Putting Your PSAP in the Cloud

APCO Emerging Technology Forum

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Presented by:

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WHY SHOULD YOUR PSAP BE IN THE CLOUD?

First responders need the best technology available

"CAD being unavailable has perhaps the most serious consequences of any IT failure in law enforcement."

Paul Wormeli, IJIS Institute

Multnomah County's new 9-1-1 computer dispatch system puts officers and public at risk, police say

By Maxine Bernstein | The Ore
Email the author | Follow on Tw
on May 18, 2011 at 10:00 PM, u

When Multnomah County prol
visited an apartment in Gresha
neighborhood and emergency

Operators Logged Calls From Outside City
Paper As 911 Problems Persisted

By LaMonica Peters
Wednesday, March 30, 2016 at 11:25 PM EDT

MotherJones

POLITICS   ENVIRONMENT   FOOD   MEDIA   CRIME & JUSTICE   PHOTOS   INVESTIGATIONS   MAGAZINE

8 Cities Where 911 Systems Recently Failed

Emergency dispatch problems: Coming to a city near you?

DANA LIEBELSON   AUG. 5, 2013 6:00 AM

Phil's 1st Pix/Flickr

Glitch Takes Down Oakland Police Radio System, Computer Dispatch

May 6, 2016 8:33 AM By Betty Yu

Filed Under: Communications, Oakland, Oakland Police Department, radio

Oakland Police Communications Go

LISTEN LIVE

KPIX 5 Studio   Oakland

POLICE RADIO PROBLEMS ⑤ KPIX

AGILE

Seamless feature upgrades and ready to integrate with other web-based NG9-1-1 tech.

AVAILABLE

Keep your systems running on a strong Internet connection during disasters or when hardware fails.

DEVICE AGNOSTIC

Deploy one web-based system and eliminate the need for separate "mobile" procurements.

SECURE

FBI CJIS compliant and less prone to local ransomeware attacks.

SCALABLE

Easier and quicker to implement and upgrade across multi-agency environments.

It's all about the servers

Cloud Software Eliminates the Cost & Maintenance Associated with On-Premise Implementation

Software Licenses — **9%**

Customization & Implementation

Hardware

IT Personnel — **91%**

Maintenance

Training

TCO

"77% less than On-Premise Software"

