

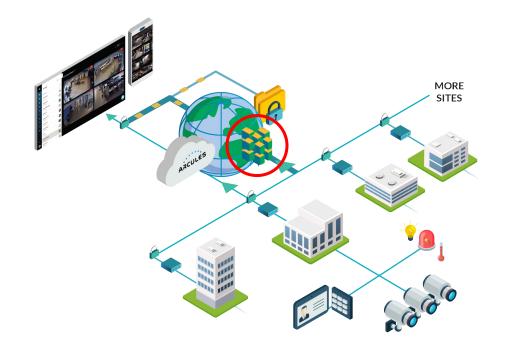
# why cloud?

- Utilize Existing Security Cameras
- No Large Up-Front Cost
- Monitor Multiple Sites on a Single Monitor
- Flexibility (Scale up and down)
- Reduced Hardware Costs
- No Software Management





- Pure Cloud
  - Low latency off-site cloud storage for high redundancy





- Pure Cloud
  - Low latency off-site cloud storage for high redundancy
- Edge Cloud
  - Local video storage for low bandwidth solutions





## Pure Cloud

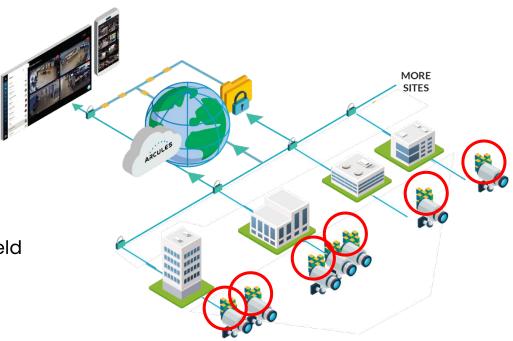
 Low latency off-site cloud storage for high redundancy

## Edge Cloud

 Local video storage for low bandwidth solutions

## Camera to Cloud

 Satellite or regional locations, small camera count sites, all new greenfield opportunities





#### Pure Cloud

 Low latency off-site cloud storage for high redundancy

## Edge Cloud

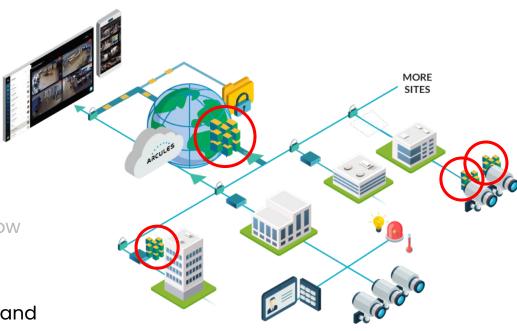
 Local video storage for low bandwidth solutions

## Camera to Cloud

 Satellite or regional locations with low camera count, all new greenfield

## Mix and Match

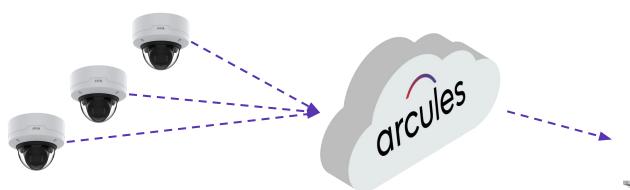
 Mix and Match architectures within and between locations to best meet your needs



# arcules Camera to Cloud Details



# **Basics of Camera to Cloud**





#### On Axis camera

- Video streaming (local)
- Video storage
- Video analytics

#### On cloud

- Video streaming (cloud)
- Video Analytics for timeline, search, widgets, and rules/alarms
- Cases / exports

#### **User interface**

- Same UX
- Video playback, analytics, alarms, etc.



# why? camera to cloud

## Lower bandwidth

 video storage on the camera results in more bandwidth available for other business critical applications

## Seamless Integration

 Camera to Cloud capabilities integrate seamlessly with the Arcules VSaaS providing the ability to view video, react to alarms and investigate events anytime, from anywhere.

# **Edge Computing**

 The Arcules camera to cloud ACAP application leverages Axis' superior camera design, utilizing it's edge computing to expand our AI object detection and forensic search capability.

## More choices

 Camera to Cloud, provides an additional deployment choice to meet varying budget, bandwidth and site considerations. Choose from pure cloud, edge cloud, camera to cloud or mix and match.

