Internet Draft E. Terrell
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# The IPtX Domain Name Service Specification; IPtX-MX DNS

'draft-terrell-iptx-mx-dns-specification-02'

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#### **Requirements Terminology**

The keywords Must, Must Not, Required, Shall, Shall Not, Should, Should Not, Recommended, May, and Optional, when they appear in this document, are to be interpreted as described in [RFC-2119].

#### **Conventions**

Please note, the mathematical operators that cannot be represented in the 'txt' file format, which represent; the '^' Carrot sign for 'NESTED' Super-Script, and the 'v' sign is used for a 'NESTED' Sub-Script.

This Internet-Draft will expire on January 27th, 2008.

## Abstract

This document defines the IPtX Specification for the 'Domain Name Service' (IPtX / IPtX-MX DNS), and eliminates the possibility of an Addressing 'Conflict', or a Mathematical Addressing Error in the IPtX Address Space when using Multiple IPtX Addressing Formats. In other words, the IPtX / IPtX-MX IP Addressing format on the "Back-End", or "Backbone", obtains its uniqueness through the use and / or difference defined by the accuracy of the 'Exponential Decimal String'. However, this uniqueness, if not clarified, would not be discernable on the "Front-End", because the IPtX IP Addressing Specification 'Allows' only a '48' Bit-Mapped IP Address, or 2 Octets and 4 '10 Bit-Quadrants', and up to 60 Bits for every IP Addressing Format greater than IPt1. That is, on the "Front-End", if there is No distinction, because every Addressing Format in the IPtX Specification, when Resolved, is Equal, there will ultimately be Address Conflicts within the Addressing Scheme.

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## Introduction

The profoundness of the 'IPtX Specification' is that, it represents and defines a real conundrum. In other words, IP Addressing in the IPtX Specification, is a Mathematical Enigma that begs the question; 'How much does anyone really know about the Human Neuronic Processes? Or more specifically; 'Does anyone truly understand the Communication Process of the Neuron (perhaps, Macro and Quantum Levels), to actually develop a 'True Artificial Intelligence'? In which case, it should be understood; Today's Computers cannot discern the 'Identity', or 'Equality', between any two or more IP Addresses having Numerical Value(s) that actually define the same IP Address in the IPtX Specification - e.g.;

```
213 = 00E0000.0000... ~ 2 E 7 . 73
11010101 11 11001010 111 . 1001001

Bit-Mapped Length = 110101011111001001 ~ 18 Bits

213 = 00E0000.0000... ~ 2 E 7 . 735
11010101 11 11001010 111 . 1011011111

Bit-Mapped Length = 110101011111011011111 ~ 21 Bits
```

The distinction between the Binary Numerals is defined by the Accuracy of the 'Exponential Decimal String', which represents a Unique Binary Sequence from the Binary Set, {0,1}. However, while this clearly defines a valid conclusion, it is sustained only on the "Back-End". In other words, when converting the Binary Sequence into the Integer representing the IP Address, an additional Tag, which identifies (equaling the 'CIDR Network Descriptor') the Bit-Mapped Length of the Addressing Format being used is necessary when making a distinction - where;

And given that the Display of the 'CIDR Network Descriptor' is replaced with the Display of the Name of the Addressing Format identifying the Bit-Mapped Length of the IPtX Addressing Format being used;

```
±/0000:00 = IPtX = {IPt1, IPt2, ... IPt100, ... IPtX}
```

