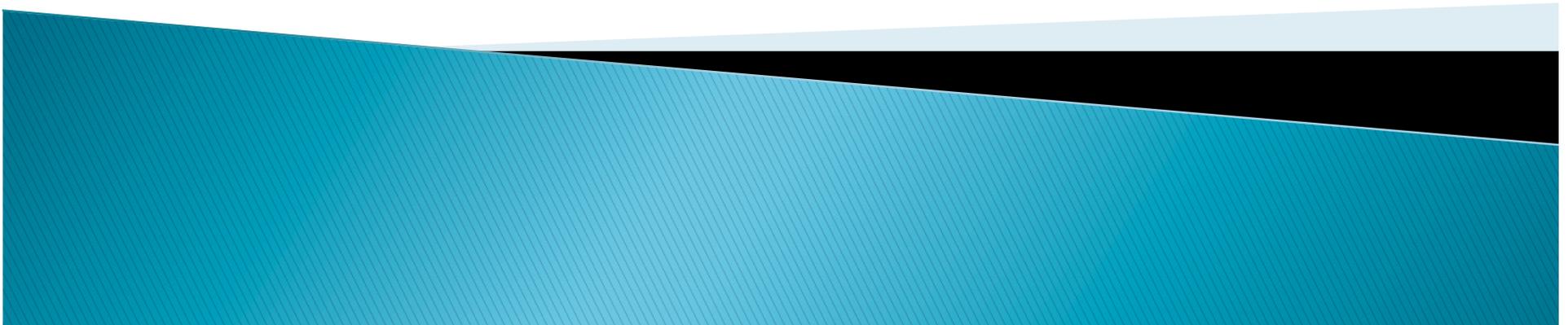


SpeechView Feature TOI

Connection 8.0.2

Jim Kerr



Overview

- ▶ Subscription Service
- ▶ Transcribes voice messages
- ▶ IMAP
- ▶ SMS and SMTP notifications
- ▶ Multilingual



Third-Party Service

- ▶ Transcriptions are done off-site
- ▶ SMTP transport
- ▶ Human-Assisted



Security

- ▶ Transport uses S/MIME
- ▶ No identifying information included
- ▶ Private messages not transcribed
- ▶ Secure messages configurable



What is transcribed?

- ▶ Voice messages to users and DL's
- ▶ Governed by **recipient's** Class of Service
- ▶ Interview handlers
- ▶ Forwarded messages
- ▶ Truncated at 500 characters



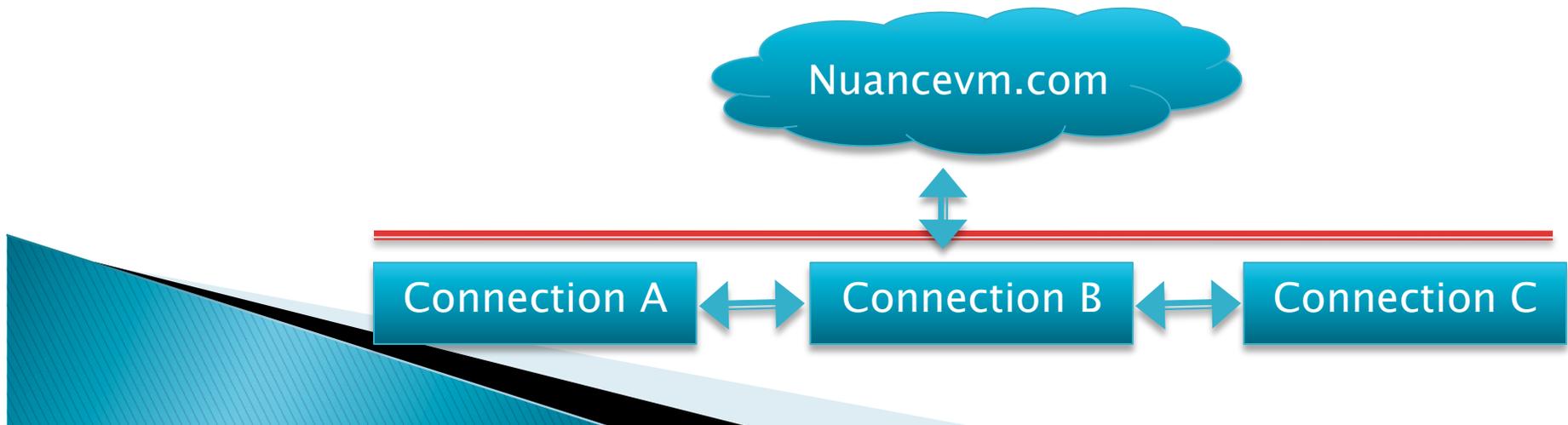
What is NOT transcribed?

