

# SMARTER PURCHASING OF IPV4 ADDRESSES FROM THE MARKET

DAVID HUBERMAN  
ORACLE BARE METAL CLOUD





“

ONE OF THE FUNNY THINGS ABOUT THE  
STOCK MARKET IS THAT EVERY TIME ONE  
PERSON BUYS, ANOTHER SELLS, AND THEY  
BOTH THINK THEY ARE ASTUTE.

— *William Feather*

”

# QUICK BASICS



# THE MARKET

## PARTICIPANTS

- Buyers & Sellers
- Brokers
- Exchange Operators
- Lawyers
- RIRs & NIRs





# THE MARKET

## THREE DIFFERENT PRICE TIERS



- Small Blocks of /24 through /17  
\$14 to \$30 but very volatile
- Medium Blocks of /16  
\$10 to \$16 and rising
- Large blocks of /15 through /8  
\$8 to \$14 and rising

# PRE-MARKET STEPS



# PRE-MARKET STEPS

*"KNOW BEFORE YOU GO!"*

You know how much you want to buy, and how long it will last, right?

Secure CAPEX

- Purchase price
- Transaction fees (RIRs, Escrow Agents)
- Broker or Exchange fees

Find quality counsel with experience in Mergers & Acquisitions

- Purchase price is key to any deal, but the purchase contract's terms & conditions are probably more important!
- Note: you will need significant operating budget

# PRE-MARKET STEPS

*"KNOW BEFORE YOU GO!"*

Keep in mind inter-RIR transfer policies. As of August 2016:

- LACNIC and AFRINIC do not allow space to enter or leave the region. This adds significant legal complexity to a deal
- Space can move freely between APNIC, ARIN, and RIPE

Have an RIR account ready to receive any purchases:

- Billing up-to-date
- Pre-approval if necessary



# PRE-MARKET STEPS

*"KNOW BEFORE YOU GO!"*

Know the regulatory framework for each RIR so that you draft contract language appropriately:

- ARIN: A license to be leased
- RIPE: An asset to be bought and sold
- APNIC: We don't care, but probably an asset to be bought and sold
- LACNIC & AFRINIC: Undefined



# PRE-MARKET STEPS

*"KNOW BEFORE YOU GO!"*

Finally, a note for buyers at "typical" big companies:

- Finance needs to know to book the purchase as an *intangible asset* with an amortization schedule of X years (depends on total price)
- Transaction is normally closed with a wire transfer - you likely won't have a PO
- Become familiar with how CorpDev (M&A) initiates wire transfers at Treasury
- Get a good contact at Treasury and have them ready to initiate the wire upon approval from all relevant parties



**TIME TO  
FIND A SELLER**



# TAKE CONTROL

*"BE YOUR OWN BEST ADVOCATE"*

- Brokers and Exchange Operators are interested in rising prices. You want lower prices. Your interests are not aligned.
- Keep control! Keep in constant communication with all parties, and do not let others steer you in a direction you do not want to go.



# THE ART OF THE DEAL

HINT: IT IS ABOUT PEOPLE

- Deal making is about people
- This is just like negotiating transit and peering
- Sellers are more likely to want to work with you if they like you
- There is high value in face-to-face meetings
- E-mail is not only a poor communication medium, in some cultures it is just not acceptable



# THE DEAL

## THREE PRIMARY FACTORS

- Price
- Timing of delivery
  - One delivery; or
  - Multiple tranches over time?
  - "We can give you 90% of the space now, but need a few months to finish up cleaning the other 10%"
- Terms and conditions of the contract



**PROTECT  
YOUR COMPANY**



# DUE DILIGENCE

## PROTECTING YOUR COMPANY

### Technical

Is the block routed?

What does RIS say about routing history?

Is it on any block lists?

Is the seller routing the blocks internally?

### Legal

Contractual obligations?

Any corporate liens? (If so, get a certification that the lien doesn't encumber the addresses.)



# FRAUD

## ARE YOU PARTY TO FRAUD?

30% of the market participants are committing fraud.

There are two general types of fraud:

*Willful fraud vs. Unwitting fraud*



# FRAUD

## WILLFUL FRAUD

- Intentionally selling space that is not theirs
- Intentionally selling non-registered space
- Intentionally selling space that was hijacked from the RIR
- Intentionally selling space that required them to lie to the RIR to obtain



# FRAUD

## UNWITTING FRAUD

- Selling space that isn't theirs, but they don't know it
- Big corporation problems

# FRAUD

## AVOIDING IT

- Rigorously vet your seller
- Do not buy from any party you do not know or cannot easily learn about
- Be very vigilant when buying space from organizations in certain countries unless it is a well-known company
- Only use a major bank as an escrow agent



THANK YOU