



Enhouse  
Interactive

# Quality Management Suite

## Product Updates

# Agenda

- ◆ Enghouse Acquisitions
- ◆ Release Highlights and Summary
- ◆ Feature Details

# Enghouse Acquisitions - Vidyo

<https://www.nasdaq.com/press-release/enghouse-systems-acquires-vidyo-inc.-2019-05-15>



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ABOUT

## Enghouse Systems Acquires Vidyo, Inc.

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Acquisition expands Enghouse Interactive product portfolio



MARKHAM, ON and HACKENSACK, NJ, May 15, 2019 /PRNewswire/ -



Enghouse Systems Limited ([TSX:ENGH](#)) announced today it has acquired Vidyo, Inc. for a purchase price of approximately \$40 million. Vidyo's annual revenue is approximately \$60 million.



# QMS v7.3 Release Highlights

- ◆ Changes:
  - ◆ All QMS server-side components converted to 64-bit, improving performance
  - ◆ Performance testing completed and documented for Recording and Media Processing services
  - ◆ Dark theme added to the user interface preferences
  - ◆ Transcription engine license consumption notifications
  - ◆ Documentation improvements
  - ◆ Separation of the Pause and Stop feature permissions for MiFID compliance
  - ◆ Mitel high availability supported
  - ◆ MS SQL Server 2017 supported

# QMS Product Release Highlights

- ◆ Added support for NPCAP
  - ◆ WinPcap has been the de facto standard library for packet capture and link-layer packet injection for over a decade. Many open source and commercial network tools use WinPcap for network access and filtering, but it has been unmaintained since 2013 and is no longer supported.

| Feature                                      | Npcap                 | WinPcap                                      |
|--|-----------------------|--|
| <i>Info</i>                                  |                       |  |
| Actively maintained and supported            | Yes                   | No (WinPcap development was terminated)      |
| Last release date                            | September 4, 2019     | March 8, 2013                                |
| libpcap version                              | 1.9.0 (2019)          | 1.0.0 (2008)                                 |
| License                                      | Free for personal use | BSD-style                                    |
| Supported commercial/redistributable version | Yes (Npcap OEM)       | No (WinPcap Professional product terminated) |

# NPCAP

- ◆ The default packet capture engine for QMS is WinPcap
- ◆ Customers are now able to install Npcap, replacing WinPcap as the packet capture engine
- ◆ Note that customers may be liable to license fee payments for Npcap
  - ◆ Companies can install Npcap on to a maximum of five systems free of charge
  - ◆ Installing on to more than five systems will require an OEM Internal license to be paid
- ◆ Npcap to be installed in WinPcap compatibility mode or native mode

# Performance and Scalability

- ◆ All QMS libraries and components have been upgraded to 64-bit only.
- ◆ Hardware requirements documentation updated accordingly.

# Hardware Specifications

- ◆ Calls Only (Co-Located DS, CRS and MPS)
  - ◆ **LESS THAN 50 SIMULTANEOUS CALL RECORDINGS**
    - ◆ Processor: Haswell 2.2 Ghz or better, 4 logical CPUs minimum
    - ◆ Memory: 4GB memory (minimum)
    - ◆ Disk used for QMS local storage locations:
      - ◆ SSD (recommended)
- ◆ Calls Only (Co-Located CRS and MPS)
  - ◆ **50 TO 100 SIMULTANEOUS CALL RECORDINGS (Dedicated Server)**
    - ◆ Processor: Haswell 2.2 Ghz or better, 8 logical CPUs minimum
    - ◆ Memory: 8GB memory (minimum)
    - ◆ Disk used for QMS local storage locations:
      - ◆ 15k RPM drive (minimum)
      - ◆ SSD (recommended)



# Hardware Specifications

- ◆ DataService (Dedicated Server):
  - ◆ Local SQL Server
    - ◆ **LESS THAN 200 TOTAL USERS**
    - ◆ Processor: Server class 4 logical cores minimum
    - ◆ Memory: 6 GB memory (minimum)

More details can be found in QMS System Design Guide on page 19

# New Features

- ◆ Key Objective: Speech-to-text transcription
  - ◆ Introduce a speech-to-text transcription engine
  - ◆ Provide full text indexing for all text media
- ◆ Dashboard and reporting enhancements
  - ◆ New home page dashboard showing key data and statistics
  - ◆ Improvements to the Total Counts Report
- ◆ Fully Documented SDK
  - ◆ Includes use cases and sample code (internal and external versions)
- ◆ New Media Processing Server

# Speech-to-text Transcription

- ◆ Speech-to-text takes an audio recording and converts it to an XML text document with tags, sentences, capitalisation, currency symbols, number conversion, speaker separation, etc.
- ◆ QMS uses a third party engine supplied by Nuance, called Nuance Transcription Engine (NTE)
- ◆ Two options are available
  - ◆ Rules-based, using a call recording policy for automatic transcription
  - ◆ On-demand, using the recorded calls screen for historic recordings
- ◆ Transcriptions can be used in evaluations like other media
- ◆ A new text indexing engine is also available that indexes all text communications to allow for keyword and phrase searches, like Google search