TCO — **68%** Subscription Fee

32% Customization, Implementation & Training
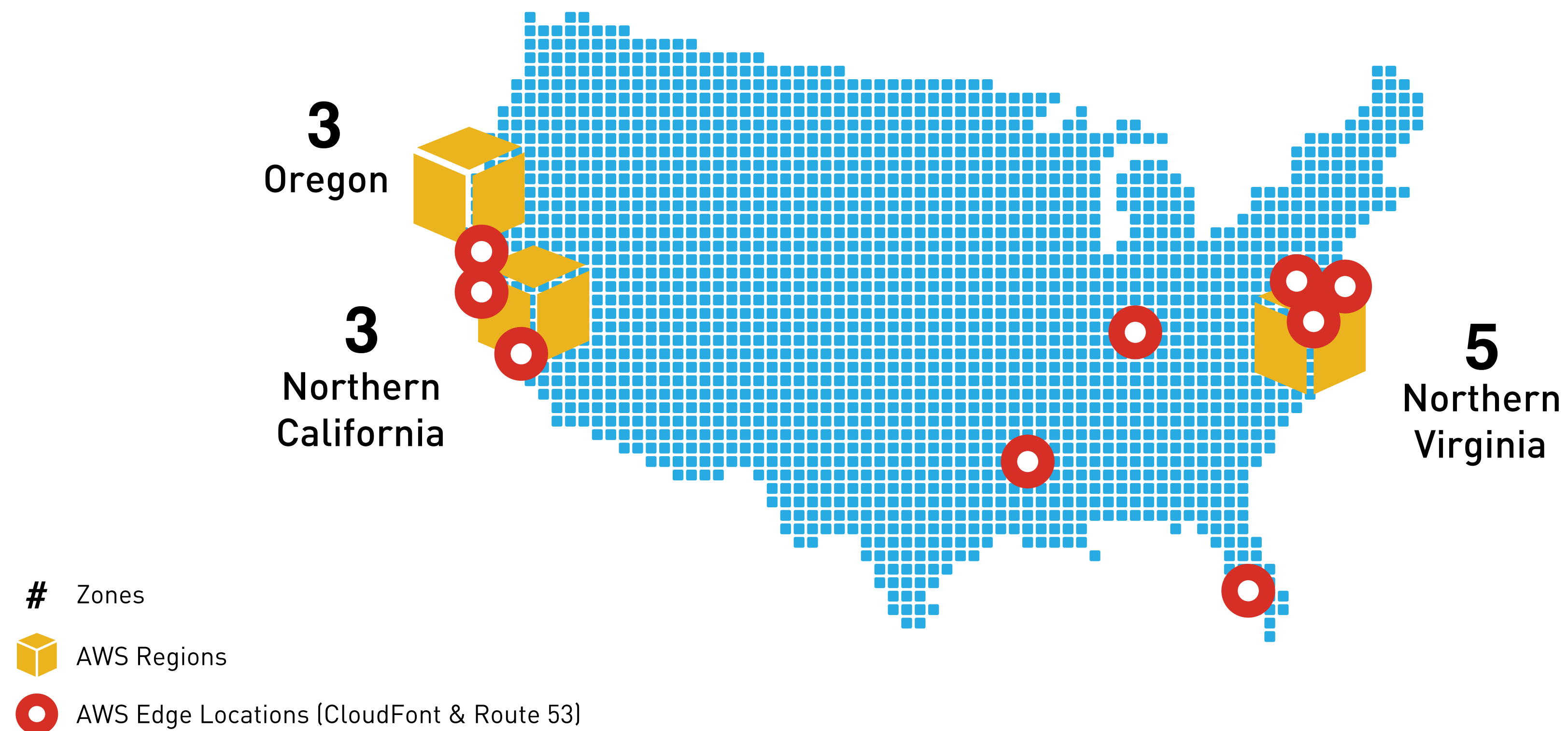