The User sees the Binary Conversion of '2E0000 . 0000...' only as the Integer which represents the IPtX IP Address - In other words, using the IPtX / IPtX-MX DNS 'IP Addressing Format Tag', which distinguishes the Addressing Specification using an 'A' to represent the number of 32 Bit Groupings the Addressing Format contains, prevents 'Front-End' Address Resolution Conflicts. - As given by;

```
' XXX:XXX.XXX.XXX.XXX.XXX /XA'

-- Or --

' XXX:XXX:XXX.XXX.XXX.XXX /IPtX '

/IPtX = {IPt1, IPt2, ..., IPt10,000, ..., IPtX} = /xA

213:112:238.009.212.001 /XA, or, 213:112:238.009.212.001 /IPtX

Where; 'X' = {Any Integer}, and 'A' = {one '4' Octet Group}
and the 'Preferred', since; XA = 16 Bits:

/XA = 16 Bits = 2EX; An 'IPtX / IPtX-MX DNS Tag'

2EX; 3Bit = Exponent = 2<sup>3</sup>, 3 Bit Decimal String = 2<sup>3</sup>

2EX = 2E8 .8 = The Number of ('A') Octet Groupings

(Yielding a 8 Bit Number with a 8 Bit Decimal String Accuracy)

Or -[/X \geq 1, X \leq 2<sup>24</sup>; and A = Class ID - 'ID' = A, B, C, D, or E] = /XA
```

```
' 213 : 112 : 238 . 009 . 212 . 001 \pm/XA
2<sup>24</sup> = Unused Bits
                           3 State CIDR Network Descriptor
                       8 - 16 Bit - Switch {'\( \varphi'\), '+', '-', '/'}
   = Internet Service
                          [Where '0' means "No Sign" or '/']
    Provider 'ID'
   (Back-End ISP ID)
                  THE END-NODE OR FRONT-END |
                         Network IP |
                                           | 8 - 16 Bits
                           Address
                                                   /XA = /2^{24}: Class ID
 8 Bit (10 Bit > IPt1)
                      | 39 Bits Or | |
                       ZONE IP ADDRESS
                      1/ \
                                / \I
                                          _____
  '2EX' = [ XXX : 999 . 999 . 999 . 999 | '±' / X A ] ~ 104 Bits
8 Bit (10 Bit > IPt1) - IP AREA CODE ADDRESS /
               16 thru 48 Bits - 'IPtX / IPtX-MX DNS Tag'
 Note: If - (Prefix x Zone IP x IP Area Code) = 2^{24};
          (Network IP Address) \sim 2^{40}; (IPtX-MX DNS Tag) = 2^{48};
    And - 104 Bit-Mapped Length = (2^{16}) x (2^{40}) x (2^{48})
  Then -(2^{24}) x (2^{40}) x (2^{48}) = 0000:2E0000.0000... = IPt1
          = [2^{24}] = Unused Bits] \times (2^{24}) \times (2^{40}) \times (2^{48}) = 2^{136}
```

# 'IPtx / IPtx-MX IP Addressing DNS Tag'

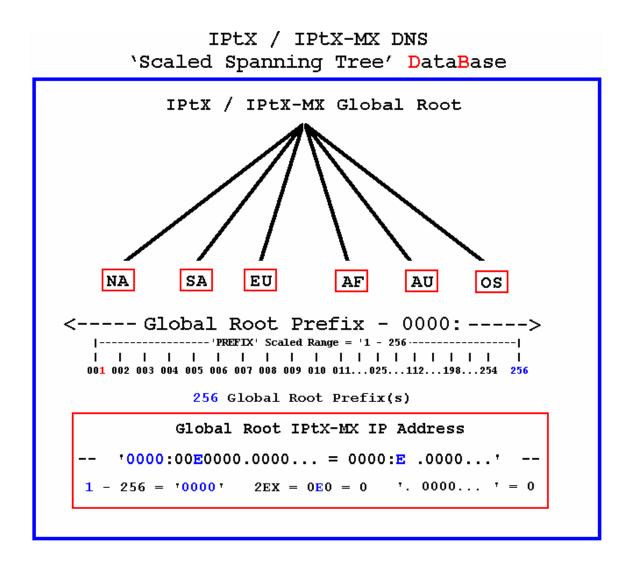
Given that; if the DNS Tag, in essence, represents a Function 'Call' that determines the IPtX Addressing Format being used, then it (the DNS Tag) must also determine the accuracy of the Exponential Decimal String - as given by;

