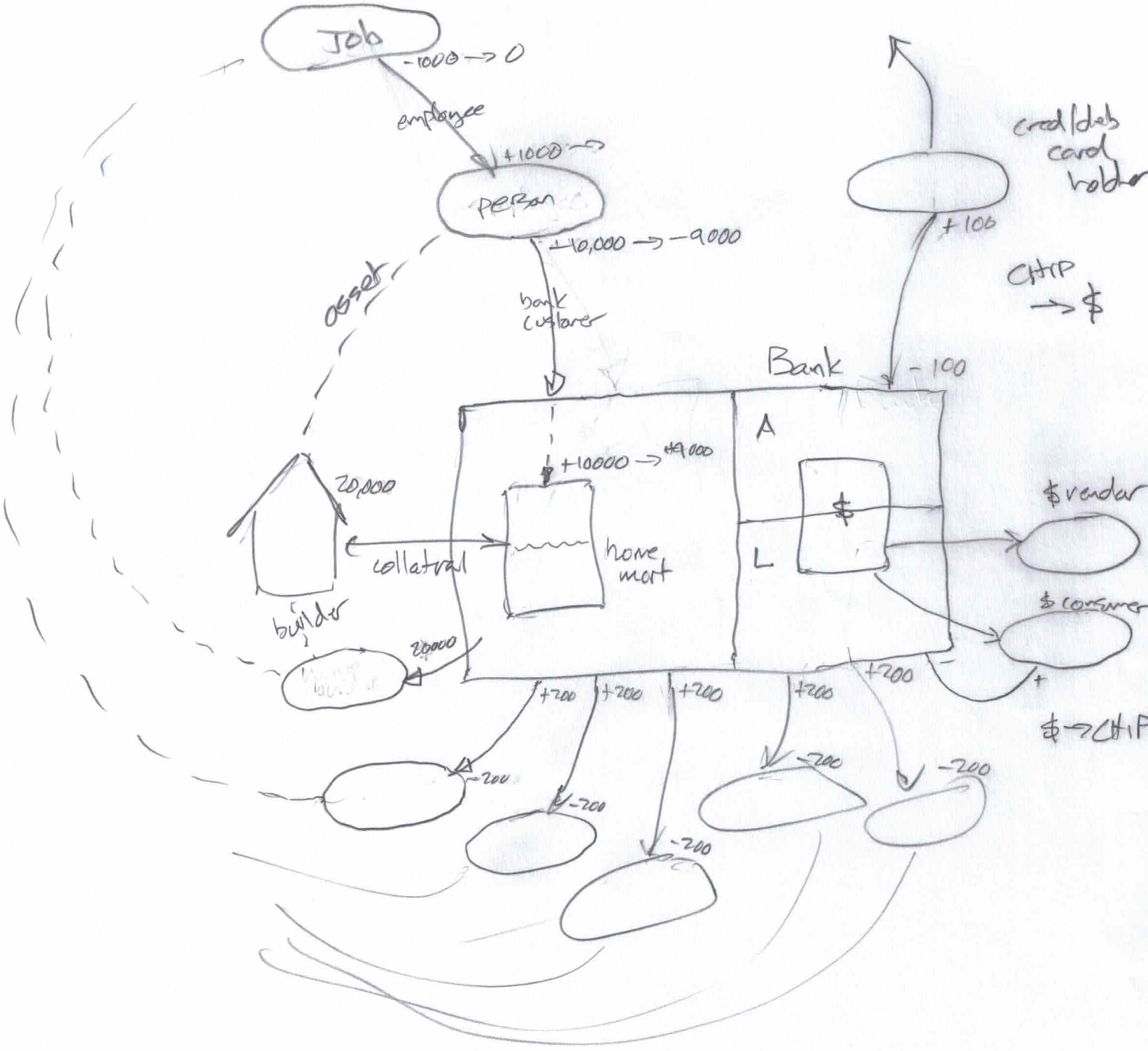
P1 : paragraph : title
text

S2 section : title
[P, P]