On-Premise Software

Cloud Computing
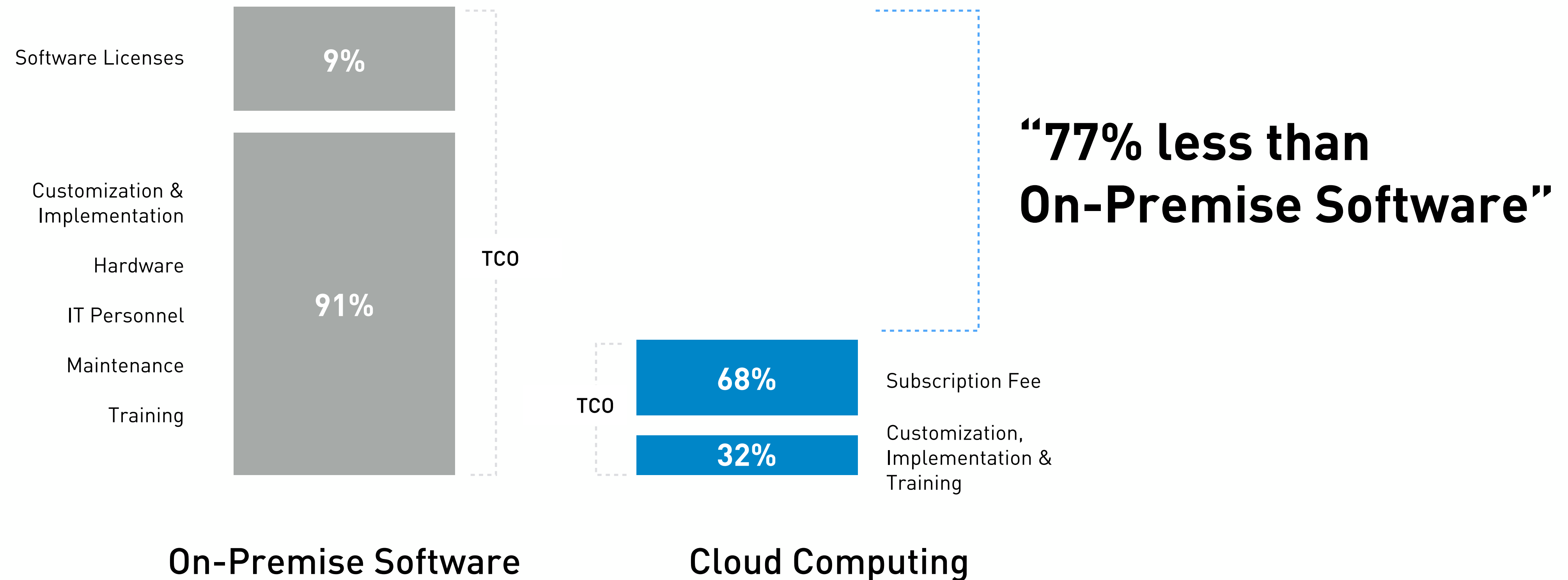
Source: Yankee Group DecisionNote Technology Analysis