- ▶ Dispatch messages
- ▶ Broadcast messages
- ▶ Private Messages
- ▶ Secure messages (configurable)
- ▶ Messages with no recipients in an enabled COS
 - (Even if the sender has the feature enabled)



SpeechView Proxy

- ▶ In an intra-site network, one Connection server may act as a proxy for others.
- ▶ Simplifies configuration
- ▶ Each node needs its own SpeechView license
- ▶ No license pooling
- ▶ Internode communication is SMTP

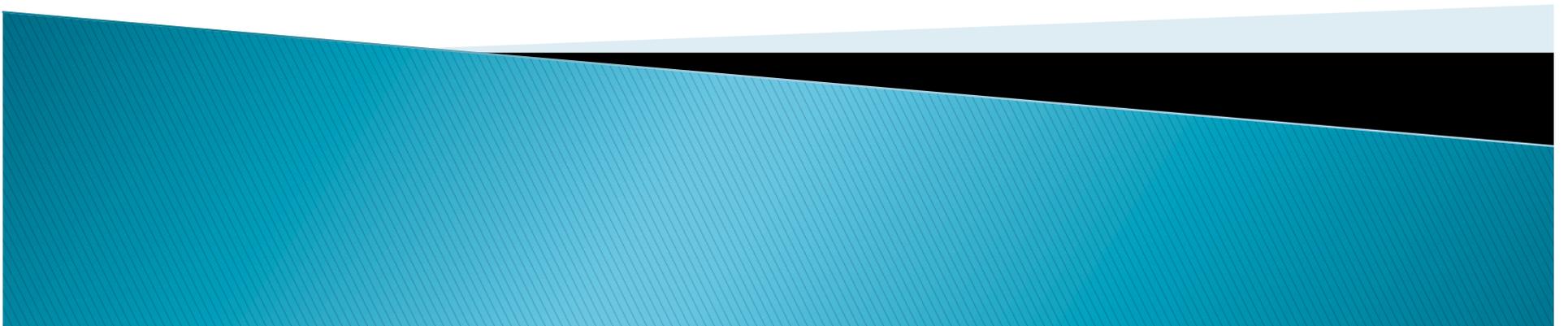


Active/Active Clusters

- ▶ License is cluster-wide
- ▶ SpeechView Processor is only activated on the acting primary



SpeechView Configuration



Configuration Steps

- ▶ Email routing (for incoming)
- ▶ SmartHost (for outgoing)
- ▶ Install license
- ▶ COS
- ▶ Service Settings
- ▶ Register
- ▶ Test!
- ▶ Personal Settings

