UTP-H VMS Stabilization and LPR Deployment

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Pre-Project Conditions/Challenges

• Mix of over 4000 analog and digital cameras (majority analog)
• Mostly low-resolution cameras by today’s standards
• No advanced analytic capability
• Split between server-based VMS and scores of NVRs of various age and capability, spread across 2 campuses plus remote sites
• User accounts/passwords managed individually on NVRs and servers
• Unable to search across systems
• Disparate retention times and device load
• Increasing demand for VMS with no sustainability plan
• VMS systems going end of life
Where We Are Now

- Approximately 25% of cameras on Avigilon
- All new cameras are Avigilon models configured on Avigilon Control Center
- Camera replacements prioritized for security sensitive areas and entrances
- Avigilon cameras are H-series AI-powered
- Avigilon AI servers installed for non-Avigilon cameras
- Flock Safety pole cameras and customized surveillance trailers deployed where permanent Avigilon install not feasible
- Adequate storage to provide for a minimum of 30 days of recording for 100% of cameras
- Pelco Endura decommissioned
- Avigilon servers installed in two centralized data centers with health monitoring
- Defined sustainability plan
- Implemented Single Sign-On Solution, role-based user groups and training
Future State

- Continued migration of all cameras to Avigilon
- Integration with access control alarms
- Retirement of other VMS systems
- Cameras from both campuses accessible from same Avigilon client
- License Plate Recognition in garages and surface lots
- Advanced analytics implementation (e.g. Camera-based weapons detection)
- New cameras placed to optimize facial recognition
- Watch list notifications for persons of interest and trespassed individuals
- Collaboration features enabled to share feeds across SOC, ROC, and potentially responding personnel.
- Security sensitive cameras will auto failover on primary connection loss
Noted Successes

• Bike thief caught on camera at Medical School within 24 hours of camera replaced with Avigilon. Security Officer noted the suspicious behavior of individual loitering in the area.
• Known offender noted trespassing at Graduate School of Biomedical Science same day exterior camera replaced. Caught next day on premise in violation of trespass warning.
• Thief in garage caught on camera and identified post incident. Individual and tools easily identified on camera due to increased image quality.
• Flock solution deployed at remote location being hit by catalytic converter thefts. Camera captured license plate of vehicle of interest, which assisted investigators in identifying and a member of a large-scale theft ring responsible for thousands of thefts in the Houston area.