But the Servers Don't Disappear...

National Amazon Web Services Network Architecture

3 Oregon

3 Northern California

5 Northern Virginia

Zones

AWS Regions

AWS Edge Locations (CloudFont & Route 53)
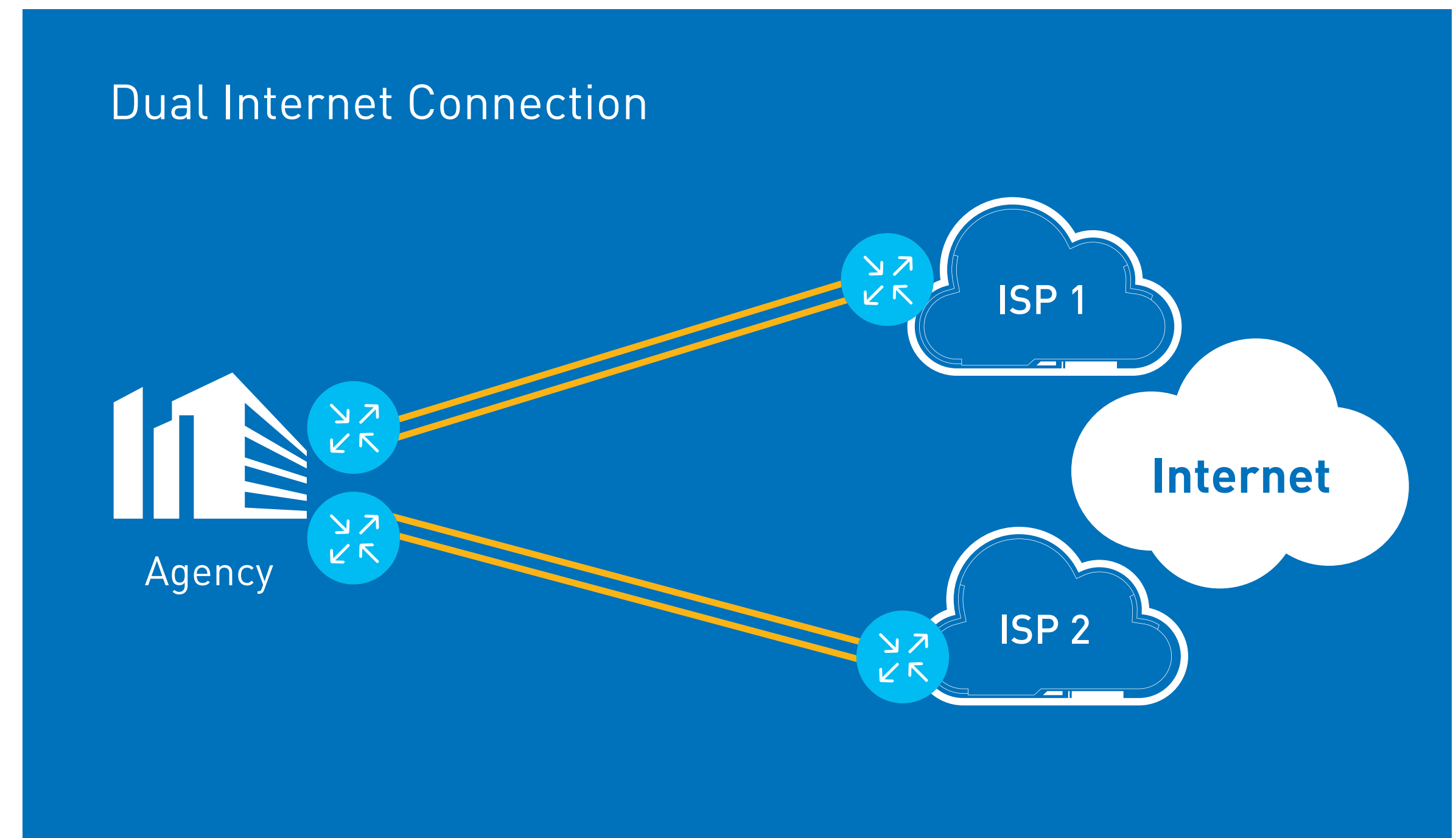
Differences for Users

