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
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**

<table>
<thead>
<tr>
<th>Technical</th>
<th>Legal</th>
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<tbody>
<tr>
<td>Is the block routed?</td>
<td>Contractual obligations?</td>
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<tr>
<td>What does RIS say about routing history?</td>
<td>Any corporate liens? (If so, get a certification that the lien doesn’t encumber the addresses.)</td>
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<tr>
<td>Is it on any block lists?</td>
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<tr>
<td>Is the seller routing the blocks internally?</td>
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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