Configuration of Dobson SIP Trunks

Dobson Fiber provides SIP Trunk services across public and private IP networks. These services can usually be turned up relatively quickly, but the following are some configuration options to consider.

TYPE

Dobson Fiber provides two flavors of SIP Trunk connections: Registration & Dedicated.

Both options have Username/Password configured, the main difference is whether you want to configure a single static IP address for the SIP Trunk usage, or if you want to use a registration that would allow changing IPs as needed, and work via NAT services.

REGISTRATION:

- Registration SIP Trunks are normally easier to configure from a Network perspective and can be easier to switch to failover Internet connections since the IP Address and router are determined when the connections registers and is not hard coded. Should also make sure the registration expiry is set to no smaller than 3600.
    - register=>USERNAME@domain.dobson.net:5060:password: USERNAME@domain.dobson.net /USERNAME~3600

- The key setup on this option is to make sure your device is looking for the dialed number in the TO: field of the SIP HEADER. Most systems that use this connection type will allow the setting of where to find the dialed number for incoming call routing, or will use that by default.

    Asterisk Looks like:

    ; Calls from Dobson - need to pull out the extension from the "To" header

    exten=>USERNAME,1,Set(USER_PART=${CUT(SIP_HEADER(To),@,1)})

    exten=>USERNAME,n,Set(USER_PART=${CUT(USER_PART,:,2)})

    exten=>USERNAME,n,Dial(SIP/${USER_PART},20)

    While an ADTRAN may look like:

    voice trunk T01 type sip

    dial-string source to

DEDICATED:

Dedicated SIP Trunks have their IP STATICALLY set to a single IP, so any traffic inbound for your phone system will only go to that IP address and Dobson will also only receive traffic from that IP. This option would need to be configured at your location to allow traffic to that IP through your Router/Firewall rules to terminate to your phone gear. Dedicated connections can also use the TO Header for calls or they can be set to use the Dialed Number as the Header Identification also.

POLLING:

Dobson Fiber SIP Trunks would normally expect responses to sip options polling requests to show that your system is "alive and well". Dobson would also respond accordingly if your system sent options requests. Polling could be turned off, but this service allows better monitoring of the connection and performance, so the preference would be to use Polling. These will happen normally every 30 seconds and is a good way to verify connection to Dobson's services. Your device should see traffic from us at least every 30 seconds so if you don't see traffic then that can point to a connection problem.

NETWORK PREPATION:

Dobson recommended network configurations for port and IP allowances can be found in a separate document at:

https://www.dobson.net/hosted-phone-support

SIP-ALG

SIP ALGs on routers and Firewalls usually result in service issues, so it is important to verify those services are turned off for your devices that handle SIP Traffic. SIP-ALG help can be found in a separate document at:

https://www.dobson.net/hosted-phone-support

DTMF Signaling

Dobson supports both Inband and Out of Band DTMF signaling.

Transport:

Dobson uses UDP for Transport but can configure as TCP in certain circumstances.

Information:

Dobson would normally be asking for the following information:

- Type of SIP Device being used. (phone system)
- Type of Connection needed (Registered or Dedicated)
- The IP Address where the SIP Device is location for Dedicated
- DNIS Digit settings for any DIDs (Default is 10 digit, but can do more or less if desired)
- Are you limited to Inband or Out of Band DTMF signaling?

Dobson would be providing you:

- SIP Username
- SIP Domain/IP
- SIP Password
- Proxy Domain/IP if needed