- Not that much!

- Log into a web-based application, either in browser or installed to desktop

Differences for IT & System Admin

- A strong Internet connection becomes the primary IT responsibility

- Internal change management is required to adapt to more quickly evolving technology

Dual Internet Connection

ISP 1

Internet

Agency

ISP 2

Implementation plan tips

Project Implementation Plan

1 MONTH	1 MONTH	6-9 MONTHS	1-2 MONTHS	1 MONTH		1 MONTH
Project Kick Off	Technical Scoping	Product Development	Testing & Validation	Training & Launch	System Go Live!	Project Closure & Review

But Wait.. Don't Just 'Flip the Switch'

Pre-Contract Sign

Establish what your agency needs and what your vendor can provide before you get to the Scope of Work.

- Data Migration
- Uptime and Availability (Service Level Agreement)

Tip: Allow your vendor to conduct a department assessment to so you can evaluate the implementation plan as much as the product itself.

| Project Kick Off | Technical Scoping | Product Development | Testing & Validation | Training & Launch | System Go Live! | Project Closure & Review |

Kickoff

1 Month

Tip: Identify internal working groups that include decision makers and end users alike.

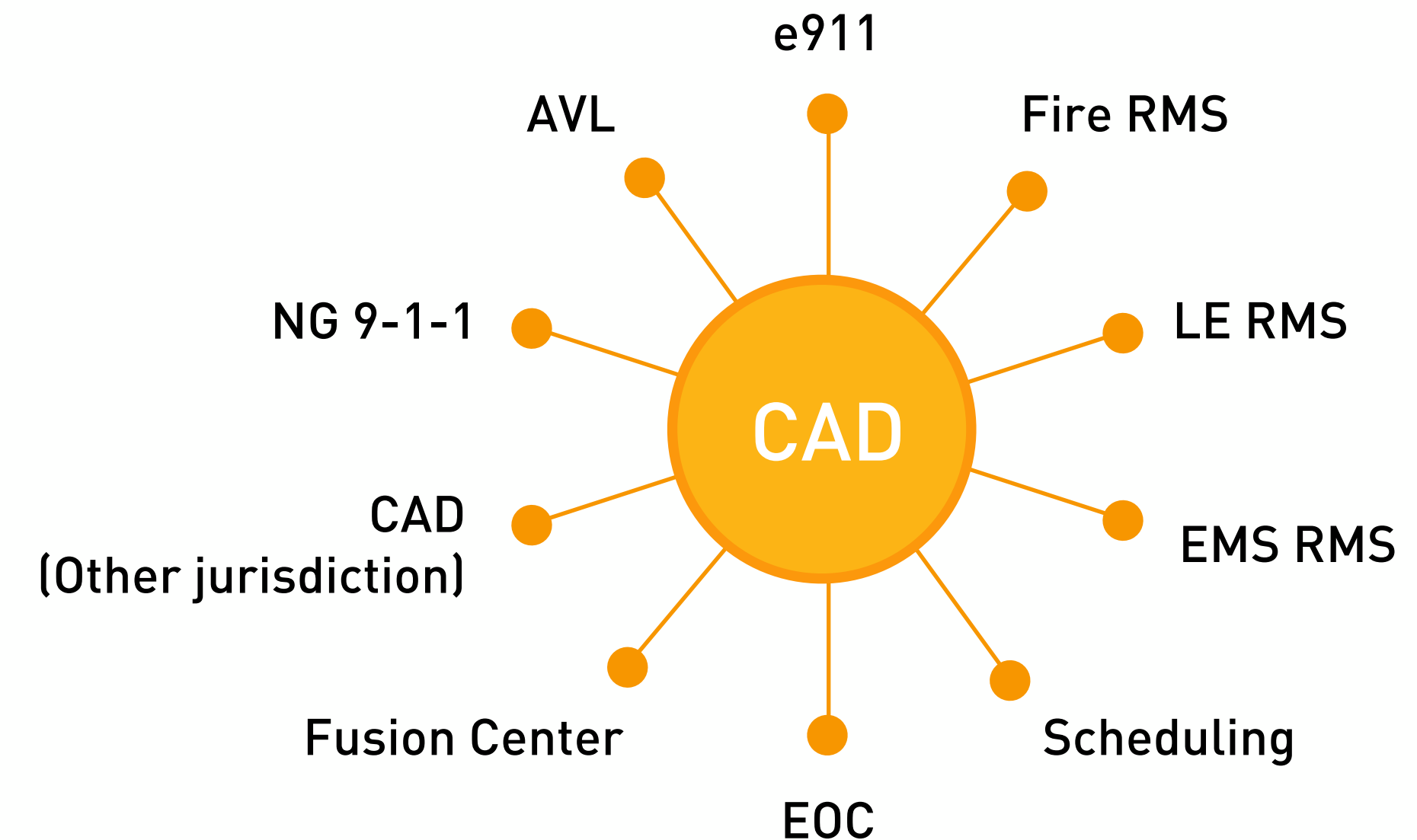| Project Kick Off | Technical Scoping | Product Development | Testing & Validation | Training & Launch | System Go Live! | Project Closure & Review |

Phase 2: Technical Scoping

1 Month

Tip: Get in the weeds with your vendor! Make sure they understand every policy and workflow.

e911

AVL

Fire RMS

NG 9-1-1

LE RMS

CAD

CAD (Other jurisdiction)

EMS RMS

Fusion Center

Scheduling

EOC

| Project Kick Off | Technical Scoping | Product Development | Testing & Validation | Training & Launch | System Go Live! | Project Closure & Review |

Phase 3: Product Development

6-9 Months

Tip: Schedule regular check points with your vendor to ensure the project stays on track.

Project Kick Off	Technical Scoping	Product Development	**Testing & Validation**	Training & Launch	System Go Live!	Project Closure & Review

Phase 4: Testing & Validation

1-2 Months

**Tip:** Test every aspect of the implementation and give your vendor a grade before the launch date.

Deadzone Testing at CCPD

| Project Kick Off | Technical Scoping | Product Development | Testing & Validation | Training & Launch | System Go Live! | Project Closure & Review |

Training & Launch

1 Month

Tip: Make sure department policies are ready to support new technology and workflows.