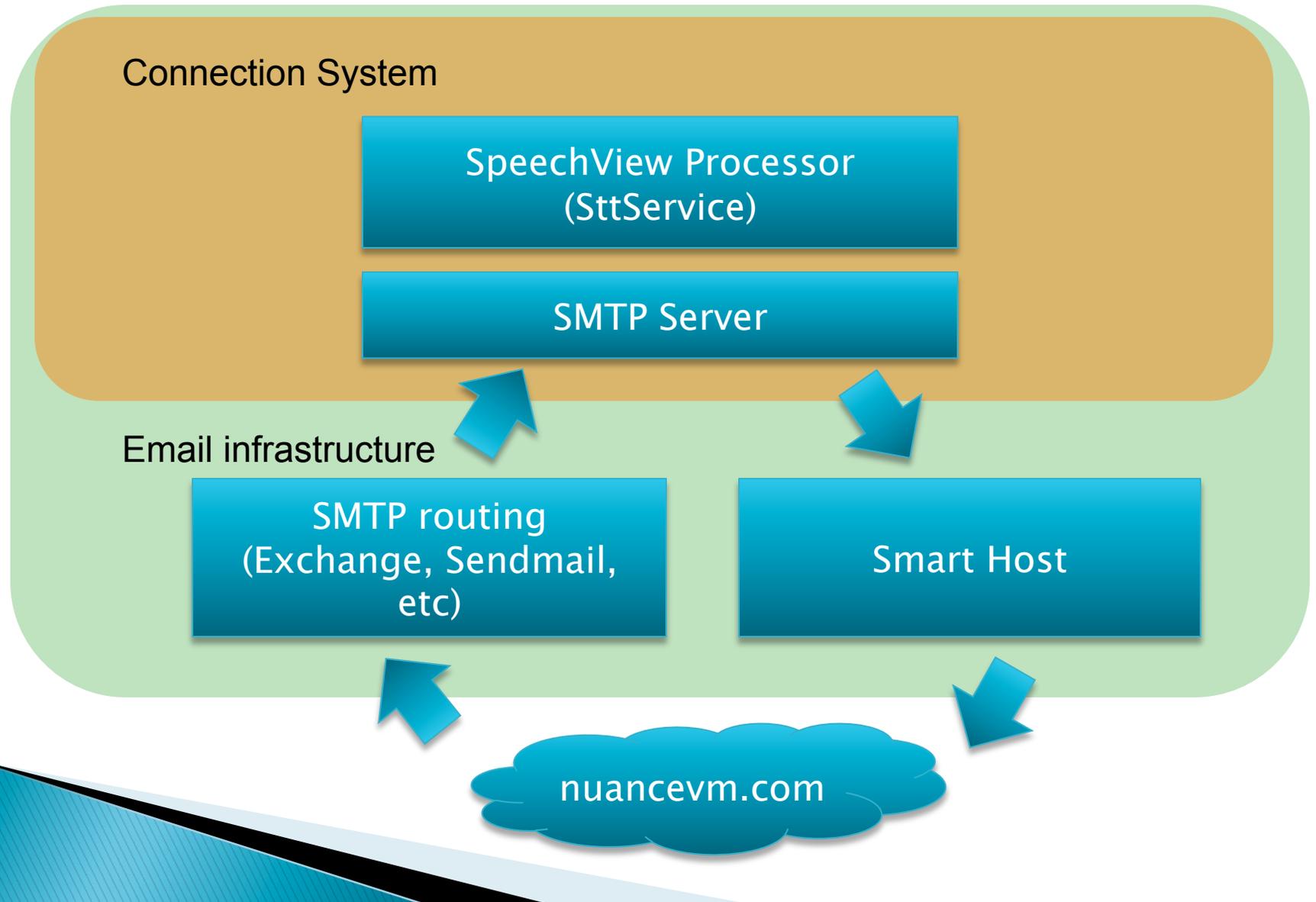


Email Routing

- ▶ Organization's email infrastructure must forward incoming SpeechView mail to **stt-service@<connection smtp domain>**
- ▶ Connection's SMTP config must be set to trust the incoming router, or allow untrusted connections
- ▶ Outgoing SpeechView traffic is routed through the smarthost.



Email Routing



Licensing

Licensed users (COS enabled) will have incoming messages transcribed.

- ▶ User Count
- ▶ Expiration Date
- ▶ Trial licenses available
- ▶ Can be rehosted



Class of Service

- ▶ Checkbox under Licensed Features
- ▶ Secure message option:
 - Do not transcribe
 - Transcribe
 - Transcribe & allow notifications
- ▶ Allow IMAP access to mailbox if desired



Service Configuration

- ▶ Access Directly
 - Incoming SMTP address.
 - Email sent from outside the organization must be routed to the stt-service@ alias on this smtp server.
 - Advertise Proxy Service to other Cxn nodes
- ▶ Access through a Proxy Location
 - Proxy location must be set up to access directly and must be advertising proxy service



Register and Test

- ▶ “Register” exchanges license info with nuancevm.com. Transcriptions will not work until registration is successful.
- ▶ “Test” does a real transcription operation with Nuance.
- ▶ In a proxy setup, only the proxy system must “Register”, any system can “Test”

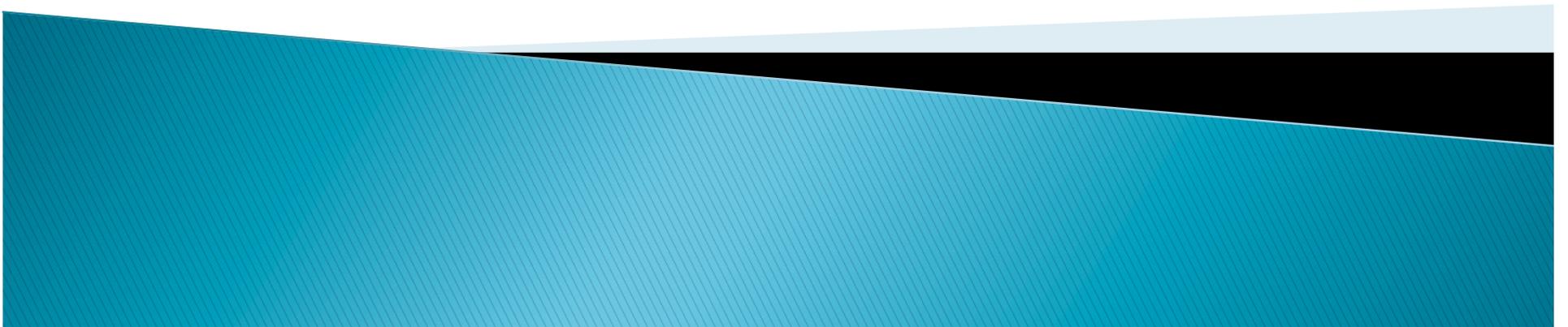


Mobile Devices

- ▶ SMS and SMTP notification devices
 - Transcription notifications must be enabled on the device via CUCA or PCA
- ▶ Users can forward their cell phone's voice mail to their Connection mailbox
 - Example: <http://www.mobilitee.org/archives/514>



Troubleshooting SpeechView



What can go wrong?