#### **FEATURES**

## Camera to cloud

- No gateways required ("serverless").
- Works with select Axis ARTPEC-8 cameras
- Requires installation of Camera to Cloud ACAP & SD card
- Axis cameras can be bought/installed through partners (Or use existing cameras)
- Object detection is performed on the camera
- Works with Forensic Video Search
- Continuous recording on camera SD card
- Includes new object timeline view
- Customers can mix & match per location



#### **CAMERA TO CLOUD**

# detailed features

- 30 days fixed video retention
- configurable recorded stream
- 1080p 10 FPS live stream
- local access to Axis OS for advanced users
- Axis Object Analytics (AOA) people and vehicle detection
- JP/EU/US data center support
- 12+ Axis settings in Arcules portal





# camera to cloud models

Model	Style	Resolution	Variants*	Recommended Storage*	Image
AXIS P3267 Series	Indoor/Outdoor Dome	5 MP	LV, LVE	512 GB	
AXIS P3268 Series	Indoor/Outdoor Dome	8 MP	LV, LVE	1024 GB	
AXIS Q1656 Series	Indoor/Outdoor Box	4 MP	B, BE, BLE, LE	512 GB	
AXIS P1467 Series	Outdoor Bullet	5 MP	LE	1024 GB	0
AXIS P1468 Series	Outdoor Bullet	8 MP	LE	1024 GB	
AXIS Q3538 Series	Outdoor Dome	8 MP	LVE	1024 GB	

<sup>\*</sup>Camera-to-cloud solution requires the use of an SD Card for video storage.

**AXIS Surveillance SD Cards** 





<sup>\*\*</sup>B-Barebone, E-Outdoor Ready, L-LED illumination, V-Vandal Resistant

# arcules

# Why Camera to Cloud today?

- Local storage
- Decentralized risk
- "No servers" mentality
- Movement to cloud



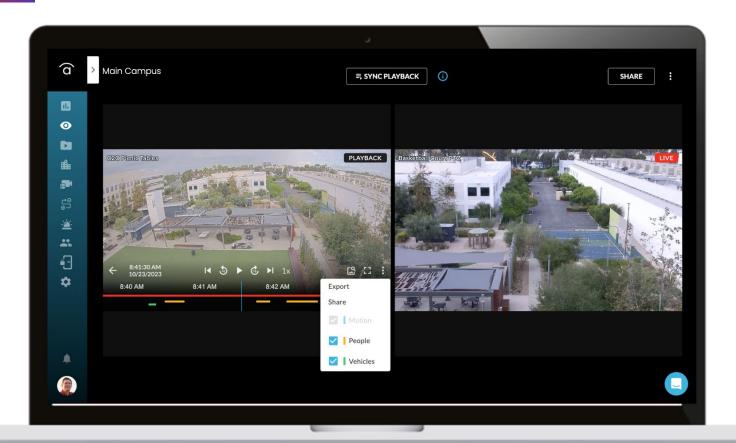
## **KEY CONCEPTS**

# Why is Arcules Different?

- Unlocked devices
- Premium cameras
- Power of Axis + Ease of Arcules
- Enterprise solution
- CX + Service









# **Customer Examples**



~300 sites, 3-4 cameras/site New installs (Greenfield)

- Using Axis cameras at HQ
- Milestone at HQ, Arcules at sites
- All small sites need new cameras

# Regional Retailer

~150 sites, 25-35 cameras/site Brownfield+Greenfield

- On prem VMS hardware EOL moving to cloud
- Using Axis cameras at multiple sites
- Camera to Cloud AND pure cloud



# Customer examples



~1000 cameras Brownfield

- Existing Axis camera
- Competitive camera to cloud dismissed due to closed system
- Arcules Camera to Cloud allows ease of transition



~100 sites, 10 cameras/site Brownfield+Greenfield

- Many disparate cameras (Vivotek, Hanwha, others)
- Arcules Camera to Cloud allows ease of transition
- Camera to Cloud AND pure cloud



# Top FAQs

- If I am already an Arcules customer, can I expand with Arcules camera to cloud? - YES
- Does camera to cloud allow for cloud storage? - NO
- Is the video stored on the camera encrypted? - YES
- Can I use an existing Axis cameras that I own? - YES
- Where can I purchase camera to cloud cameras? - Integrators & Dealers (Not Arcules)
- What types of video analytics will be available? - Classification, Alarming, Forensics (no color)
- Is video analytics an extra charge? NO

- Will camera to cloud be able to utilize on-camera I/O capability? - NO\*
- Can a current user migrate a cloud-based subscription from an existing camera to a camera to cloud subscription? - YES, at end of current subscription
- Do camera to cloud cameras become locked? - NO
- Is camera to cloud wireless or does it still require a network switch? - NO, switch required
- Will local live and local live playback be available on camera to cloud devices? - YES
- Will camera to cloud be released to all regions? - YES



thank you learn more at <u>arcules.com</u>



Reference / Alternate Slides

# other considerations

#### Cost

Crossover point when dealing with many cameras.

