AN-101: DCAP Internet Connectivity

Property Internet Requirements

The Internet service required by the DCAP is quite modest. In normal operation, the DCAP autonomously pushes out data to the cloud multiple times an hour over the standard HTTPS port used by Web browsers. The typical bandwidth required of a DCAP is between 25MBytes and 100MBytes per month, depending on the number of MDTs communicating through the DCAP.

The DCAP's default setting is to use DHPC to get an IP address. You can configure it to use a Static IP though it is much preferred to use a DHCP reservation if you need to fix the IP of the DCAP.

There are three options to provide the DCAP with Internet service.

Share an existing Internet connection (most common)

Connect the DCAP to an existing Internet connection such as that used by the property manager or leasing office. The advantage is that the dedicated Internet connection costs can be avoided, and the property has a vested interest to ensure the Internet is up and functioning. In rare cases you may need to contact the property's IT group if they have set up any security measures on their router, but for the most part this is a plug and play operation.

Dedicated Internet connection (not common)

Contract with the local Internet Service Provider (ISP), usually the local telephone or cable provider, to provide a dedicated Internet connection. The lowest or slowest speed grade/package from the ISP is more than sufficient. In most cases the ISP will provide a combined Modem/Router box to install at the site, with the Router functioning to create a local LAN to which you can connect the DCAP.

Purchase one of our LTE enabled DCAPs

Our LTE DCAP includes a cellular module if you don't have Internet at the property. Idea for small commercial sites, manufactured housing sites, and HOAs. Service is available from Tehama for a $20/month subscription service you can start or cancel anytime from our Web portal.

Accessing Your Data

Regardless of the type of Internet connection used by the DCAP, data is forwarded to our cloud; you access the site data using our Access Code as the identifier. The Access Code is a unique serial number programmed by Tehama into every DCAP and is printed on the label of every DCAP.

Internet Protocol (IP) Address Tutorial

Public IP: The IP address visible to the world. You can access a device from anywhere in the world over the Internet using the public IP address. This is also called the External IP address (External to the LAN).

Private IP: The IP address of a device behind a Router or Firewall. Local IP addresses are not accessible from the public Internet unless Port Forwarding has been setup. This is also known as the Local or LAN IP address.

LAN: Acronym for Local Area Network, which is the local Ethernet and/or WiFi network administered by the router and protected from the public Internet by the router's firewall.

Static IP address: This is an IP address that is fixed and will not change.

Dynamic IP address: A Dynamic IP address is assigned through a mechanism called Dynamic Host Configuration Protocol or DHCP. The DCAP will query the DHCP server (usually in the Router) and request an IP address. This IP address comes with a "lease time" and is typically 24 hours. DHCP leases are renewed after the lease time expires, and will rarely change if the DCAP is always active (i.e the renewed lease will have the same IP address).

DHCP Reservation: A DHCP reservation tells the DHCP server to always associate the assigned IP address to a unit with the provided MAC address. MAC addresses are world wide unique for every Internet connected device. MAC addresses are printed on each DCAP label.

> **Note:** DCAPs are shipped from the factory set to use a DCHP assigned IP address.