| Project Kick Off | Technical Scoping | Product Development | Testing & Validation | Training & Launch | System Go Live! | Project Closure & Review |
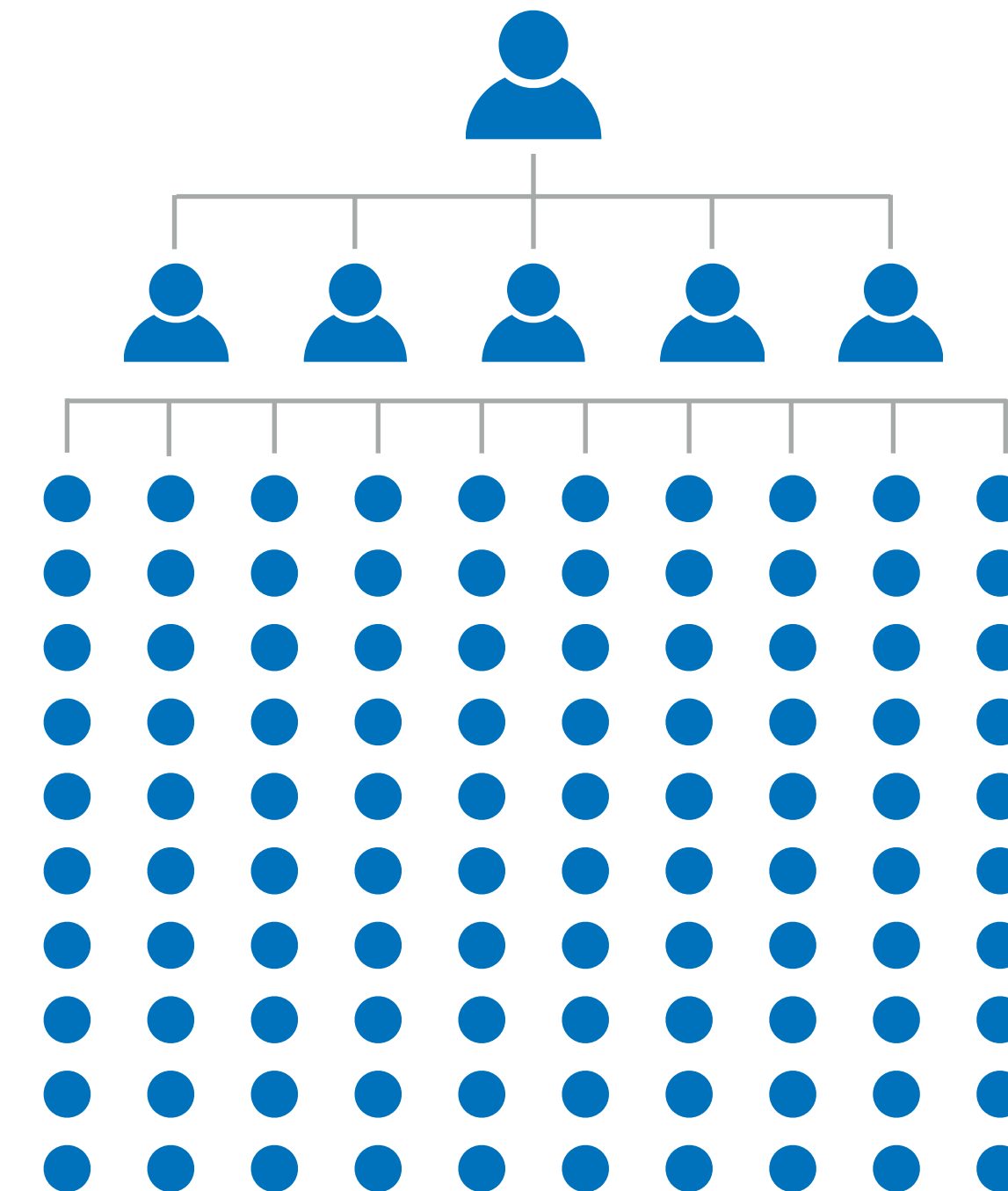
System Go Live!

1 Week

Tip: Amp up vendor on-site support for the first shifts on the new system, just in case!

