<table>
<thead>
<tr>
<th>Description</th>
<th>Server Name</th>
<th>In Use By Account</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>smtp.gmail.com</td>
<td>gih902 gmail</td>
</tr>
<tr>
<td></td>
<td>smtp.gmail.com</td>
<td>Gmail – gih903</td>
</tr>
<tr>
<td></td>
<td>mail.bigpond.com</td>
<td>BigPond Wireless Broadband</td>
</tr>
<tr>
<td></td>
<td>smtp.gmail.com</td>
<td></td>
</tr>
<tr>
<td></td>
<td>smtp.gmail.com</td>
<td></td>
</tr>
<tr>
<td></td>
<td>smtp.gmail.com me</td>
<td></td>
</tr>
<tr>
<td></td>
<td>smtp.gmail.com me</td>
<td></td>
</tr>
<tr>
<td></td>
<td>asmt.pl.net</td>
<td></td>
</tr>
<tr>
<td></td>
<td>APNIC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>APNIC-EXCHANGE</td>
<td>iCloud, <a href="mailto:gih@apnic.net">gih@apnic.net</a></td>
</tr>
</tbody>
</table>

**Account Information**

- Use default ports (25, 465, 587)
- Use custom port: [blank]
- Use Secure Sockets Layer (SSL) selected

**Authentication**

- User Name: gih
- Password: [blank]
Be sure no changes to the message are made.

Select a different outgoing mail server from the list below or click Try Later to leave the message in your Outbox until it can be sent.

Sending from: Geoff Huston <gih@apnic.net>

APNIC (Offline)
APNIC-EXCHANGE (Offline)
gmail outgoing (Offline)
mail.bigpond.com
smtp.gmail.com:gih902@gmail.com
smtp.gmail.com:gih903@gmail.com
smtp.gmail.com:gihsidr@gmail.com

Edit Message  Edit SMTP Server List  Connection Doctor

Try Later  Try With Selected Server
<table>
<thead>
<tr>
<th>Status</th>
<th>Account Name</th>
<th>Account Type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>APNIC</td>
<td>SMTP</td>
<td>Connection and login to server succeeded.</td>
</tr>
<tr>
<td></td>
<td>APNIC-EXCHANGE</td>
<td>SMTP</td>
<td>Could not connect to this SMTP server. Check your network connection and that you entered the correct information in the Account preferences. Also verify that the server supports SSL. If it does not, deselect the “Use SSL” checkbox in the Advanced tab of Account preferences.</td>
</tr>
<tr>
<td></td>
<td>BigPond Wireless...</td>
<td>POP</td>
<td>Connection and login to server succeeded.</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:gih@apnic.net">gih@apnic.net</a></td>
<td>IMAP</td>
<td>Connection and login to server succeeded.</td>
</tr>
<tr>
<td></td>
<td>gih902 gmail</td>
<td>Google IMAP</td>
<td>Connection and login to server succeeded.</td>
</tr>
<tr>
<td></td>
<td>Gmail – gih903</td>
<td>Google IMAP</td>
<td>Connection and login to server succeeded.</td>
</tr>
</tbody>
</table>
Configure IPv4: Using DHCP
IPv4 Address: 220.247.146.243
Subnet Mask: 255.255.248.0
Router: 220.247.144.1
Configure IPv6: Off
<table>
<thead>
<tr>
<th>Status</th>
<th>Account Name</th>
<th>Account Type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔️</td>
<td>APNIC</td>
<td>SMTP</td>
<td>Connection and login to server succeeded.</td>
</tr>
<tr>
<td>✔️</td>
<td>APNIC-EXCHANGE</td>
<td>SMTP</td>
<td>Connection and login to server succeeded.</td>
</tr>
<tr>
<td>✔️</td>
<td>BigPond Wireless</td>
<td>POP</td>
<td>Connection and login to server succeeded.</td>
</tr>
<tr>
<td>✔️</td>
<td><a href="mailto:gih@apnic.net">gih@apnic.net</a></td>
<td>IMAP</td>
<td>Connection and login to server succeeded.</td>
</tr>
<tr>
<td>✔️</td>
<td>gih902 gmail</td>
<td>Google IMAP</td>
<td>Connection and login to server succeeded.</td>
</tr>
<tr>
<td>✔️</td>
<td>Gmail – gih903</td>
<td>Google IMAP</td>
<td>Connection and login to server succeeded.</td>
</tr>
</tbody>
</table>
$ telnet exch-v6only.rand.apnic.net 587
Trying 2001:dd8:9:2::101:16...
Connected to exch-v6only.rand.apnic.net.
Escape character is '^]'.
220 IAMDA1.org.apnic.net Microsoft ESMTP MAIL Service ready at Thu, 28 Feb 2013 10:55:11 +1000
501 5.5.4 Invalid domain name
$ telnet exch-v6only.rand.apnic.net 587
Trying 2001:dd8:9:2::101:16...
Connected to exch-v6only.rand.apnic.net.
Escape character is '^]'.
250-SIZE 30965760
250-PIPELINING
250-DSN
250-ENHANCEDSTATUSCODES
250-STARTTLS
250-X-ANONYMOUSTLS
250-AUTH GSSAPI NTLM
250-X-EXPS GSSAPI NTLM
250-8BITMIME
250-BINARYMIME
250-CHUNKING
250-XEXCH50
250-XRDST
250 XSHADOW

