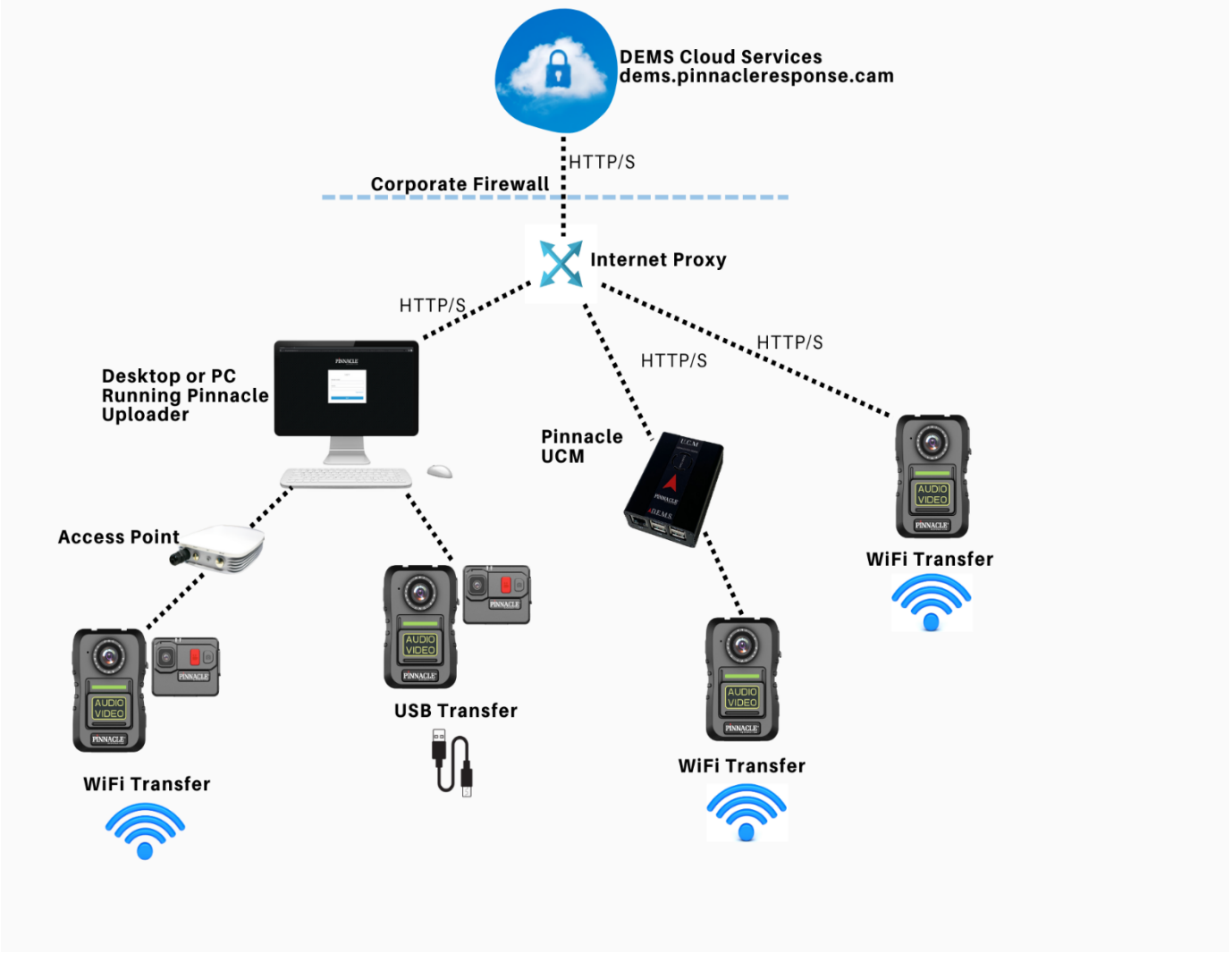
DEMS Cloud – Network Routing



Network Diagram

PC Sync Network Routing

From	To	Protocol / Port
Desktop Uploader	DEMS Cloud Services - “dems.pinnacleresponse.cam”	HTTPS / 443 HTTP / 80
Desktop Uploader	DEMS Upload Service - “pinnacle-dams-cloud-production-ldn.s3.eu-west-2.amazonaws.com”	HTTPS / 443 HTTP / 80

Upload Control Module (UCM) Network Routing

Note that the UCM runs a Debian-based Linux operating system.