# Speech to Text Screenshots

The screenshot displays the Quality Management Suite interface. The main window shows call details for a recording titled "Tom Brady - 20/11/2018 13:55:01". It includes a waveform, a transcription of the call, and transcription settings. A pop-out window shows a detailed view of the transcription media, including a waveform and a list of transcription segments. The transcription settings section includes a dropdown for "Accurate - Processes at 1x real time" and a table for "Transcription Operating Mode (Speed vs Accuracy)".

**Call details showing transcription**

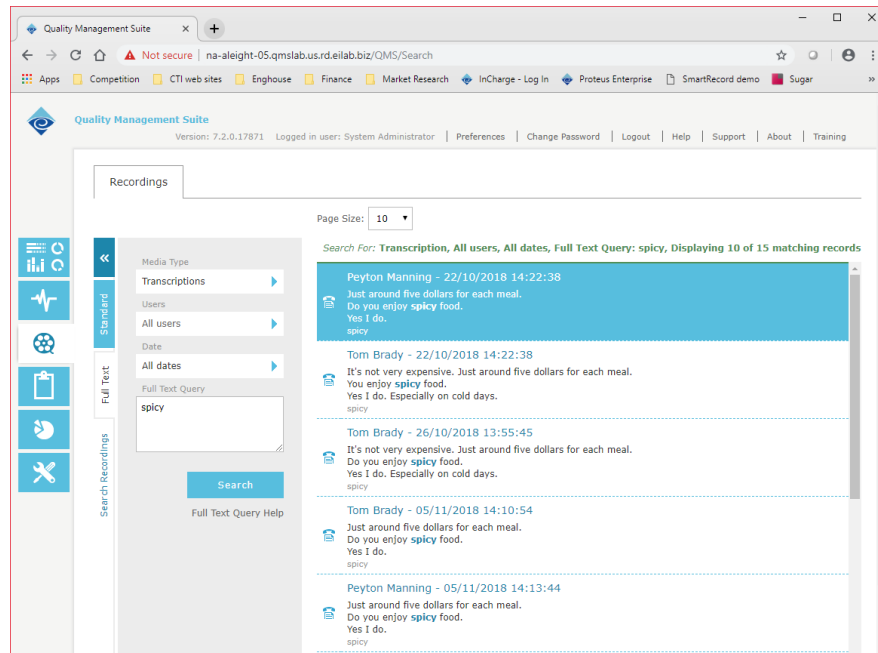
**Call details pop-out**

**Configuring rules-based transcription**

- (1) transcription speed – 1x = most accurate, 10x = best performance
- (2) multiple languages are available

# Full Text Indexing

- ◆ A new menu option has been created in the Recordings section – Full Text. This is only visible if the text indexing server is deployed
- ◆ A separate server is required for text indexing
- ◆ This will search all text recordings and transcriptions for the word or phrase given
- ◆ There are a number of search operators including AND, OR, NOT, single character and sequential character wildcards.



The screenshot displays the Quality Management Suite web application interface. The browser address bar shows the URL: `na-aleight-05.qmslab.us.rd.eilab.biz/QMS/Search`. The page title is "Quality Management Suite" and the version is 7.2.0.17871. The user is logged in as "System Administrator".

The interface features a search bar labeled "Recordings" and a "Page Size" dropdown set to 10. A search filter sidebar on the left includes options for "Media Type" (Transcriptions), "Users" (All users), "Date" (All dates), and "Full Text Query" (spicy). A "Search" button is located below the filter sidebar.

The search results are displayed in a list format, showing 10 of 15 matching records. The search criteria are: "Search For: Transcription, All users, All dates, Full Text Query: spicy, Displaying 10 of 15 matching records". The results include:

- Peyton Manning - 22/10/2018 14:22:38  
Just around five dollars for each meal.  
Do you enjoy spicy food.  
Yes I do.  
spicy
- Tom Brady - 22/10/2018 14:22:38  
It's not very expensive. Just around five dollars for each meal.  
You enjoy spicy food.  
Yes I do. Especially on cold days.  
spicy
- Tom Brady - 26/10/2018 13:55:45  
It's not very expensive. Just around five dollars for each meal.  
Do you enjoy spicy food.  
Yes I do. Especially on cold days.  
spicy
- Tom Brady - 05/11/2018 14:10:54  
Just around five dollars for each meal.  
Do you enjoy spicy food.  
Yes I do.  
spicy
- Peyton Manning - 05/11/2018 14:13:44  
Just around five dollars for each meal.  
Do you enjoy spicy food.  
Yes I do.  
spicy