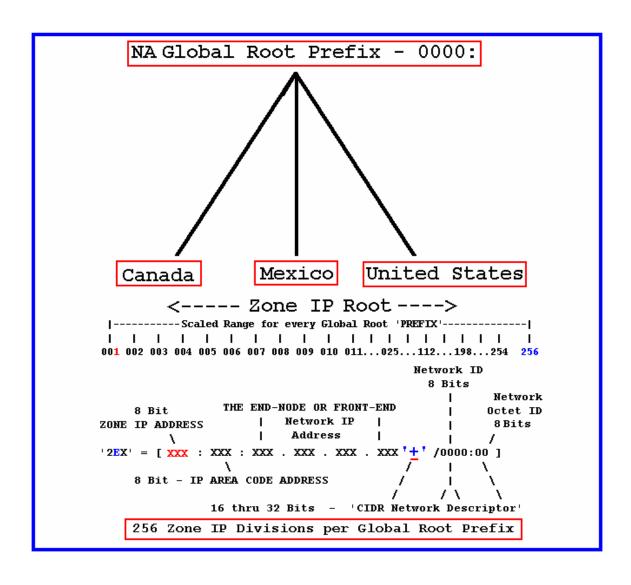
0000:2E0000.0000... - 'DNS Tag' = /XA

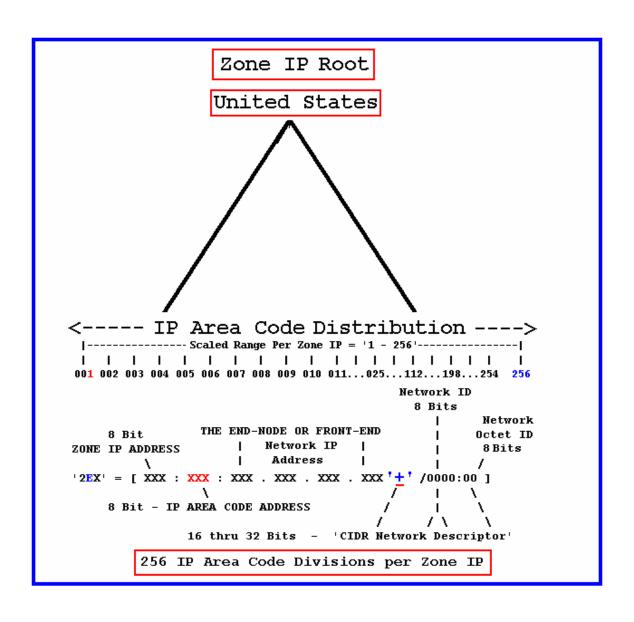
 $0000:2\bar{E}0000.0000... - 'DNS Tag' = /X\bar{A}$ 

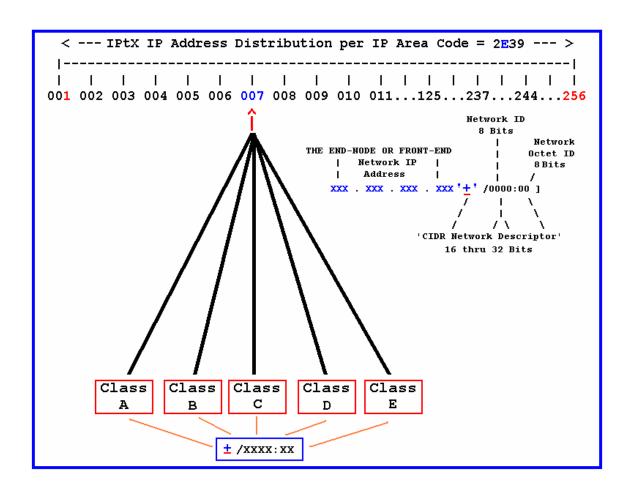
Clearly then, any translation and / or distinction available to the user, must also be defined within the code of the Operating System, and in particular, defined within the code of the 'Domain Name Service' for the IPtX / IPtX-MX DNS Specification.

I. IPtX / IPtX-MX DNS 'Scaled Spanning Tree' Data Base for an IP Address;

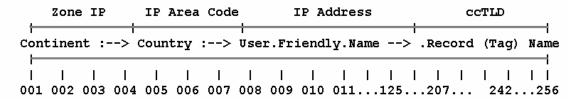


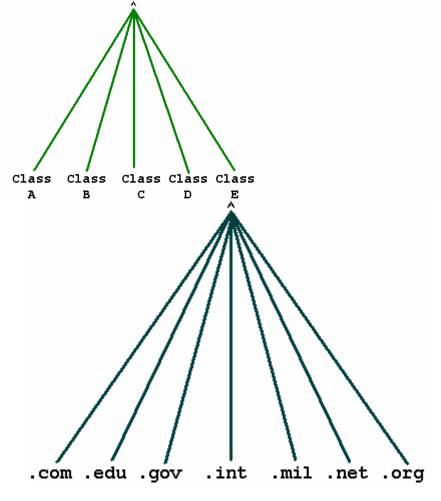






Default IPtX Specification 'Network Domain Name Specification'





II. IPtX 32 / 64 Bit Header Design Specification - 'Variable IP Addressing Format Range Bit-Mapped Capacity' - e.g.; IPt1 thru IPtX

