The ABC’s of ACD in the PSAP

What is it? and Why do I care?
Where we’re going…

- What is ACD?
  - Definition
  - Brief history of call distribution
    - What ACD is NOT
    - What ACD IS
- Simple ACD example
- Considerations for the 9-1-1 call center
  - Why would I need or want this?
  - What effects will it have?
- Identifying the right ACD system
- Design and implementation
What is ACD?
What is ACD?

**Automatic Call Distribution**

- Using the power of the PBX to *automatically distribute calls* among call takers in order to optimize service delivery, resource utilization, efficiency, etc.

- Many flavors, many options

- Looks can be deceiving

- Let’s look back…
In the beginning…

Right for today.
Ready for tomorrow.

This is NOT ACD!

Life on the line.

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Key Systems

- Switchboard shrinks to tabletop console
- Cables become bundles of thin wires
- Keys light and flash to indicate status
- Shared ‘n’ squared
- Press the key: answer, join, retrieve a held call
- Quickly adopted by 9-1-1 call centers
The Private Branch eXchange (PBX)

- Solid-state electronics, inexpensive computers, & telephony standards
- Initially, automatic routing of calls to destination (extension, voice mail, operator, etc.)
- Fine for a business, but inadequate for most call centers (especially 9-1-1)
- Call center managers began to demand more control over call distribution
- STILL, we do not have ACD, BUT WE’RE GETTING CLOSE!
• Three crucial features were needed:
  – Call queuing
  – Call/queue prioritization
  – Agent groups based on roles

• Basic ACD or UCD (Uniform Call Distribution) – distribute call load uniformly among call takers
  – UCD schemes include:
    • Ring–all (carry–over from key system shared ‘n’ squared)
    • Circular
    • Linear
    • Longest–idle
UCD makes assumptions...

- All call takers are trained with the same skill sets and toward the same skill levels
- ‘Fairness’ is important (# of calls taken by each call-taker)
- Average call length doesn’t matter; only the number of calls matters
- All callers have the same need

But we all know that this is not only RARELY true, it is almost NEVER true!
Basic ACD/UCD

- One call taker – one call
- Easier to configure and manage
  - Few queues & priorities
  - Priorities are system-wide
- Benefits
  - Improved efficiency
  - Better utilization of limited resources
  - Reduced fatigue
  - Increased sense of fairness and teamwork
A Simple ACD Example
ACD Example – Setup

Right for today.
Ready for tomorrow.

• 4 Queues
  – 9-1-1
  – Admin
  – 9-1-1 Overflow (calls in 9-1-1 queue for >30 seconds)
  – Admin Overflow (calls in Admin queue for >2:00 minutes)

• 3 Agent groups
  – 9-1-1 (take 9-1-1 Overflow calls 1\textsuperscript{st}; 9-1-1 calls 2\textsuperscript{nd}) = Why?
  – Admin (take Admin overflow calls 1\textsuperscript{st}; Admin calls 2\textsuperscript{nd}) =
  – Dispatch (take 9-1-1 overflow calls 1\textsuperscript{st}; Admin overflow 2\textsuperscript{nd}) =

• 2 Priorities
  – High (9-1-1/Emergency) & Low (Admin/non-emergency)
ACD Example – Call Flow

Tandem
Central Office

Agent A
Agent B
Agent C
Agent E
Agent D

02:59

911 Queue
Admin Queue
911 Overflow
Admin Overflow

911 Queue

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Ready for tomorrow.

Life on the line.

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Skills-based ACD

- Outwardly- vs. internally-focused
- Route calls based on caller, not just trunk/line info or ANI/CLID
- Transfer calls to a ‘skill set’, not an individual or group
- Requires either
  - Triage call takers/screeners (emergency calls)
  - Auto-attendant (non-emergency calls)

Myth: ACD requires the use of auto-attendant
Skills-based ACD (cont’d)

Call takers belong to Skillsets
Skillset = Queue
Delivery based on callers’ needs
Bells & whistles
- Observe
- Whisper/Coaching
- Barge-in
- Supervisor/assistance request
- Forced answer
- Pre-recorded greetings by skillset

Myth: ACD requires the use of forced answer
Network-based ACD (Extreme ACD)

- Combine resources across multiple PSAPs into larger ‘virtual’ skill sets
- Adds resiliency
- Share resources and skills from anywhere
- Leverage expensive training and expertise
PSAP Considerations
(Why do I care?)
Operational Considerations

- Call takers know a call ringing is a call meant for *them*
- Pre-recorded greetings
- Granular reporting
- Accurate needs analysis
- Hybrid solutions offer the best of both
Benefits

- **Improved public safety**
  - More efficient service delivery
- **Reduces stresses**
  - Call takers receive a single call at a time
  - Calls are only sent to appropriate resources
- **Better utilization of valuable resources**
- **System selects ‘best’ call taker faster than is humanly possible**
Identifying the right ACD system
Get Educated

Is ACD right for you?
  - If it ain’t broke…

Learn the terminology

Understand the implications
  - Operational
  - Maintenance
  - Administrative

How does YOUR call center operate?
  - Engage the call takers
  - Engage supervisors
Ask the Experts

A good technology partner will:

• Help you understand the features and functionality available to you
• Take the time to understand your specific needs
• Help you clearly identify your business goals

All before they ever present a product solution
How do I design and implement a good ACD scheme?
K.I.S.S.

- Keep It Seriously Simple (OAM)
- Always provide a none-of-the-above option (voice mail or ?) when no resources are available
  - Avoid ‘voice mail jail’ (ACD ≠ auto-attendant)
  - Provide shortcut to live operator (‘press zero for an operator’)
- Put your partner’s expertise to work for you
- Understand your call takers and callers
- Be mindful of local cultural issues
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questions
thank you