A Recommendation for IPv6 Address Text Representation

Abstract

As IPv6 deployment increases, there will be a dramatic increase in the need to use IPv6 addresses in text. While the IPv6 address architecture in Section 2.2 of RFC 4291 describes a flexible model for text representation of an IPv6 address, this flexibility has been causing problems for operators, system engineers, and users. This document defines a canonical textual representation format. It does not define a format for internal storage, such as within an application or database. It is expected that the canonical format will be followed by humans and systems when representing IPv6...
4.1. Handling Leading Zeros in a 16-Bit Field

Leading zeros MUST be suppressed. For example, 2001:0db8::0001 is not acceptable and must be represented as 2001:db8::1. A single 16-bit 0000 field MUST be represented as 0.

4.2. "::" Usage

4.2.1. Shorten as Much as Possible

The use of the symbol "::" MUST be used to its maximum capability. For example, 2001:db8:0:0:0:0:2:1 must be shortened to 2001:db8::2:1. Likewise, 2001:db8::0:1 is not acceptable, because the symbol "::" could have been used to produce a shorter representation 2001:db8::1.

4.2.2. Handling One 16-Bit 0 Field

The symbol "::" MUST NOT be used to shorten just one 16-bit 0 field. For example, the representation 2001:db8:0:1:1:1:1:1 is correct, but 2001:db8::1:1:1:1:1:1 is not correct.

4.2.3. Choice in Placement of "::"

When there is an alternative choice in the placement of a "::", the longest run of consecutive 16-bit 0 fields MUST be shortened (i.e., the sequence with three consecutive zero fields is shortened in 2001:0:0:1:0:0:0:1). When the length of the consecutive 16-bit 0 fields are equal (i.e., 2001:db8:0:0:1:0:0:1), the first sequence of zero bits MUST be shortened. For example, 2001:db8::1:0:0:1 is correct representation.
Robustness principle - Wikipedia, the free encyclopedia
en.wikipedia.org/wiki/Robustness_principle
Be conservative in what you do, be liberal in what you accept from others (often reworded as "Be conservative in what you send, liberal in what you accept").

Jon Postel - Wikipedia, the free encyclopedia
en.wikipedia.org/wiki/Jon_Postel
... in its sending behavior, and liberal in its receiving behavior" (reworded in RFC 1122 as "Be liberal in what you accept, and conservative in what you send").
Career - Legacy - See also - Notes