Keeping the IPv4 Internet Growing

Charles M. Lee
President

www.addrex.net
Why is there an IPv4 Marketplace?

• The supply of unallocated IPv4 numbers is nearing “exhaustion” globally
  – Already has occurred in the Asia region (effectively speaking)
  – Imminent within the European region
• Demand for IPv4 numbers is growing
  – New Internet market entrants
  – Emerging regional Internet participants
  – Incumbent Internet business expansion
  – Internet enabled device proliferation
• No near-term viable technical alternative
  – IPv6 is not an extension of IPv4, it’s an alternative
  – Significant issues remain unresolved in the IPv6 “solution”
  – Major corporations are investing in addressing the technical issues
What do service providers need?

A complete solution to the challenges of acquiring IPv4 number blocks to fuel continued Internet service growth.

An effective marketplace must provide Buyers:

• A fair, and unbiased, competitive process
• A trusted and secure environment
• Expert guidance and advice on asset rights and protection
• Access to an extensive inventory of IPv4 number block assets
• Tools to assist in establishing the value of the asset(s) offered
• Complete transaction support from beginning to end
What do effective Brokers do?

Good brokerage services include:
• Confidential asset analysis
• Ownership/rights research and documentation
• Sales strategy advice
• Asset preparation, packaging and promotion
• Standardized Asset Sale Agreements (ASAs)
• Maximizing the competition participants
• Complete transaction support from beginning to end
What are the major steps?

- Execute a Brokerage Agreement
  - Ownership/rights certification conducted (2 – 3 weeks)
- Asset must be packaged for sale (2 – 3 weeks)
  - Asset packaging
  - Asset Sales Agreement drawn up
  - Freed of all encumbrances (if necessary)
- Asset sale is marketed (8 – 12 weeks)
  - Asset description, competition type, start date and time, duration
- Competition is conducted (2 weeks)
- Sales contract is executed with selected buyer (1 week)
- Payments are rendered
Number Block Categories

• Two broad categories of number blocks
  – Service Contracts: Allocated by RIRs and encumbered with “service” contract constraints
  – Assets: Allocated without any service contract

• Shared attributes of both categories
  – They are vast
  – Minor fractions are actually used
  – Each has the capacity to fuel continued growth of the Internet
Service contract category challenges

• Service contracts are “fluid” and tough to explain
  – Rights of use vs. rights of ownership
    • Unilaterally dictated by the RIRs in their service contracts
  – 5 RIR’s enacting self interest policies
    • Policies and processes are structurally similar but the differences make all
      the difference
  – Service contracts can be sold but the value is dramatically lower
    • Can be transferred only with approval of the RIR that issued the contract
      – Complicates the transactions with 3rd parties in the process
    • Inter-RIR transfers are possible BUT there are two moving policy
      compliance targets to hit
      – Introduces two 3rd parties to the sales process
    • Seemingly designed to strangle traditional business practices
      – Ownership rights, and associated value to the Buyer, are shredded
      – “Needs assessment” harms the value to the Seller
Asset category challenges

- Asset ownership can be tough to determine
  - Fraudulent allocations
    - Some material misrepresentations have been found
  - Control does not equal ownership
    - Breathtaking over-reaching has occurred
  - Use does not equal control or ownership
    - Misappropriation sadly not that uncommon
  - "Grey" status
    - 30 years of "neglect" can create a provenance hairball too nasty to touch
  - "WHOIS" records are not reliable or authoritative
Nortel Networks-Microsoft Transaction

• 2 “hidden” truths
  – Nortel sold the exclusive rights to 38 number blocks
    • None of the blocks were listed in the ARIN Whois database as belonging to Nortel Networks Inc.
    • It took over 2,600 pages of documentation to prove that Nortel owned the blocks and had the legal right to sell the assets
  – The asset owner has the exclusive right to sell
    • The court approved “THE SALE OF INTERNET NUMBERS FREE AND CLEAR OF ALL LIENS, CLAIMS, ENCUMBRANCES AND INTERESTS”
    • There is no legal requirement to enter into an agreement with any 3rd party prior to a sale
    • No 3rd party approval of a sale is required
What are IPv4 number blocks worth?

- Market forces decide
  - Competition is the key
- Block size matters
  - Bigger is usually better
  - Small blocks may have higher value per number
- Validation/determination of the legal status matters
  - Essential to the buyer
  - Hugely complicated and expensive exercise
- Competition matters
  - Regionally constrained competition lowers the value to all parties
  - Global competition between highly motivated, financially strong, entities maximizes the value of the asset
Thank You

To learn more, please come and talk to me anytime

charles.lee@addrex.net