P2.1 : title

MyChips

Oct 30, 2019

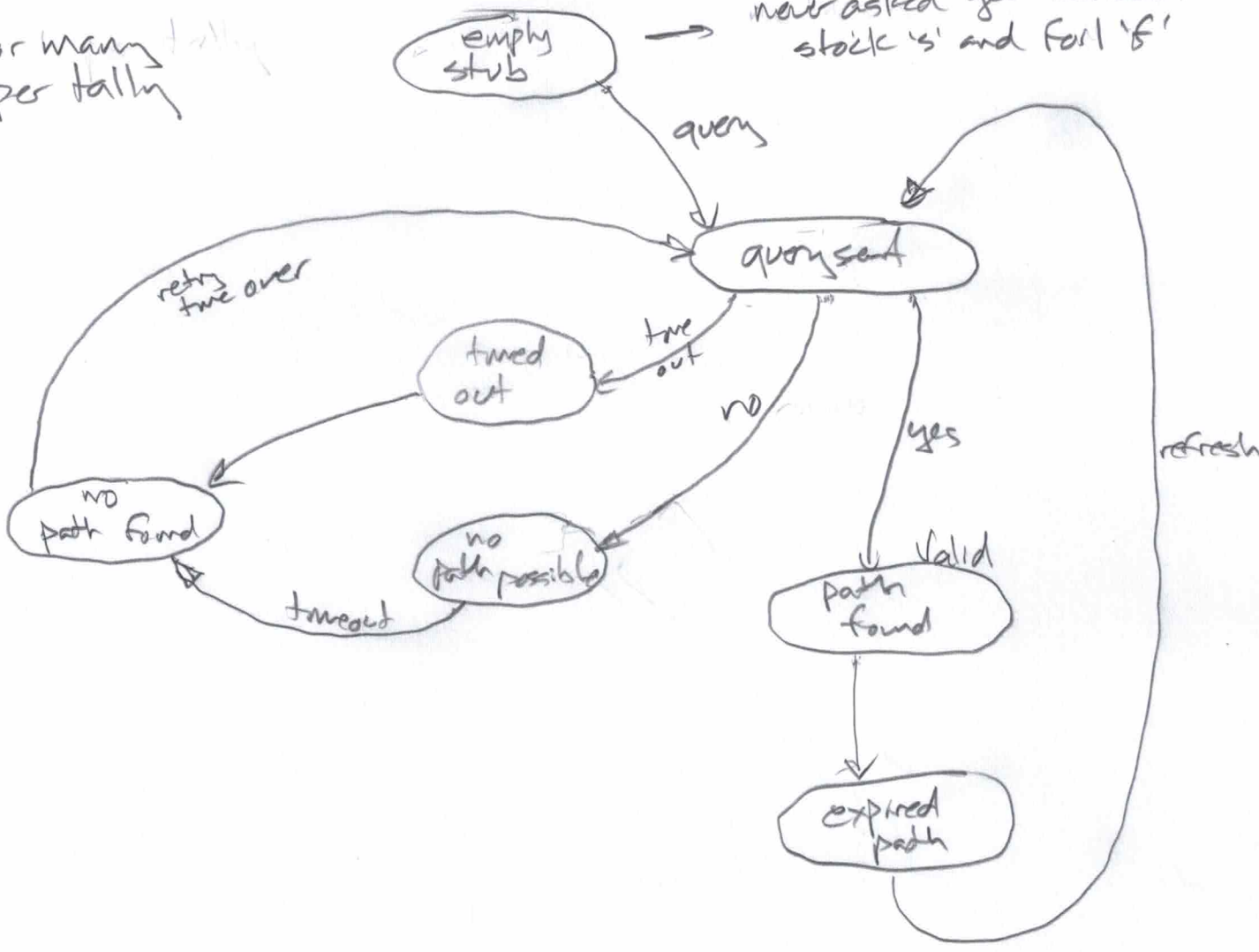


MyChips

Nov 5, 2019

Pathways

0 or many per tally



MyChips

Nov 8, 2019

Talkers

A

B

User: creates tally rec → userdraft

transmits ⟶

server: receives tally → peerProffer

notifies user

User: signs tally → accepted