# Dashboard and Reporting

- ◆ When logging into QMS users will now be presented with a dashboard home page
- ◆ Users can elect to have an alternative page as their home page
- ◆ The dashboard shows data such as:
  - ◆ Calls in Progress
  - ◆ Total number of recordings for selected time period
  - ◆ Most recent recordings
  - ◆ Recording counts over time
  - ◆ Storage usage over time
  - ◆ If licensed, some agent evaluation summary data
- ◆ In Reports, the Reports and Dashboard tabs have been swapped to provide an more logical workflow

# Dashboard Sample

The screenshot shows a web browser window displaying the Quality Management Suite dashboard. The dashboard includes several widgets: 'Calls in Progress' showing 12 users, 0 active calls, and 0 recording calls; 'Total Recordings' showing 282 calls and 62 screen recordings; 'Recent Recordings' with a table of the top 10 results; 'Recording Counts Over Time' with a line chart; 'Storage Usage Over Time' with a bar chart; and 'User Summary' with a table of top results. A configuration panel for the 'User Summary' widget is open, showing options for the number of results (Top 10 Results), display type (Table), time period (Last 30 Days), and auto-update frequency (Refresh Every 5 Minutes).

| Name            | Start Time          | Length   |
|-----------------|---------------------|----------|
| Tom Brady       | 20/11/2018 13:55:01 | 00:01:30 |
| Peyton Manning  | 20/11/2018 13:55:01 | 00:01:26 |
| Tom Brady       | 20/11/2018 13:55:01 | 00:01:27 |
| Tom Brady       | 20/11/2018 12:37:47 | 00:01:27 |
| Peyton Manning  | 20/11/2018 12:37:47 | 00:01:27 |
| Sueki Takahashi | 19/11/2018 06:42:05 | 00:00:39 |
| Keiko Kitagawa  | 19/11/2018 06:42:05 | 00:00:40 |
| Sueki Takahashi | 16/11/2018 07:48:17 | 00:00:40 |
| Keiko Kitagawa  | 16/11/2018 07:48:17 | 00:00:39 |
| Keiko Kitagawa  | 14/11/2018 13:08:00 | 00:00:39 |

| Name           | Maximum  | Average  | Recordings |
|----------------|----------|----------|------------|
| Tom Brady      | 00:01:30 | 00:01:24 | 23         |
| Peyton Manning | 00:01:28 | 00:01:18 | 11         |

Widgets can be repositioned within the dashboard

- Each widget has a set of configuration parameters

- New widgets can also be created and existing ones removed

# Media Processing Server

- ◆ This new feature is designed to provide additional scalability and performance to QMS
- ◆ Currently the QMS Recording Server (RS) handles signalling (SIP, H.323, etc.), media processing (RTP, H.323, etc.) and media encoding (compression to Opus or MP3, optional encryption, removal to permanent storage)
- ◆ The Media Processing Server now takes responsibility for media encoding, increasing the performance of the RS, resulting in high call concurrency per server
- ◆ For small deployments all components can reside on one server



# Other Enhancements

- ◆ Microsoft SQL Server 2017 supported (not 2019)
- ◆ Windows Server 2019 supported
- ◆ Mitel high availability deployments are now supported
- ◆ The following Cisco UCM codecs are supported
  - ◆ iLBC
  - ◆ iSAC
  - ◆ Opus

# Key Resources

## ◆ Document Catalogue

| General                               | API  | Integration Guides                     |
|---------------------------------------|--|--|
| QMS Product Sheet                     | QMS API Help Documentation                   | Avaya CS1000 Integration Guide         |
| QMS Solutions Paper                   | <b>High Availability</b>                     | Avaya DMCC Integration Guide           |
| QMS Overview Presentation             | QMS High Availability Deployment Guide       | Avaya IP Office Integration Guide      |
| QMS Release Notes                     | <b>Optional Components</b>                   | Cisco Integration Guide, all variants  |
| QMS Product Lifecycle Policy          | Agent Evaluation Template Installer          | Innovaphone Integration Guide          |
| QMS Release Highlights Presentation   | Desktop Utility Guide                        | Mitel MiTAI Integration Guide          |
| QMS Regulatory Compliance White Paper | Migration Utility Guide                      | Mitel MiTAI with SRC Integration Guide |
| QMS Feature Matrix                    | Packet Forwarding Service Installation Guide | Port mirroring Configuration Guide     |
| <b>Technical</b>                      | QMS Soft Evaluators Quick Start Guide        | ShoreTel, all variants                 |
| QMS Supported PBX Matrix              | QMS User Management for Vocal Coach          | Skype for Business Integration Guide   |
| QMS Installation Guide                | Screen Recording Installation Guide          |  |
| QMS System Design Guide               | Solr Integration Guide                       |  |
| QMS Upgrade Guide                     | Transcription Services                       |  |

◆ <https://partnerportal.enghouseinteractive.com/>