

Media Management in the Archive Appliance

Media Management:

The UDO Archive Appliance is shipped with a primary and secondary (two copy) media configuration by default. The intent of this configuration was to provide an on-line pool of files for retrieval and a secondary off-line pool of the same files for disaster recovery purposes. As secondary media fills up, it should be removed from the library thus freeing up space in the library to add more media. If media in the secondary pool is removed as recommended, the library will have on-line storage of its advertised capacity less the slots dedicated to backup media and a few cartridges of secondary media. Thus, an AA174 would have 170 slots dedicated to primary data media, 2 slots dedicated to system backup media, and 2 slots reserved for secondary media.

System Capacity:

For on-line capacity calculations, multiply the size of the primary media actually available for DICOM images by the number of slots allocated for primary media in the library. In the example of the AA174, this would be 170 slots less the 2 pieces of (re-writable UDO) backup media and 2 secondary media cartridges. With 30GB UDO media as an example, an AA174 would result in a net capacity of approximately 5 TB (170-slots X 30GB). Please bear in mind that primary media capacity is approximate and will fluctuate somewhat based on the size of the meta data written to each primary cartridge (a failsafe in the event that both backup media become damaged or corrupted) and how many secondary media are active in the library at any given time. When Plasmon ships 60GB UDO media in early 2007, the UDO Archive Appliance capacity will double by purchasing and installing a system upgrade package which will include new UDO drives, firmware and software.

Infinitely Expandable Library Capacity:

Once the UDO Archive Appliance is full of primary media copies, it is still possible to remove written primary media in order to make room for new media and achieve added capacity. This is accomplished by exporting the oldest primary media from the library via user friendly UDO Archive Appliance key pad commands. The implication of removing written media from the primary pool to make room for new primary unwritten media is two-fold. First, the system currently supports up to 80 million files with the current 250GB cache. Second, if exams are required that are on media which has been removed from the library for off-line shelf management, the media will need to be retrieved and reinserted into the library via the library mail slot. Requested media which has been removed for off-line shelf management will result in an administrator notification in the form of an email, SNMP, or through the API.