server: ⟶ open

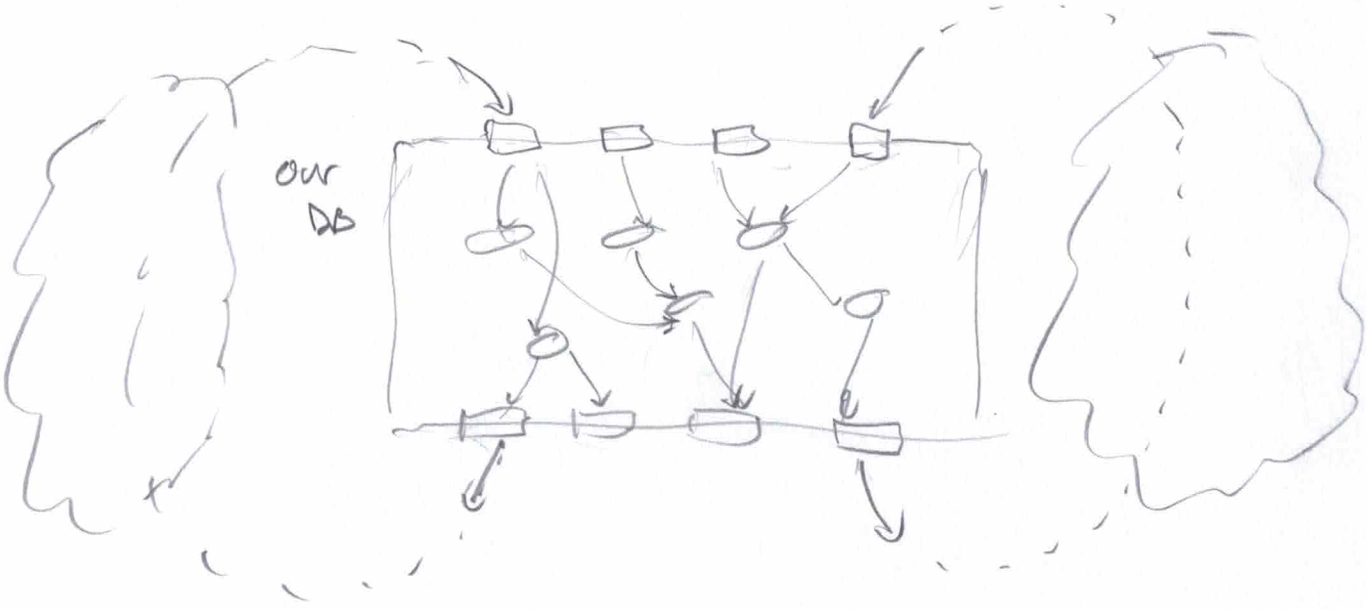
⟵ transmit

Server: receives

↳ open

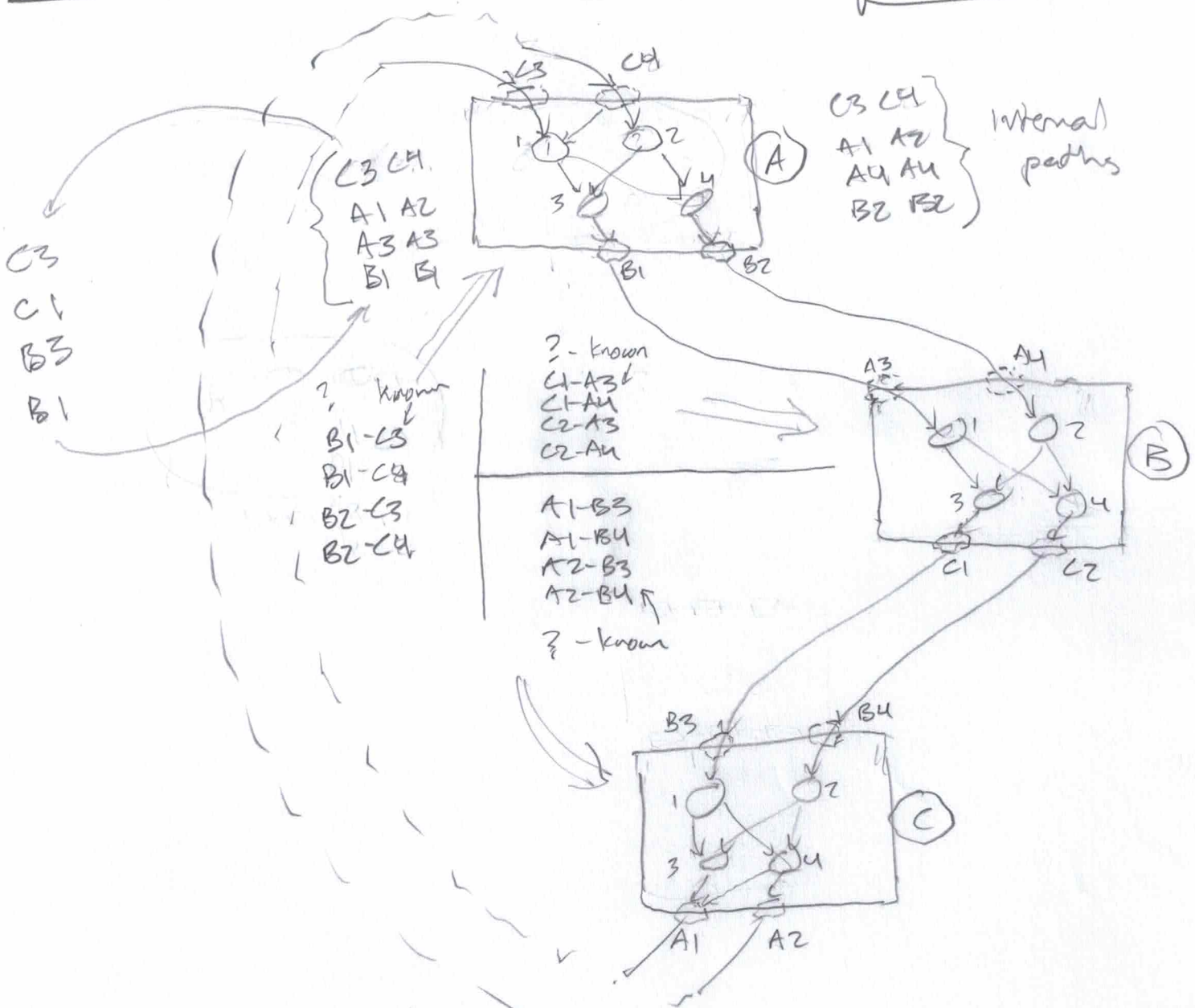
Path queries:

- User seeks lift path to unknown destination user
- peer server seeks path to unknown user
  - or known user
- this server seeks path completion from peer server



