



Telephone System Upgrade - Project Update

Presentation to General Committee

June 14, 2021

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Purpose

To update Council on the continued enhancement of our digital workplace through the implementation of our new telephony system



Agenda

- Digital Markham Focus: Digital Workplace
- Our Telephony Journey
- Shift to Computer-based Communication
- Softphone & Mobile App
- Implementation Strategy and Rollout Plan
- Future Roadmap



Digital Workplace

- Enabling a digital workplace(& workforce) is a key pillar in the Digital Markham Strategy, and has been a priority for the City for many years
- Today, the City provides a full suite of tools in support of a digital & mobile workforce including laptops, handheld devices, VPN access, Citrix as well as a host of online services .
- For voice communications & collaboration, Staff are equipped with desk phones, mobile phones, conferencing and meeting tools (e.g., Skype, Zoom and Microsoft Teams (as part of the pilot).
- During the pandemic, investments in these tools have paid off contributing to our ability to pivot with immediate effect and transition to working remotely.
- The City will continue to assess opportunities to modernize business operations, improve customer service and enhance productivity



Our Telephony Journey

- In 2012, the City changed to a Voice over IP (VoIP) telephone system, which uses data lines for voice traffic.
- This E-3 initiative eliminated dedicated land lines, and achieved a significant operational cost saving.
- The hardware infrastructure deployed in 2012 is now at end of life and was approved for replacement as part of the 2019 capital budget.
- An RFP for the replacement telephony system was issued in 2020 and the contract has been awarded to Unity. The project launched in November 2020.
- Our future vision is a workplace and workforce fully enabled with unified communications and collaboration tools to work securely anywhere, any time.
- Replacement of the current telephony infrastructure allows us to take the next step in digital transformation of our communications and collaboration channels



Staff Voice Communication Today

Dedicated Phone Extension



Corporately provided or
BYOD device



- Skype
- Zoom
- MS Teams (pilot participants only)

The current approach includes duplicate communications tools with limited integration capability across platforms



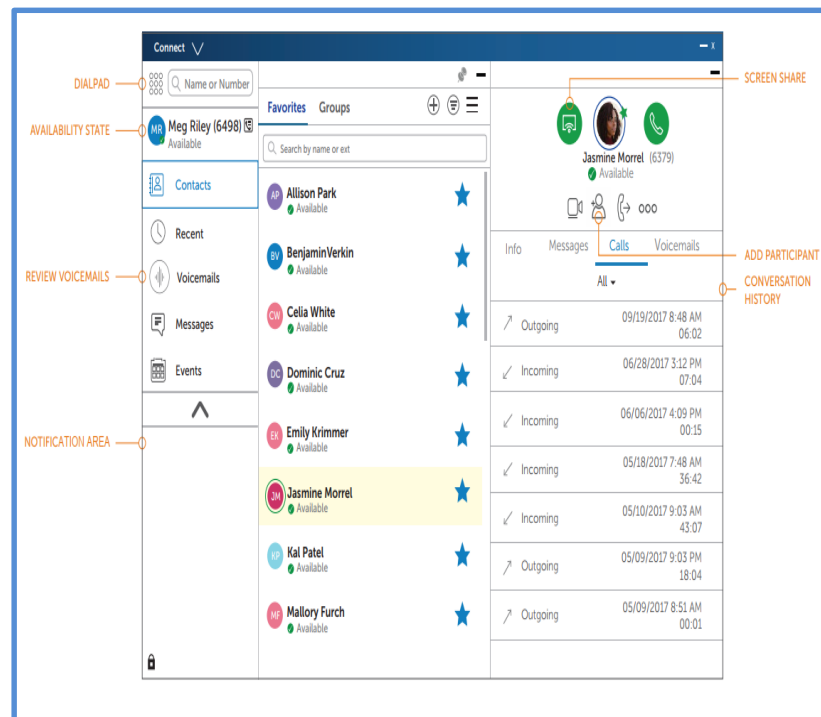
Features of the New Telephony System

- The new system includes many new features and enhancements over the previous desk phone-centred technology, as well as an upgraded system for the Contact Centre and the ability to integrate with the new CRM.
- It also provides an opportunity to “rethink” how telephone services can be provided within the City
- Among the most important enhancements are computer-based communications tools to support remote work and seamless customer service:
 - “soft phones”
 - a mobile App