- ▶ Organizational SMTP routing
- ▶ Connection SMTP Server config
- ▶ License expiration
- ▶ Inter-node communication (proxy setup)
- ▶ Configuration gotchas



First Steps

- ▶ Try the “Test” button on the SpeechView configuration page.
- ▶ Check the License page for warnings
- ▶ Verify connectivity with “run cuc smtpptest”
- ▶ Gather micro traces
 - SMTP Server
 - SpeechView Processor (SttService)
 - MTA
 - Notifier



SMTP routing

- ▶ New CLI command:
run cuc smtpstest <email address>
 - Pass it an *external* email address.
- ▶ Logs from organization's email smart host or email routing software
 - Ensure message is getting forwarded to stt-service@my.connection.domain
 - Ensure my.connection.domain is resolvable in DNS



Outgoing Message Flow

- ▶ New incoming voice message for delivery
- ▶ At least one recipient has SpeechView enabled
- ▶ MTA posts request to SQL table UnityDynDb:vw_SttRequestQ
- ▶ SttService checks the SttRequestQ and updates status to Pending
- ▶ SttService builds an SMTP message and writes it to the SMTP pickup directory
- ▶ SMTP server sends the request via Smart Host



Incoming Message Flow

- ▶ Nuance sends message to “Incoming SMTP address”
 - ▶ Organization forwards the message to stt-service@my.connection.server
 - ▶ Connection SMTP server receives message and writes it to the stt drop directory
 - ▶ SttService checks drop directory and updates UnityDynDb:vw_SttRequestQ with results
 - ▶ MTA checks vw_SttRequestQ and adds text to the message in the Connection mail store.
- 

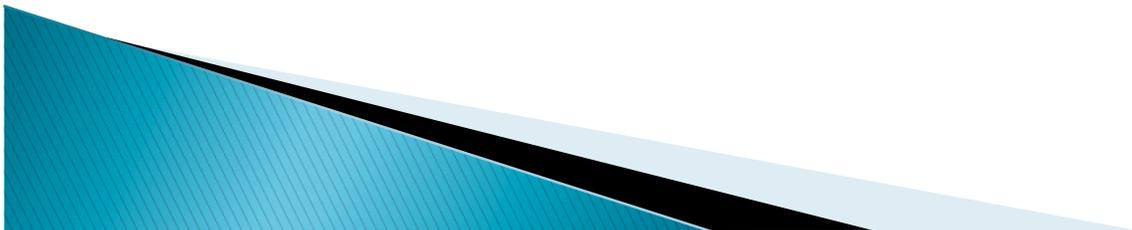
Using a Proxy

- ▶ SMTP messages are routed to stt-service@ alias on the proxy
- ▶ Responses are routed to stt-service@ user on the local machine.
- ▶ Check digital network health with Serviceability “Voice Network Map” tool.
- ▶ Troubleshoot the proxy.



Configuration Gotchas

- ▶ Class of Service settings
 - Special setting for secure messages
- ▶ Private messages are never transcribed.
- ▶ SMTP server trust settings
- ▶ Email gateway's DNS might not resolve Connection's SMTP domain



License Violations

- ▶ If the license expires, transcriptions stop
- ▶ If usage exceeds the licensed user count, only the first n users can use the feature on that day.
- ▶ 30-day warnings on the License page in CUCA.



Licensing Example

1. May 1 2010: Customer installs a license for 100 users.
2. July 1: Customer adds another license for 100 more users, total of 200.
3. 200 users have the COS enabled and are enjoying the feature a great deal.
4. May 1 2011: the first license expires. $200 > 100$, so we have a license violation.
5. The first 100 people to use the feature each day will receive transcriptions.
6. July 1: Transcriptions stop working entirely.



Filesystem

- ▶ `/var/opt/cisco/connection/`
 - `spool/stt/drop` : **SpeechView Processor drop dir**
 - `spool/stt/diag` : **Last 10 incoming/outgoing SpeechView messages**
 - `spool/stt/badmail` : **SpeechView badmail dir**
 - `security/certs/stt_vendor.p7b` : **The vendor's PKCS7 public certificate chain**
 - `security/certs/stt_ca_cert.der` : **Self-signed root CA for generating the local key pair**



Fore more info

- ▶ vw_SttRequestQ: see the Data Dictionary, <http://databot/docs/murnau/UnityDynDb.pdf>
- ▶ Informal project wiki: <http://zed.cisco.com/confluence/display/CUC/Connection+Speech+to+Text#ConnectionSpeechtoText-Troubleshooting>