Pathways

Nov 9, 2019

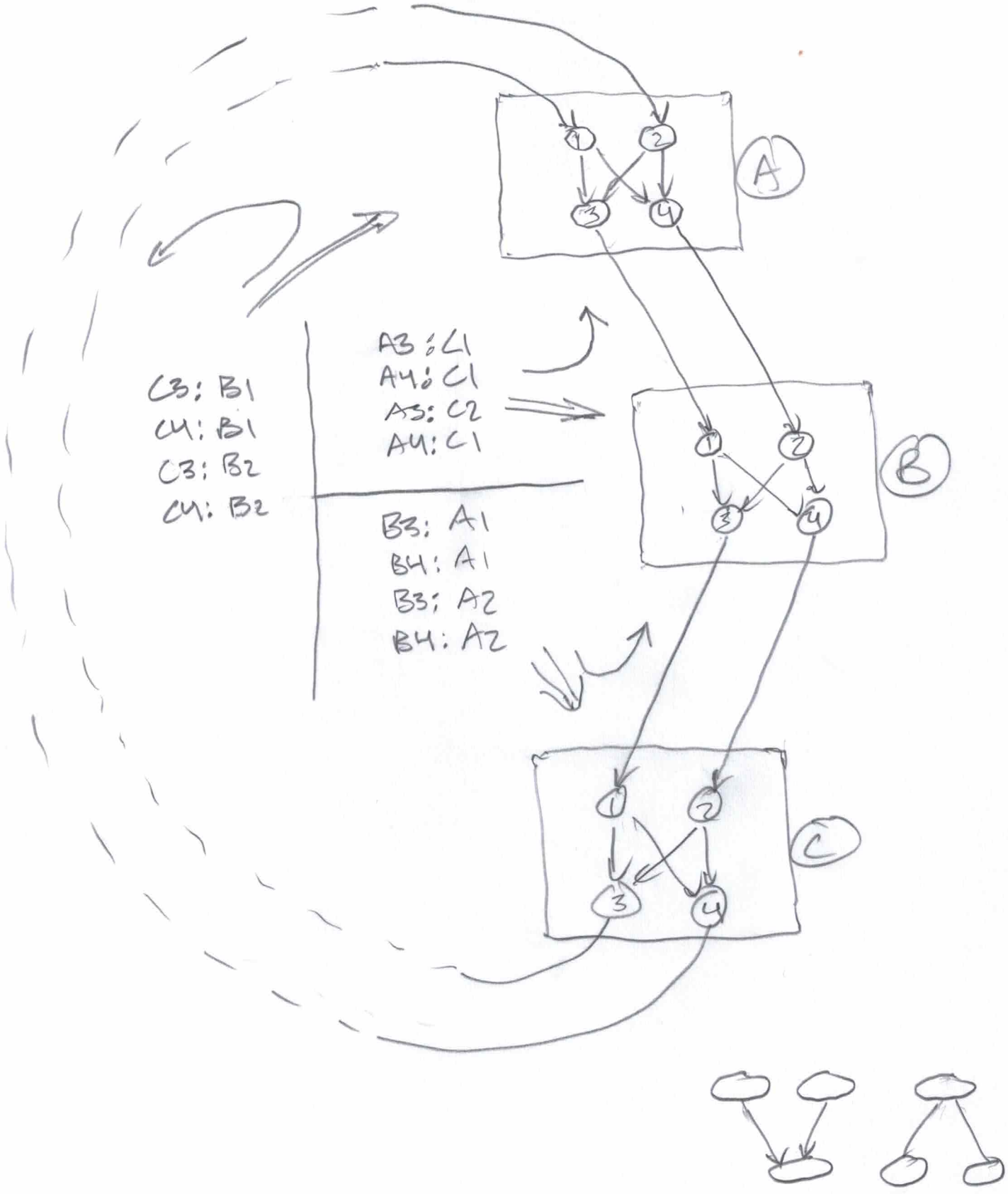


B A C

B ? A3→B1 : ⇐ B3→C1 ⇒ A3→B1 ! ⇐ B3→C1 ⇒ Yes! ⇒ B

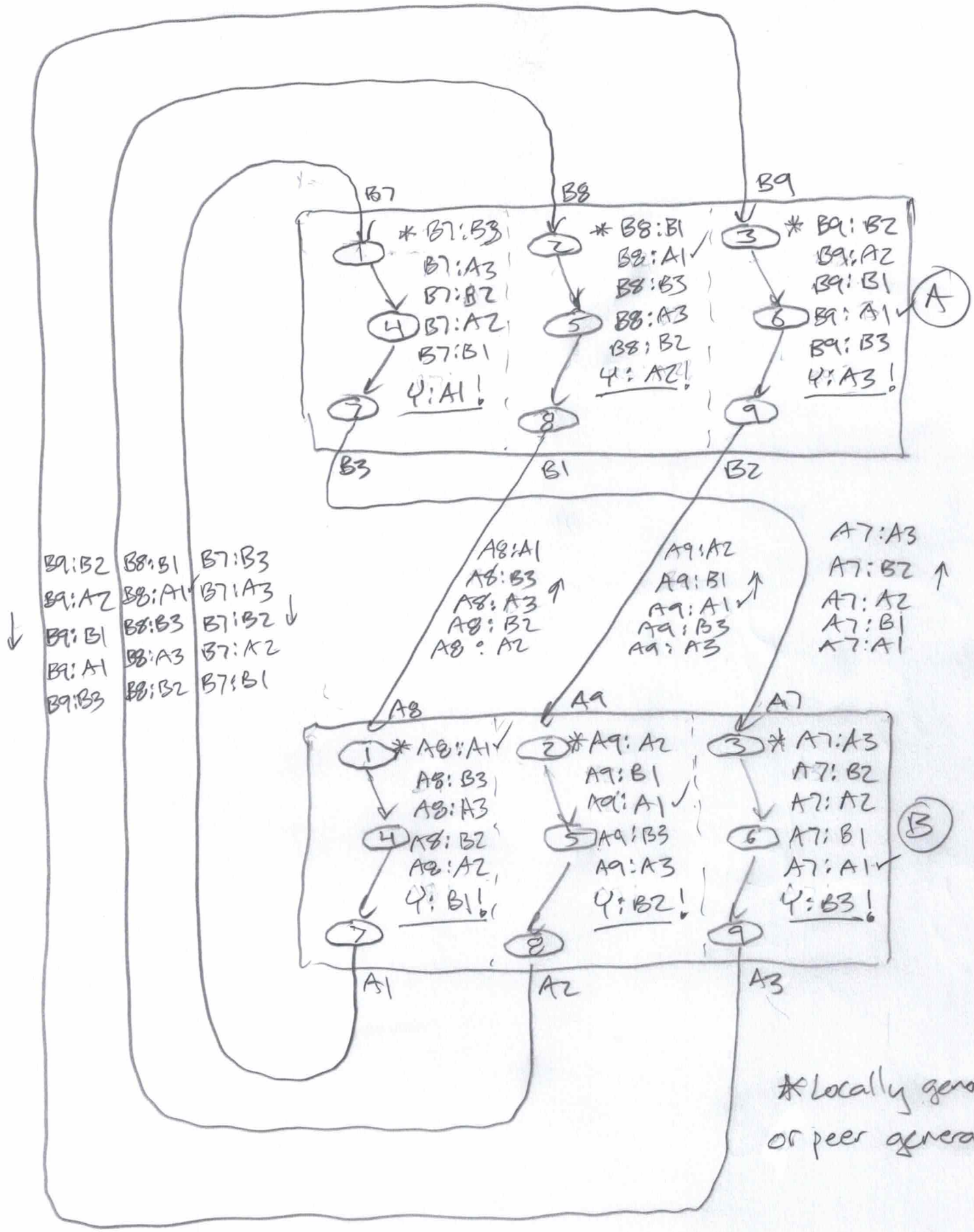