The current IP Bit-Mapped Transmission of an IP Address, is nothing more than the 'End or Station' Node Software Translation of a Binary Numerical Conversion. Clearly, utilizing the same principles and continuing to exploit of the 'DCE Unit'. The Compression Range of a 22 to 54 Bit-Mapped IPtX IP Addressing Format, can be reduces to the Bit-Mapped Length of a 32 or 64 Bit Header.

```
IPtX 32 / 64 Bit Header
                                     2
                   1
1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2
                     32 Bit Header Scale
2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2
                     64 Bit Header Scale
         IPtX 32 / 64 Bit Header Information Fields
               TOS & NEXT HEADER
                                       TL & DIRECTION BIT
ID & SECURITY BIT | FLA| FRAG OFFSET |: IP PBX Send | /XXXX:XX
       +++++++++++++++++++
TTL-HOP LIMIT | PROTOCOL |: IP PBX Recv | CHK SUM | ConfCall
             |Exponential Decimal String = 2E 14 / 46 Bits
         SOURCE ADDRESS
             |Exponential Decimal String = 2E 14 / 46 Bits
    DESTINATION ADDRESS
```

# Internet Protocol tX (32 / 64 Bit) Address Space IPtX/IPtX-MX IP Address = 0000:2E0000.0000...

8 Bits   8 Bits	•	16-48 Bits
Prefix :  Zone IP :		

		CIDR Network	Distribution	
Prefix Zone IP I	P Area Code IPtX IP Address	Descriptor	Purpose	Date
-8 BIT-+8 BIT	8 BIT+	+	+	+
None   None	None   000.000.000.000	None	None	7/2007
001   001-256:	All:   XXX.XXX.XXX.XXX	All	NA	7/2007
002   001-256:	All:   XXX.XXX.XXX.XXX	All	SA	7/2007
003   001-256:	All:   XXX.XXX.XXX.XXX	All	EU EU	7/2007
004   001-256:	All:   XXX.XXX.XXX.XXX	All	l os	7/2007
005   001-256:	All:   XXX.XXX.XXX.XXX	All	AU	7/2007
006   001-256:	All:   XXX.XXX.XXX.XXX	All	AF	7/2007
007-256   001-256:	All:   XXX.XXX.XXX.XXX	All	IANA/RESERVED	7/2007
001-256   001-256:	All:   000.XXX.XXX.XXX	All *	IANA/TELEPHONY	7/2007
None   None	None   127.000.000.000	None	IANA/LoopBack	7/2007
001-256   001-256:	All:   000.000. YYY. XXX	All	IANA/EMERGENCY	7/2007

SA = South America, NA = North America, EU = European Union, AU = African Union, AF = Asian Federation, OS = Oceania States

Note: For IPtX-MX Specifications > IPt1 the Zone IP and IP Area Code Divisions = 1 - '999'

## Internet Protocol tX (32 / 64 Bit) Address Space IPtX/IPtX-MX IP Address = $0000:2\overline{E}0000.0000...$

8 Bits		39 Bits	
		:  IPtX IP Address	

			CIDR		
			Network	Distribution	
Prefix Zone IP IP	Area Code IPtX	IP Address	Descriptor	${f Purpose}$	Date
-8 BIT-+8 BIT+	-8 BIT+	+		+	+
None   None	None $ 1/000$	,000,000,000	None	None	7/2007
001   001-256:	All:  1/XXX	. xxx. xxx . xxx	All	NA	7/2007
002   001-256:	All:  1/XXX	. xxx. xxx . xxx	All	SA	7/2007
003   001-256:	All:  1/XXX	. xxx. xxx . xxx	All	EU EU	7/2007
004   001-256:	All:  1/XXX	. xxx. xxx . xxx	All	l os	7/2007
005   001-256:	All:  1/XXX	. xxx. xxx . xxx	All	UA U	7/2007
006   001-256:	All:  1/ XXX	. xxx. xxx . xxx	All	AF	7/2007
007-256   001-256:	All:  1/ XXX	. xxx . xxx . xxx	All	IANA/RESERVED	7/2007
001-256   001-256:	All:  1/000	.XXX.XXX.XXX	All *	IANA/TELEPHONY	7/2007
None   None	None  1/127	.000.000.000	None	IANA/LoopBack	7/2007
00 <mark>1</mark> -256   001-256:	All:  1/000	.000. YYY. XXX	All	IANA/EMERGENCY	7/2007

SA = South America, NA = North America,

EU = European Union, AU = African Union, AF = Asian Federation, OS = Oceania States

Note: For IPtX-MX Specifications > IPt1 the Zone IP and IP Area Code Divisions = 1 - '999'

