



## Digital Telecommunications, Inc. Customer BGP-4 Routing Policy

### Customer Requirements:

- The customer must be multi-homed to Digital Telecommunications, Inc. or to Digital Telecommunications, Inc. and at least one other provider.
- The customer must have its own autonomous system number (ASN) from ARIN unless multi-homed to Digital Telecommunications, Inc. only. In that case a private ASN will be assigned and used.
- The customer premise equipment (CPE) must support BGP version 4.
- The customer must not perform redistribution of any dynamic routing protocol into BGP.
- The customer must filter outbound network announcements by applying explicit and inclusive filters on the CPE router. These filters must only permit the advertisement to Digital Telecommunications, Inc. of the network prefixes that have been previously arranged with Digital Telecommunications, Inc. for advertisement. Digital Telecommunications, Inc. and Digital Telecommunications, Inc. upstream providers will maintain similar network prefix filter lists.
- The customer must designate primary and secondary points of contact, available 24x7, for BGP related issues.
- The customer is responsible for provisioning an appropriate CPE device. Due to the size of the global routing table as of July 2001 if the customer wishes to receive full Internet routes the minimum CPE requirements are:
  - A device similar in capabilities to a Cisco 3640.
  - 128MB of RAM.

### Policy:

- Digital Telecommunications, Inc. is not responsible for CPE configuration, or for problems associated with CPE mis-configuration.
- Digital Telecommunications, Inc. will make every attempt to work with the customer to maintain a BGP session with a BGP-4 compliant CPE device, but will not be responsible for problems arising from vendor interoperability.
- Digital Telecommunications, Inc. will supply IP addresses for the link between the CPE and Digital Telecommunications, Inc. router.
- At the customer's discretion Digital Telecommunications, Inc. can advertise either full Internet routes or only a default route.
- Digital Telecommunications, Inc. will respond to change requests within 2 business days. The completion of network prefix filter changes may take longer depending on the response time of Digital Telecommunications, Inc. upstream providers.
- Digital Telecommunications, Inc. may require that a password be used for the BGP session.
- Digital Telecommunications, Inc. asks its customers to aggregate their network announcements to the smallest possible prefix.
- Before advertising customer routes Digital Telecommunications, Inc. must be able to verify via WHOIS and the routing registries that the address space in question is properly assigned to the customer.
- Digital Telecommunications, Inc. will accept trouble reports and change requests only from the customer's designated points of contact.

### Filtering:

- Digital Telecommunications, Inc. will only accept network announcements whose prefix length is less than or equal to /24.
- Digital Telecommunications, Inc. will not accept advertisements containing a default route or private (RFC1918) address space.
- Digital Telecommunications, Inc. filters on both prefix and AS-path and will only accept network advertisements which:
  - Originate from the customer's autonomous system, or
  - Originate from autonomous systems for which the customer is providing transit.
- It is the responsibility of the customer to provide Digital Telecommunications, Inc. with a comprehensive list of network prefixes and associated AS-paths that the customer wishes advertised.
- Digital Telecommunications, Inc. will apply a sensible route-dampening policy to promote network stability.



- If the above filtering policies are violated, or if the customer's BGP session causes other critical problems, Digital Telecommunications, Inc. may temporarily shut down the BGP session and contact the customer's designated points of contact to rectify the issue.

**Support:**

- For all questions regarding routing or BGP or to request changes to BGP configurations including filters please contact: [bgpadmin@pickdti.com](mailto:bgpadmin@pickdti.com)
- For after-hours support please contact Digital Telecommunications, Inc. Network Operations Center: 1-877-742-5384

**References:**

1. [Multihoming with Two Different Service Providers \(Cisco Systems\)](#)
2. [Using the Border Gateway Protocol for Interdomain Routing \(Cisco Systems\)](#)
3. [CIDR RFC](#)
4. [1BGP RFC](#)
5. [Multihomed, Multiprovider Community RFC](#)
6. [American Registry of Internet Numbers](#)