Routes

Nov 18, 2019



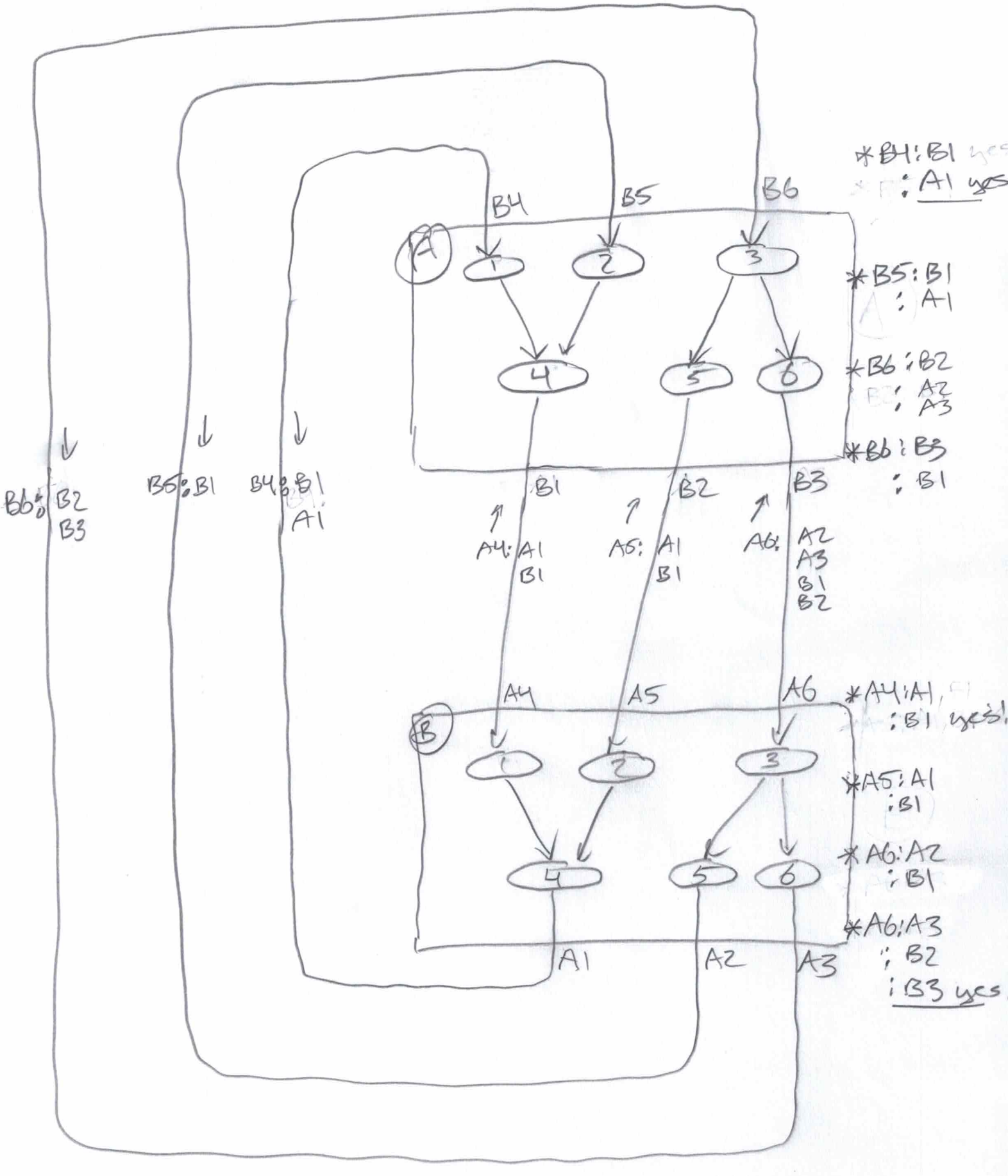
Routes

Nov 18, 2019 (2)



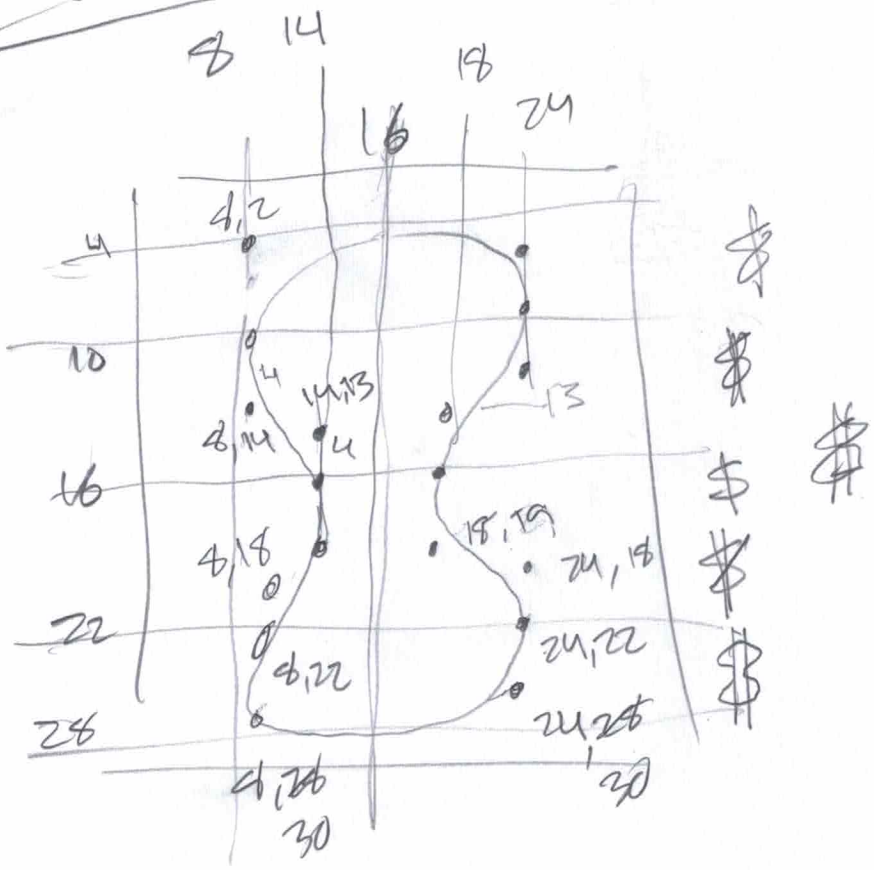
Routes

Nov 18, 2019 (3)