III. IPtX 32 / 64 Bit - DNS Header, DNS Query, DNS Resource Record, TCP Header, TCP Pseudo Header, UDP Header, and UDP Pseudo Header, Design Specification(s) -

# CHANGES: IPtX DNS Services 32 / 64 Bit Header

```
DNS Header for IPtx | DNS Query for IPtX | DNS RR Record for IPtX
  Identification = | Type = 2E18.20 Bits | Type = 2E18.20 Bits
     2E15.25 Bits
                   | Class = 16 Bits | Class = 16 Bits
  Opcode = 4 Bits
                    | Length Rdata = | TTL = Variable to
| 2E12.20 Bits | 2E22.40 Bits
 Rcode = 4 Bits
-----|----|-----|-----|
                                  4 New "TYPE" Categories
TQuestions = 2E12.20 Bits |
                       | 1. TYPE 43 = 'RNN'
TAnswers RR = 2E12.20 Bits |
                                   = "Reverse Network Domain Name"
                            Title: IN-ADDR.APARA NAME
                                    = IN-ADDR.RNN
TAuthority RR = 2E12.20 Bits |
                          | 2. TYPE 44 = 'RNN-PTR'
                               = "Reverse Network Domain
                                       Name-Domain Name Pointer"
TAdditional RR = 2E12.20 Bits 2 New IPtX DNS Tag(s) Specifications
CIDRNetDes = XXXX:XX
                      |3. TYPE 45 = XA = "IPtX (IP Address)"
  /XXXX:XX = 8 Bits | Where X = Integer Variable ≥ 1
                         - e.q. IPt1 = A, IPt2 = AA = 2A,
                            IPt3 = AAA = 3A, IPt4 = AAAA = 4A, etc
                          |4. TYPE 46 = X\bar{A} = "IPtX (IP Address)"
```

```
Note: Approximating the Number of Digits representing the Integer from a Binary Conversion, or the Bit-Mapped Displacement / Length of an Integer, is more accurately defined as;

(Binary) Bit-Map Length ÷ 3 ≈ Number of Digits (Integers)

e.g.; 1GB = 2E30 = 2<sup>30</sup> = 1,073,741,824 Bit Length ≈ 357,913,941 Digit Number (Integer)
```

#### DNS Header 32 Bit IPtX

1 2 3 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 Identification-XXXX:XX |QR|Opcode|AA|TC|RD|RA|Z|AD|CD|Rcode Total Answer RRs Total Questions Total Authority RRs Total Additional RRs Questions = 2E10.12 Bits + + + + + + + + Answer RRs = 2E10.12 Bits + + + + + + + + + Authority RRs = 2E10.12 Bits + + + + + + + + + Additional RRs = 2E10.12 Bits