New Features: Soft Phone

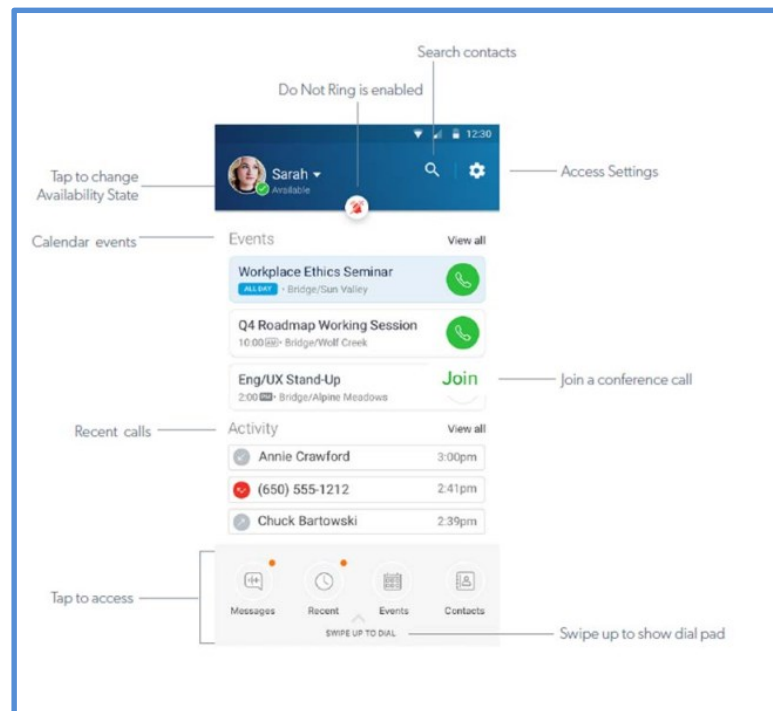
- A 'soft phone' is software that is installed on a City owned computer, such as a desktop, laptop, tablet, or tough book computer
- Soft phones bring all the functionality of a desk phone onto a user's computing device
- This software will meet the needs of a flexible and mobile workforce by enabling all staff working off-premise to connect through the corporate VPN to the City's phone system, allowing them to access their business line remotely (to make and receive calls, contacts, voicemails, messages, etc.)
- Soft phones offer additional features such as: video calling (internal one-on-one), conferencing, visual voicemail management, chat capabilities, integration of contact directories.





New Features - Mobile App on Smart Phone

- A Smart Phone mobile app – gives all corporate and BYOD smart phone users the ability to manage all business communications easily and effectively from any location
- Seamlessly switch calls between computer based softphone and mobile softphone application without dropping the calls
- No need to give out cell numbers as contacts can reach staff directly through the regular business number





Our Future: Integrated Computer-based Communications

- Skype
- Zoom
- MS Teams (pilot participants only)
- Softphone enablement (dedicated phone extension)



- Corporately provided or BYOD device
- Mobile app enabled for dedicated phone extension



Office and Field/Operations staff will be provided with additional flexible and mobile options for voice communication



The Future of the Desk Phone

- Given the functionality features of the new telephony system, there is no longer a need for all staff to rely on a desk phone.
- In fact during COVID, with mobile work, desk phones are no longer a key communications tool
- Industry best practices show that many businesses have opted to eliminate desk phones in favour of soft phones and smart phones
- As an example, over the past five+ years, KPMG eliminated desk phones and landlines for more than 5000 staff through use of Skype for Business, and have recently moved to Microsoft Teams.
- ITS Staff recently met with Kevin Travers, our external auditor, and IT Staff at KPMG, to learn about their experience and lessons learned.



Implementation Strategy

- The new telephony infrastructure has now been implemented, and ITS is now ready to deploy the necessary communication tools for Council and Staff.
- The focus continues to be ensuring that Staff have the necessary communication and collaboration tools to work effectively
- ELT has challenged ITS Staff to optimize the use of the new computer-based communication tools for our workforce, to significantly reduce the number of desk phones where possible
- This means that most Staff will use the softphone on their City-provided laptop, eliminating the need for a desk phone, and enabling them to work remotely or in the office.
- Headsets will be provided by ITS with each soft phone deployment
- Staff with City-provided cell phones or BYOD phones will have access to the mobile app in addition to the soft phone on their computer



Implementation Strategy

- A number of desk phones will still be required to support emergency calling, autodial 911, shared workstation calling (ie., security desks, larger boardrooms, recreation/fitness centre counters, Emergency Operations Centre needs).
- The plan currently calls for an 81% reduction of desk phones, from 1190 to 226
- The optimization of computer based telephony tools supports:
 - continuation of remote and/or hybrid work for the foreseeable future
 - additional features better enabling remote/mobile workers
- As computer refreshes are done, ITS will be replacing current desk top computers with laptops and tablets to fully enable access to the new technology tools, mobility and hybrid work
- Smart phones will continue to be available for Staff, based on business requirements



Roll-out Plan

- The roll-out of the new phone systems will be done on a department by department basis, in consultation with Directors and Council members.
- ITS will be deployed first to ensure any identified issues are captured and rectified before continued rollout.
- Facility rollout will be based upon complexity and size – minimizing impact/disruption
- Soft phone apps will be rolled out to Staff, coordinated with a training plan and timelines
- Soft phones will be deployed first, followed shortly after by remaining desk phones, as per approved criteria and ELT direction
- Old desk phones will be removed in coordination with deployment timeline
- General communications will precede any deployment
- Detailed communications will be provided to each department/team prior to deployment, including conversion and training details.
- **Timing** – planned for full deployment by end Q3 2021.



Future Roadmap

- This is a continued step on the path towards Unified Communications and Collaboration and supports the Digital Markham Strategy
- Unified Communications and Collaboration includes:
 - Unified messaging
 - Instant messaging
 - Conferencing capabilities
 - Mobility
 - Collaborative tools
 - Business Process Integration
- ITS will continue to explore opportunities to further consolidate and streamline platforms and tools used to facilitate communication and work collaboration including:
 - Computer-based voice enablement of all devices, including shared devices
 - Future elimination of VoIP and related desk phone infrastructure



Recommendations

That the presentation entitled Telephone System Upgrade – Project Update be received; and

That Staff be authorized to do all things necessary to give effect to this resolution.