CHP Symbol

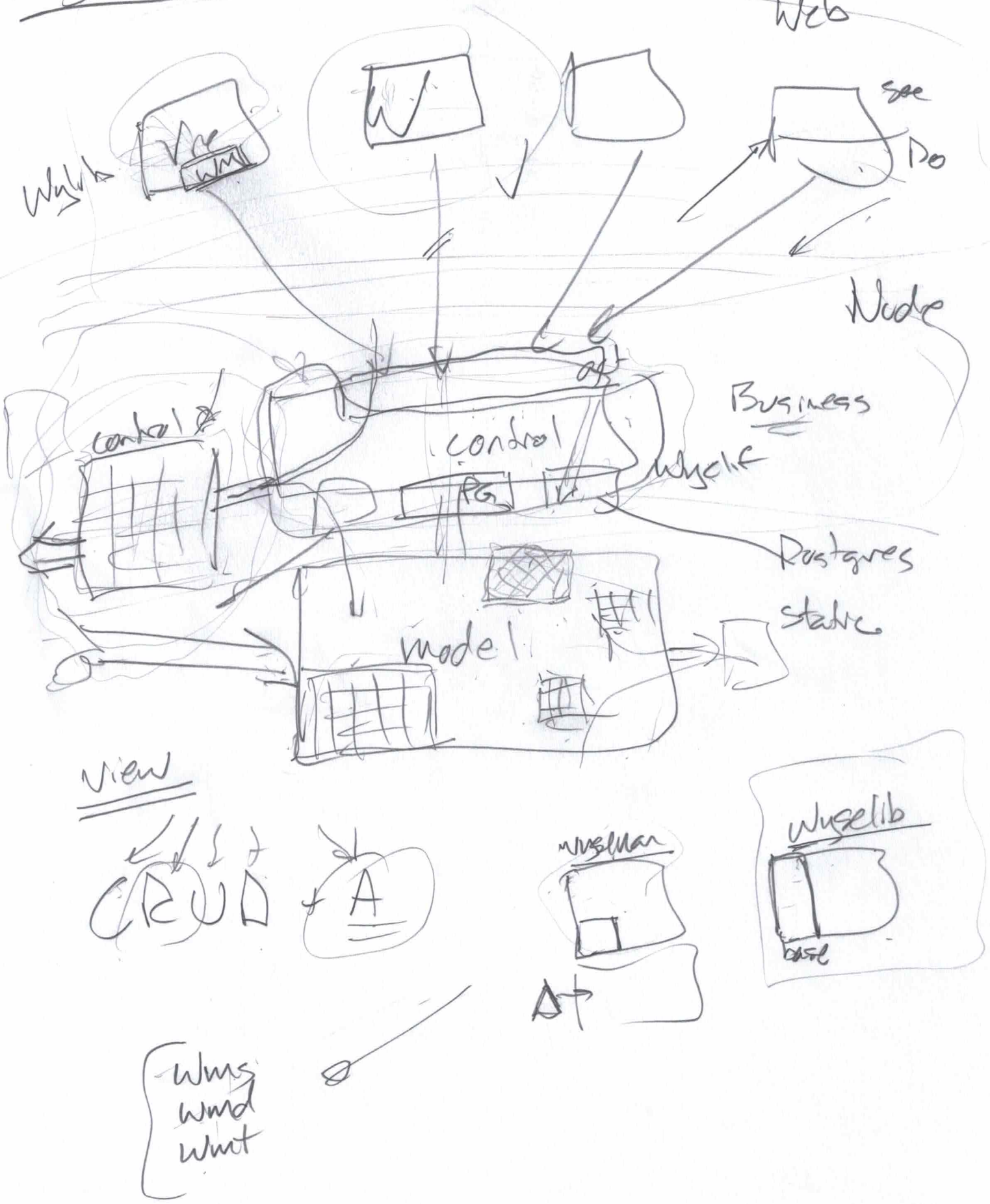
Dec 10, 2019



MyCMPS

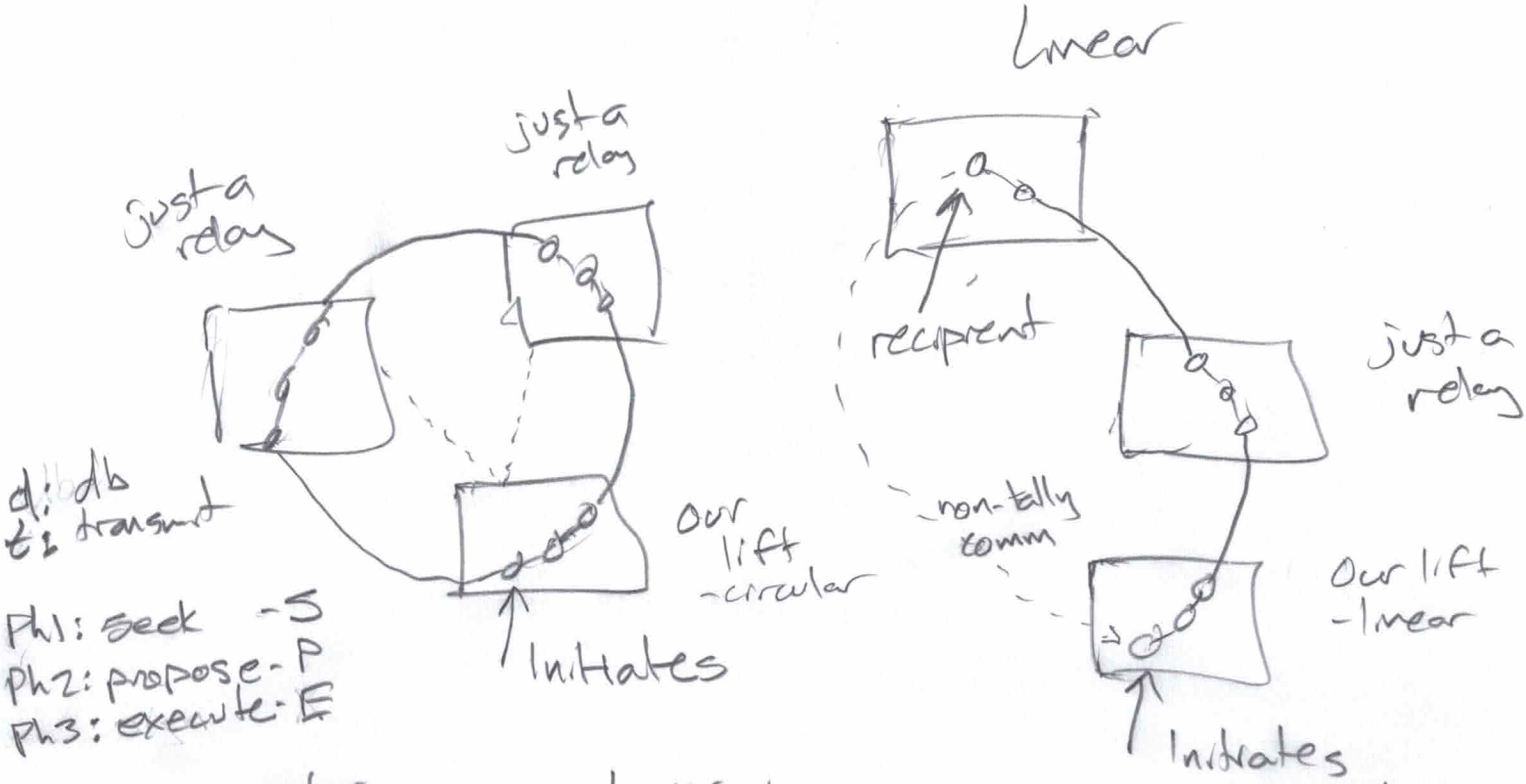
Dec 13, 201

Web



Lifts

Dec 14, 2019



Init-C (circular)	Init-L (Linear)	JAR	Recip (Linear)
	user initiates		
Sd → no conn (abort)	Sd → no conn → tell user		
St → rejected	St → rejected		
↳ timeout			
(got)	(got)		
Pd → no conn (retry?)	Pd → no conn		
Pt → rejected	Pt → rejected		
(got) (signed)			
Ed → no conn (retry)			
Et			
done			