From	To	Protocol / Port
UCM Device	DEMS Cloud Services - “dems.pinnacleresponse.cam”	HTTPS / 443 HTTP / 80
UCM Device	DEMS Upload Service - “pinnacle-dams-cloud-production-ldn.s3.eu-west-2.amazonaws.com”	HTTPS / 443 HTTP / 80
UCM Device	NTP Time Servers - “0.debian.pool.ntp.org” “1.debian.pool.ntp.org” “2.debian.pool.ntp.org” “3.debian.pool.ntp.org”	UDP / 123
Local Network	UCM Device	SSH / 22 *SSH access is only required for setup and configuration of the UCM device

Upload Control Module (UCM) Network Configuration

The UCM ships with a DHCP IPv4 configuration by default. A static IPv4 address may be configured pre or post-installation on the device via SSH. If a static IP is to be used, then the device must also have a gateway and DNS addresses configured.

(UCM) NTP Configuration (Camera Time Updates)

By default, the UCM is configured to the above NTP pools. An internal server that supports NTP can also be used and must be configured within the Linux OS of the UCM device.

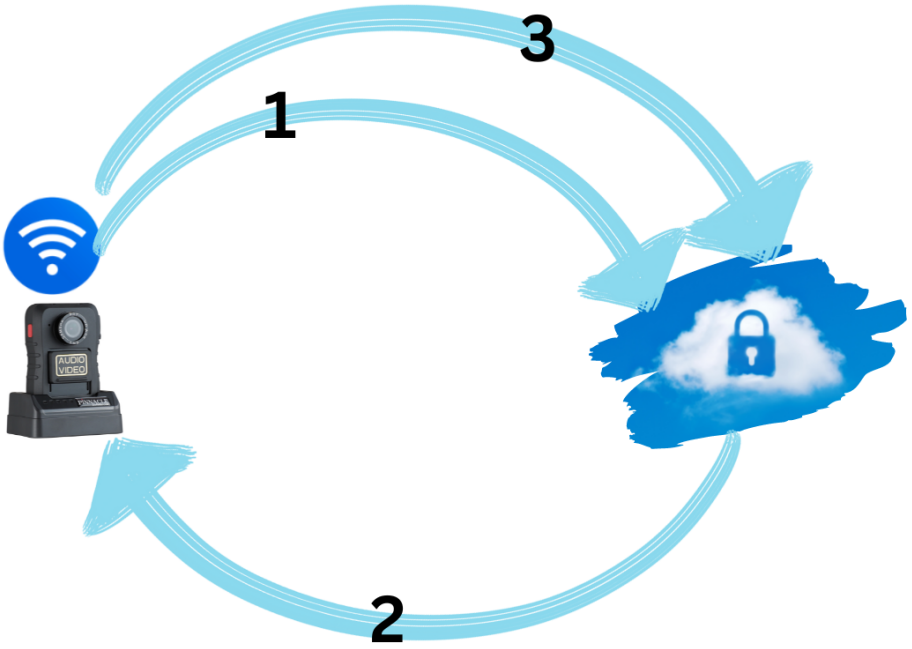
Onboard Uploader

Each standard PR7 can be configured to connect to the available Wi-Fi and upload directly to DEMs.

There are however a few steps to this process.

Steps

1. **The camera makes a call to DEMs to upload footage.**
2. **The security protocols are met, and a pre-signed URL is returned to the camera.**
3. **Footage is now moved over the internet using the pre-signed URL.**



Pre-signed URLs are a secure way of transferring data into a specific AWS bucket. Each URL is unique and each pre-signed URL contains both the bucket name and key, so at the least, the max would be around 1400 bytes (1024 bytes for the key, 63 for the bucket name, ~300 for the other params).