#### Access Control

 Gateway is required when using Axis Access Control, but not Genea & IMRON integrations.

## Video Storage

- Stored at edge (Release 1).
- Case video resides in the Cloud.

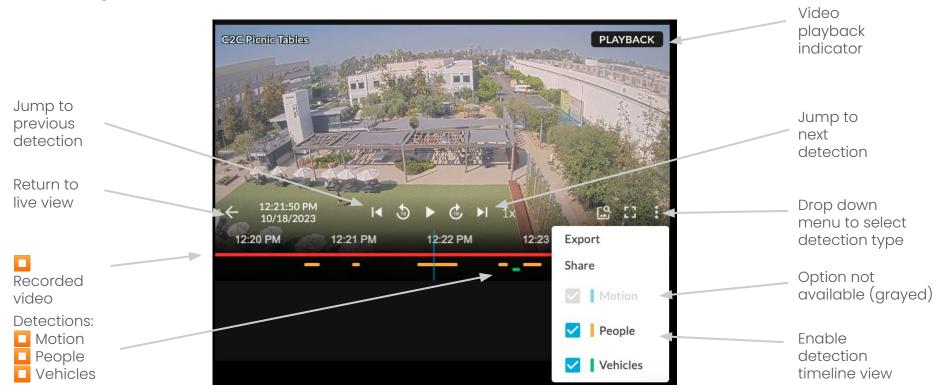
## Video Analytics

- Forensic Search by Region, Enhanced Timeline,
   Alarming on Classified Objects (Release 1)
- Forensic Color (Release 2)





# People / vehicle detections





# Why Arcules?







- Unlocked devices:
   Hostage-as-a-Service
- Premium cameras: not locked Vivotek or simple Cisco
- Enterprise: how can locked ecosystems handle transition plans?

- Open-first: deep VAPIX and ONVIF support
- Customer experience:
   Embedded chat
- Enterprise: XProtect hybrid deployments

- Premium cameras:
   not Sunell OEM Iol
- Ease-of-use: cloud-native not VMS-in-the-cloud
- Enterprise: we run on GCP, backed by Canon

© 2023 Arcules, Inc. All Rights Reserved.

#### CAMERA TO CLOUD



# **Kit Option**

- Services Provided through Wesco
- Single P/N Includes
  - Cameras installed SD cards
  - Configuration & ACAP installation complete



#### **INTELLIGENT VIDEO**



MOTION VIDEO SEARCH	Used for recorded video data	Available with Cloud & Edge Gateways and Camera to Cloud	Requires 1 video stream	Used to create alarms and notifications	Enabled by clicking on the <u>video search</u> <u>icon</u> in the player	Allows motion search in a user-defined area of interest	Color and object filtering option is not available
FORENSIC VIDEO SEARCH	Used for recorded video data	Available with Cloud Gateways and Camera to Cloud (Not available on Edge)	Requires 1 video stream	NOT associated with alarms or notifications	Enabled by clicking on the <u>video search</u> <u>icon</u> in the player	Allows <u>object search</u> by vehicle or person and by region of interest	Refine search by area of interest and/or color <sup>1</sup>
CLOUD VIDEO ANALYTICS	Used for <u>REAL-TIME</u> video	Available with Cloud Gateways	Cloud Requires 2 video streams (1 continuous)	Used to create alarms and notifications	Enabled through cloud analytics set up, then placed as part of an alarm rule	Counting, People/Vehicle Detection, Blur/Rotation Detection used as triggers or heatmaps	Color filtering option is <u>not</u> <u>available</u>
DEVICE / EDGE VIDEO ANALYTICS	Used for REAL-TIME video	Available with Camera to Cloud (Not available on Edge Gateways)	Requires 1 video stream	Used to create alarms and notifications	Enabled through analytics set up menu, then placed as part of an alarm rule	Counting, People/Vehicle Detection, Detection used as triggers or heatmaps	Color filtering option is <u>not</u> <u>available</u>