Lifts

Dec 16, 2019

Stimulus:

- local: would like to lift a pathway
- local: linear payment - user initiated
- remote: I'm a relay
- remote: I have the target → linear / circular

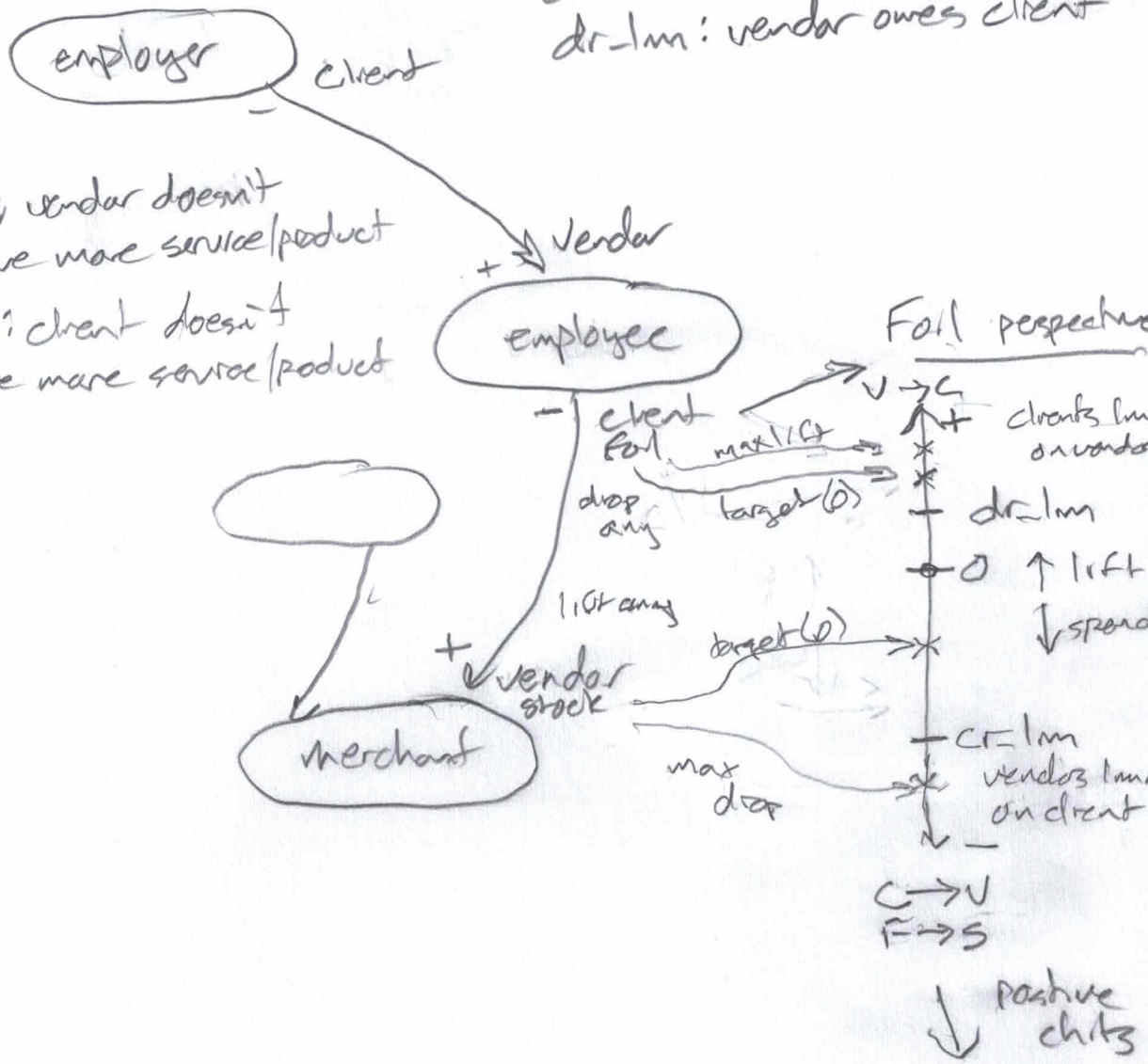
local: - I sign the transaction
I verify completion

remote: I wait for phases 1 & 2
after ph 2, I wait for timeout, then seek signature