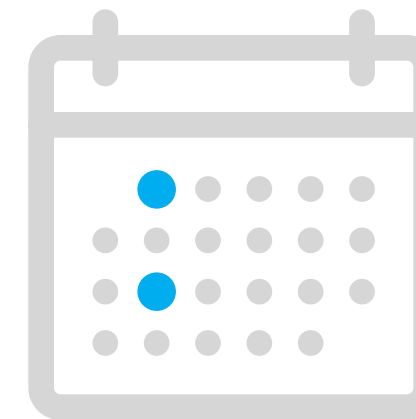| Project Kick Off | Technical Scoping | Product Development | Testing & Validation | Training & Launch | System Go Live! | Project Closure & Review |
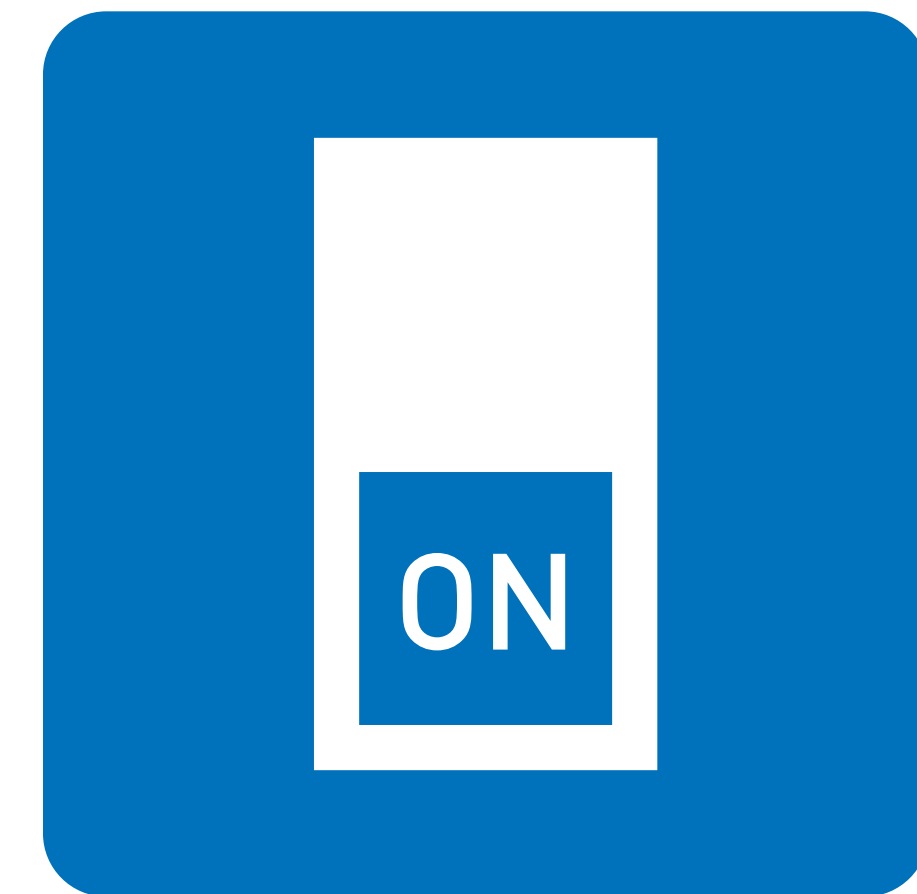
Project Closure & Review

1 Month

Tip: Get the most out of your cloud subscription! Collect as much as user feedback as possible and transfer any feature requests to your vendor's release schedule.

Bi-weekly releases
address minor fixes
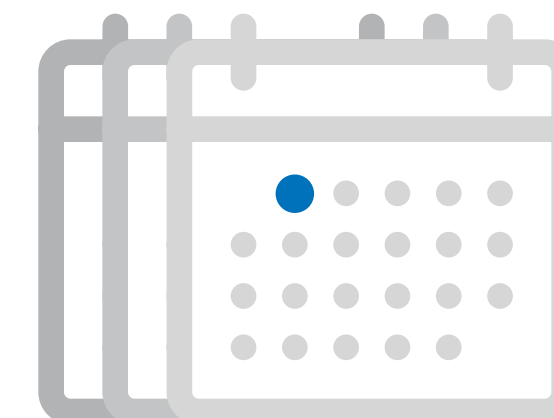
Major quarterly upgrades
address substantial product enhancements based on user feedback & research

Ask Your Vendor

1. Do you offer a true, multi-tenant cloud solution?

2. What are the terms of your Service Level Agreement?

3. How do you ensure system uptime? Is it measured and tracked?

4. Does your cloud solution comply with FBI CJIS standards?

5. How do you handle disaster recovery?

6. What backup network connectivity options do you recommend?

7. Does the solution use an open API to interface with other vendors and datasets?

8. How does your solution account for different user groups?

THANK YOU.