# subscription model

#### standard features

- Cloud VMS
- Al Forensics Search
- Dashboards
- Notifications

- Evidence Sharing
- Upgrades
- Unlimited Users
- Support

## options

- Site-specific hardware and software
- Siloed video data
- Al Cloud Analytics
- Volume Pricing
- Door Access Control
- Continuous Recording



#### **CAMERA TO CLOUD**



# subscription model

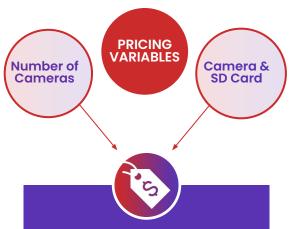
#### standard features

- Cloud VMS
- Al Forensics Search
- Dashboards
- Notifications
- Al Analytics

- Continuous Recording (SD Card)
- Evidence Sharing
- Upgrades
- Unlimited Users
- Support

## **Options**

- Axis ARTPEC-8 Camera (Purchased through integrator / dealer)
- Volume Pricing



## price example

1080p Camera 10 fps (to cloud) Continuous recording (On-camera SD card)

\$9.95 / camera / month (volume discounts available)

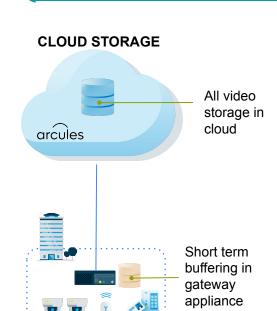
Axis Camera & SD card: \$1000- \$2700

(one time purchase)

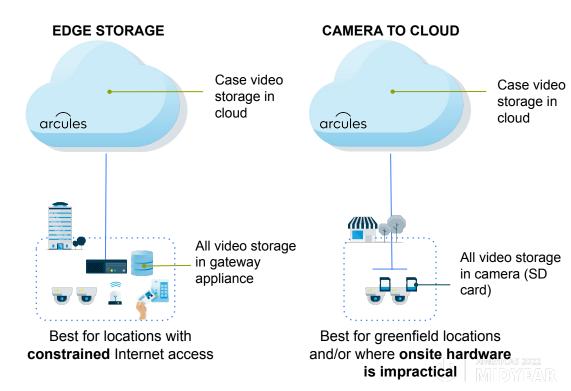
#### **DEPLOYMENT OPTIONS**







Best for locations with unconstrained Internet access and/or need for redundancy





# cloud, edge, or hybrid

- Built on Google Cloud for security, scalability & low latency
- Storage options for low bandwidth & high redundancy
- Mix-and-match for the best of both worlds
- Keep your own cameras.
   Support for ~6000 models





Low latency, offsite cloud storage for high redundancy





Local video storage for low bandwidth situations





Pure Cloud for critical cameras; edge for the rest



# cloud, edge, camera to cloud or hybrid

- Built on Google Cloud for security, scalability & low latency
- Storage options for low bandwidth & high redundancy
- Mix-and-match for the best of both worlds
- Keep your own cameras.
   Support for ~6000 models
- Serverless option





Low latency, offsite cloud storage for high redundancy





Local video storage for low bandwidth situations



Camera to cloud for low camera count locations





Pure Cloud for critical cameras; edge for the rest



# what is camera to cloud?

#### Pure Cloud



- Monitoring
- Set Up



- Web-Based Access
- Video Storage
- Analytics

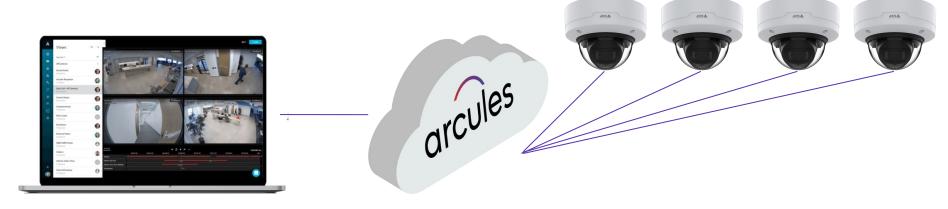


- Connection to Cloud
- Video Buffering



# what is camera to cloud?

#### Camera to Cloud



- Monitoring
- Set Up

• Web-Based Access

- Connection to Cloud
- Video Buffering
- Video Storage
- Video Analytics