Tally Parameters

Dec 18, 2019

cr_lm : client owes vendor
dr_lm : vendor owes client



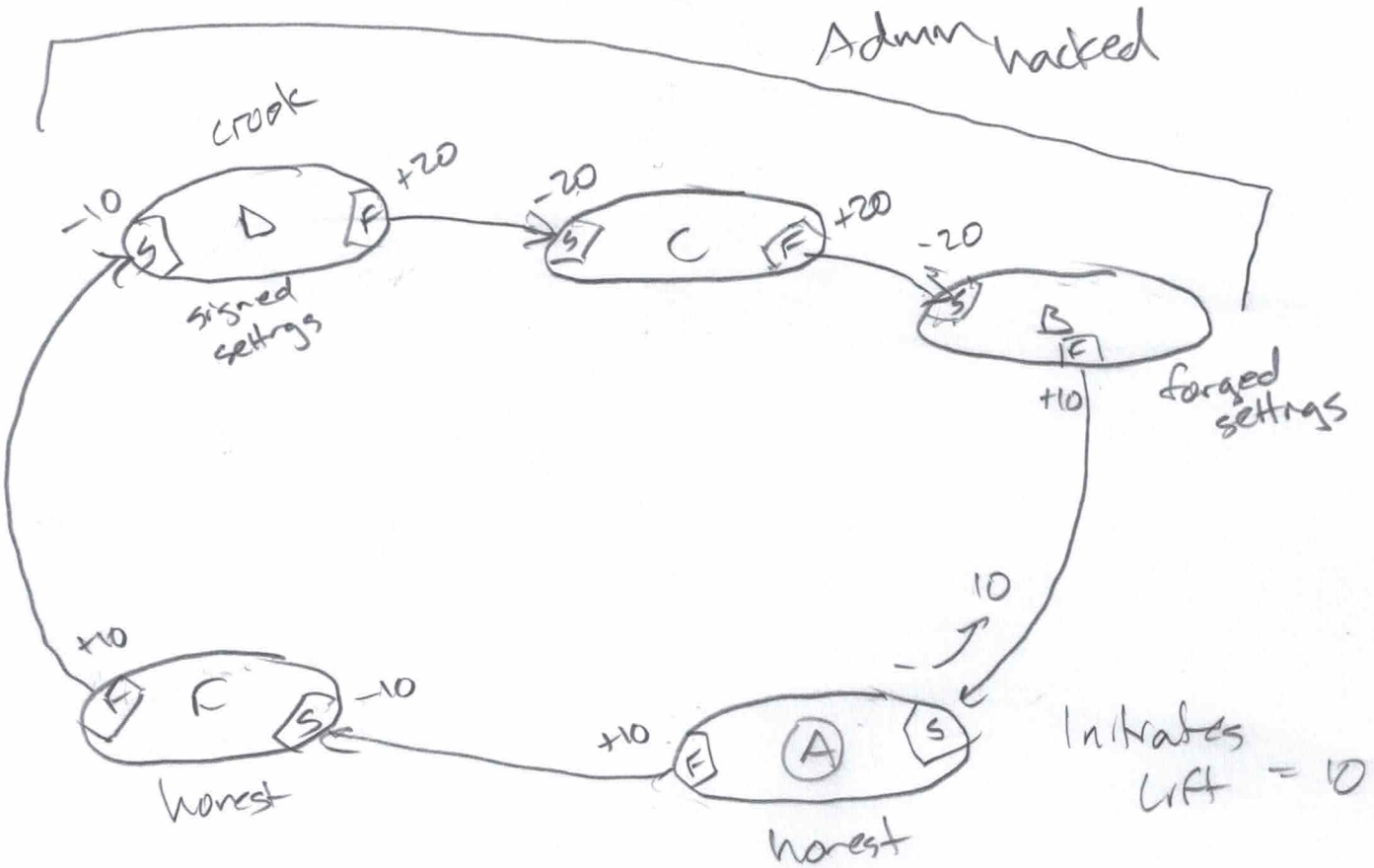
stock
amt ≥ cr_lm : vendor doesn't give more service/product

amt ≤ −dr_lm : client doesn't give more service/product

Foil perspective

Lift Fraud

Dec 19, 2019

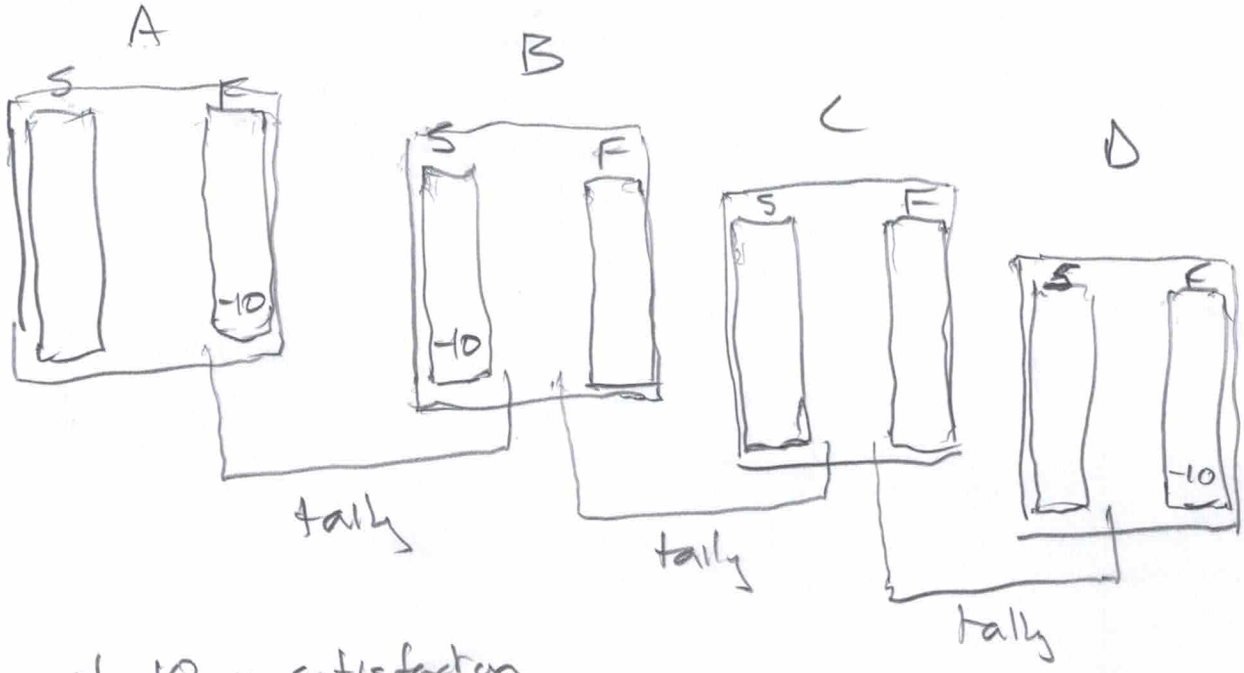


Trading Signatures

Dec 19, 2019 ①

Lift

Lift −10



A: I accept 10 in satisfaction

B: I give 10 to A conditioned on:
I get 10 From C, adjusted by my signed settings

Circular Lifts

Dec 19, 2019 (2)