#### DNS Header 64 Bit IPtX

2 0 2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 Identification-XXXX:XX |QR|Opcode|AA|TC|RD|RA|Z|AD|CD|Rcode 2E10.12 Bits = Total Questions = Total Answer RRs Total Authority RRs = 2E10.12 Bits = Total Additional RRs Questions 2E24.30 Bits ++++++++++ Answer RRs 2E24.30 Bits + + + + + + + + + + + + + Authority RRs 2E24.30 Bits + + + + + + + + + + Additional RRs 2E24.30 Bits

```
DNS Resource Record 32 / 64 Bit IPtX
                                 2
1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2
            DNS Resource Record 32 Scale IPtX
24680246802468024680246802468024
            DNS Resource Record 64 Scale IPtX
         Field Information - DNS Resource Record
                        Name
           32 / 64 \text{ Bit} = 2E10.12 \text{ Bit} / 2E24.30 \text{ Bits}
             32 / 64 Bit = 2E10.12 Bit / 2E24.30 Bits
  Type = 16 Bit / 2E10.12 Bit | Class =
                                    16 Bit / 2E10.12 Bit |
                           \mathtt{TTL}
    32 Bit = 2E10.12 Bits
                                  64 \text{ Bit} = 2E24.30 \text{ Bits}
|Length Rdata = 16Bit/2E10.12Bit| Rdata = 16Bit / 2E10.12Bit|
          32 / 64 Bit = 2E10.12 Bit / 2E24.30 Bits
          32 / 64 \text{ Bit} = 2E10.12 \text{ Bit} / 2E24.30 \text{ Bits}
```

```
IPtX TCP Header 32 64 Bit
1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2
             TCP Header 32 Scale IPtX
2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4
             TCP Header 64 Scale IPtX
           Field Information - TCP Header
| Source Port = 16 / 2E10.12 Bits | Destination Port = 16 / 2E10.12 Bits |
2E10.12 Bits = Sequence Number = 2E24.30 Bits
| 2E10.12 Bits = Acknowledgment Number = 2E24.30 Bits
|DataOffset 4Bit | Resrvd | ECN | Control Bits6 | Window 48Bit HEX No. |
| Checksum = 16 Bit / 2E10.12 Bit | Urgent Pointe = 16 Bit / 2E10.12 Bit
2E10.12 Bits = Options and padding = 2E24.30 Bits
        2E10.12 Bits = Data = 2E24.30 Bits
          IPtX 32 / 64 Bit TCP Pseudo Header
1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2
              32 Bit Header Scale
2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4 6 8 0 2 4
               64 Bit Header Scale
   2E10.12 Bits = Source IPtX address = 2E24.30 Bits
  2E10.12 Bits = Destination IPtX address = 2E10.12 Bits
| Protocol = 8 / 16 Bits | Total length = 16 / 2E10.12 Bits |
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```

The IPtX-MX Domain Name Service Specification

NOTE: There is room for improvement, i.e. TTL = 2E24.30... Bits! This is clearly Ridiculous... However, this represents Backwards Compatibility at its Best. At least now, Networking the Moon, or perhaps Mars, seems plausible. Nevertheless, the difference between the Fields defining the Headers for the 'Binary' IPtX-MX IP Addressing Specification, which pertains specifically to IP Addressing, only involves the Mathematics associated with Changing the Exponential Operator, E, to E. However, it also necessitates the specification defining the use of a "T" for 'TELe' and an 'M' for Mobile, as the Operational Function(s) defined 'by / in' the CIDR Network Descriptor for Transmission and Front-End' Address Resolution. In which case, 'X'becomes; 'X = T (TELe)', or 'X = M (Mobile)', in '/XA', which respectively represents the '/TA', and '/MA' IPtX-MX DNS Tags for use in Telephony and Mobile Transmissions.

# **Security Considerations**

- IANA Isolation and Privatization Options -

There are many instances, not only for Businesses, Governments, and the Military, but ordinary Citizens also require a Secure Networking and Telephony Environment - However, while there are a number of methods employed today, which addresses these concerns, the IPtX Specification provides IANA with additional tools to make these environments even more secure - e.g.;

I. IANA/Telephony\* - IPtX / IPtX-MX DNS Tag "/TA" 'Depending upon whether or not the Telephony Address Pool is Shared by every IPtX Addressing Format'

Provides every IPtX Addressing Format with LIMITED Isolation when using the IPtX / IPtX-MX DNS Tag "/TA" Specification

- II. ISP "Backbone ID"
  LIMITED Security for 'All IPtX Addressing Formats'
- III. Users "Backbone Account Number ID" LIMITED Privatization

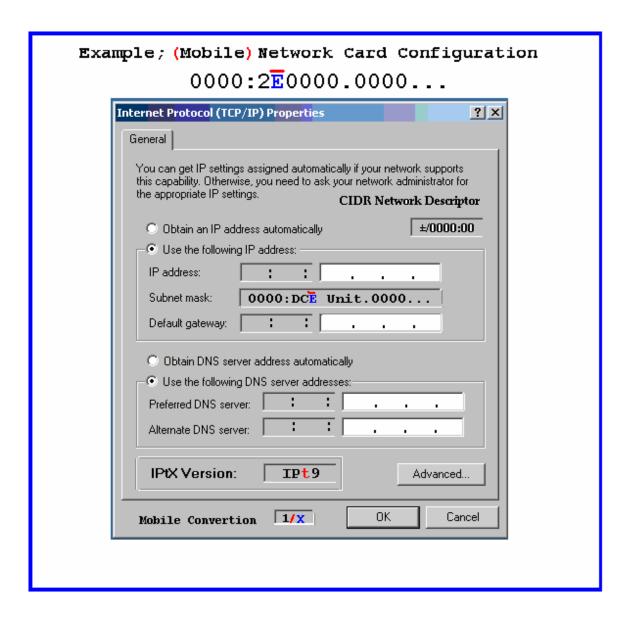
Enhanced Security for 'All IPtX Addressing Formats' beyond the IPt1 Specification - an Address Bit-Mapped Length assigned by IANA, with respect to the IPtX Addressing Format being used.

IV. Network - "Backbone Account Number ID"- Isolation and Privatization

Enhanced Security for 'All IPtX Addressing Formats' beyond the IPt1 Specification - an Address Bit-Mapped Length assigned by IANA, with respect to the IPtX Addressing Format being used – Network Isolation.

- V. IANA/EMERGENCY "BROADCAST" Isolation and Privatization Defined by / in the 'CIDR Network Descriptor Specification'
- VI. Options for the "IPtX-MX '0000:2E'0000.0000..." Address Band"

If a 'Binary IP Addressing Protocol Specification' is unnecessary, then the more suitable application for the '0000:2\bar{E}0000.0000...' Address Band Specification defines a 'Routable Encrypted / Encryption Protocol, which can be used to Encrypt; the 'ISP Backbone ID', the 'Users Backbone Account Number ID', and the 'Network Backbone Account Number ID'.



# Work(s) in Progress;

These drafts represent the twelve chapters of the Networking Bible, designing a Network IP Addressing Specification that maintains a 100 Percent backward compatibility with the IPv4 Specification. In other words, this is a design specification developed from the Theory of the Expansion of the IPv4 IP Addressing Specification, which allowed the representation of the Network for the entire World on paper, and the possibility of an Infinite IP Address Pool. Nevertheless, the Internet-Drafts listed below, "Cited as Work(s) in Progress', explain the design Specification for the development of the IPtX (IP Telecommunications Specification) Protocol Addressing System and the correction of the Mathematical Error in the Binary System.

#### **Computer Science / Internet Technology:**

- 1. <a href="http://www.ietf.org/internet-drafts/draft-terrell-logic-analy-bin-ip-spec-ipv7-ipv8-10.txt">http://www.ietf.org/internet-drafts/draft-terrell-logic-analy-bin-ip-spec-ipv7-ipv8-10.txt</a> (Foundational Theory for the New IPtX family IP Addressing Specification, and the Binary Enumeration error discovery after the correction.) "Work(s) in Progress'
- 2. <a href="http://www.ietf.org/internet-drafts/draft-terrell-simple-proof-support-logic-analy-bin-02.txt">http://www.ietf.org/internet-drafts/draft-terrell-simple-proof-support-logic-analy-bin-02.txt</a>
  (The 2<sup>nd</sup> proof for the existence of another Binary System, resulting from the Error Correction.)

   "Work(s) in Progress'
- 3. <a href="http://www.ietf.org/internet-drafts/draft-terrell-visual-change-redefining-role-ipv6-01.pdf">http://www.ietf.org/internet-drafts/draft-terrell-visual-change-redefining-role-ipv6-01.pdf</a> (Argument against the Machine dependant IPv6 deployment.)

   "Work(s) in Progress'
- 4. <a href="http://www.ietf.org/internet-drafts/draft-terrell-schem-desgn-ipt1-ipt2-cmput-tel-numb-02.pdf">http://www.ietf.org/internet-drafts/draft-terrell-schem-desgn-ipt1-ipt2-cmput-tel-numb-02.pdf</a> (The foundation of the New IPtX Addressing Spec compared to the Telephone Numbering System.) "Work(s) in Progress'
- 5. <a href="http://www.ietf.org/internet-drafts/draft-terrell-internet-protocol-t1-t2-ad-sp-06.pdf">http://www.ietf.org/internet-drafts/draft-terrell-internet-protocol-t1-t2-ad-sp-06.pdf</a> (The IPtX Addressing Specification Address Space / IP Address Allocation Table; establishes the visual perspective that actually represents Networking Schematic Networking the entire World on Paper.) "Work(s) in Progress'
- 6. <a href="http://www.ietf.org/internet-drafts/draft-terrell-iptx-spec-def-cidr-ach-net-descrip-01.pdf">http://www.ietf.org/internet-drafts/draft-terrell-iptx-spec-def-cidr-ach-net-descrip-01.pdf</a> (Re-Defines CIDR) {Classes Inter-Domain Routing Architecture} and introduces the Network Descriptor for the IPtX Addressing Standard.) "Work(s) in Progress'
- 7. <a href="http://www.ietf.org/internet-drafts/draft-terrell-math-quant-new-para-redefi-bin-math-04.pdf">http://www.ietf.org/internet-drafts/draft-terrell-math-quant-new-para-redefi-bin-math-04.pdf</a> (The 3rd Proof for the New Binary System, correcting the error in Binary Enumeration.)

   "Work(s) in Progress'
- 8. <a href="http://www.ietf.org/internet-drafts/draft-terrell-gwebs-vs-ieps-00.pdf">http://www.ietf.org/internet-drafts/draft-terrell-gwebs-vs-ieps-00.pdf</a> (Defining the GWEBS The Global Wide Emergency Broadcast System) "Work(s) in Progress'
- 9. <a href="http://www.ietf.org/internet-drafts/draft-terrell-iptx-dhcp-req-iptx-ip-add-spec-00.pdf">http://www.ietf.org/internet-drafts/draft-terrell-iptx-dhcp-req-iptx-ip-add-spec-00.pdf</a>
  (The development of the DHCP {Dynamic Host Configuration Protocol} for the IPTX IPSpec)
   "Work(s) in Progress'

- 10. <a href="http://www.ietf.org/internet-drafts/draft-terrell-iptx-dns-req-iptx-ip-add-spec-03.pdf">http://www.ietf.org/internet-drafts/draft-terrell-iptx-dns-req-iptx-ip-add-spec-03.pdf</a> (The development of the DNS {Domain Naming Specification} the for IPTX IPSpec) "Work(s) in Progress'
- 11. <a href="http://www.ietf.org/internet-drafts/draft-terrell-math-quant-ternary-logic-of-binary-sys-08.pdf">http://www.ietf.org/internet-drafts/draft-terrell-math-quant-ternary-logic-of-binary-sys-08.pdf</a> (Derived the Binary System from the proof of "Fermat's Last Theorem", and Developed the Ternary Logic for the Binary System) "Work(s) in Progress"
- 12. <a href="http://www.ietf.org/internet-drafts/draft-terrell-cidr-net-descrpt-expands-iptx-add-spc-17.pdf">http://www.ietf.org/internet-drafts/draft-terrell-cidr-net-descrpt-expands-iptx-add-spc-17.pdf</a>
   "Work(s) in Progress"

(An application of Quantum Scale Theory, the  $2^{X}$ : 1 Compression Ratio, the Expansion derived from the 'CIDR Network Descriptor, and the Mathematics of Quantification provided the foundation for the development of the "Intelligent Quantum Tunneling Worm Protocol"; A Routable Mathematical Exponential Expression, Backend IP Addressing Protocol that provides an (nearly) Unlimited IP Address Space using the Compression Ratio  $2^{X}$ : 1.)

Note: These Drafts has Expired at <a href="www.ietf.org">www.ietf.org</a> Web Site. However, you can still find copies posted at Web Sites all over the World. {Suggestion; Perform Internet search using "Yahoo" or "Google", Key word: "ETT-R&D Publications"}.

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#### **Pure Mathematics:**

- 1. The Proof of Fermat's Last Theorem; The Revolution in Mathematical Thought {Nov 1979} Outlines the significance of the need for a thorough understanding of the Concept of Quantification and the Concept of the Common Coefficient. These principles, as well many others, were found to maintain an unyielding importance in the Logical Analysis of Exponential Equations in Number Theory.
- 2. The Rudiments of Finite Algebra; The Results of Quantification {July 1983}
  Demonstrates the use of the Exponent in Logical Analysis, not only of the Pure Arithmetic
  Functions of Number Theory, but Pure Logic as well. Where the Exponent was utilized in the
  Logical Expansion of the underlining concepts of Set Theory and the Field Postulates. The results
  yield another Distributive Property that is Conditional, which supports the existence of a Finite
  Field (i.e. Distributive Law for Exponential Functions) and emphasized the possibility of an
  Alternate View of the Entire Mathematical field.
- 3. The Rudiments of Finite Geometry; The Results of Quantification {June 2003} Building upon the preceding works from which the Mathematics of Quantification was derived. Where by it was logically concluded that there existed only 2 mathematical operations; Addition and Subtraction. In other words, the objectives this treatise maintained, which was derived from the foundation of the Mathematics of Quantification; involves not only the clarification of the misconceptions concerning Euclid's Fifth Postulate, and the logical foundation of his work, or the existence of 'Infinity in a Closed Bound Finite Space'. But, the logical derivation of the Foundational Principles that are consistence with the foundation presented by Euclid, which would establish the logical format for the Unification of all the Geometries presently existing.
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<sup>&</sup>quot;This work is Dedicated to my first and only child, 'Princess Yahnay', because she is the gift of Dreams, the true treasure of my reality, and the 'Princess of the Universe'. (E.T. 2006)"

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