Mitel MiCloud Flex vs.
8x8 Virtual Office X8 and RingCentral Premium

Understanding the Business Case for
Mitel Cloud-based Unified Communications

January 2018

Mitel Networks Corp.

MiCloud vs. 8x8 Virtual Office & RingCentral

Business Case For Mitel MiCloud Flex

January 2018

Executive Summary

Cloud-computing opens up significant opportunities for delivering a feature-rich unified communications (UC) experience. With decades of experience in telephony, Mitel provides an extensive set of core telephony functions that form a solid base for enterprise UC. Mitel MiCloud Flex is the company's fully-featured hosted UC service. MiCloud Flex is designed to offer businesses and enterprises a customized, feature-rich cloud solution, particularly when deploying an integrated contact center.

Mitel Networks Corp. commissioned Tolly to analyze the feature set of its Mitel MiCloud Flex solution along with comparable solutions from 8x8, Inc. and RingCentral using product documentation.

The Mitel solution builds upon its product heritage to deliver core functionality expected of business-class UC solutions along with sophisticated capabilities that rival cloud-based solutions from 8x8 and RingCentral. Mitel provides a seamless, integrated set of functionality across its core Flex offering, MiCollab, MiTeam, MiContact Center Business and MiVoice 6900 Series Phones - all of which are explored in this paper.

In all the key areas analyzed, the Mitel MiCloud solution matches or exceeds the offerings from 8x8 and RingCentral. See Table 1 for an "At A Glance" comparison.

Call Management

The Mitel solution provides the same key call management functions as 8x8 and RingCentral and that one would expect in an enterprise-class system. Mitel's flexible call recording options, voice mail along with feature-rich call transfer, join, forward, park and pickup options cover almost every scenario imaginable.

Collaboration

From presence to multi-point video conferencing, to scheduled and ad-hoc conferencing and webinars - Mitel has it all. The MiCollab collaboration solution offers comparable functionality to 8x8 and RingCentral in all essential categories. In addition to conferencing features comparable to standalone web conferencing systems, Mitel MiTeam provides a fully-featured environment for ongoing, project-based collaboration.

At A Glance Comparison of Key Areas

Vendor	Mitel MiCloud Flex	Mitel +	8x8 Virtual Office X8	RingCentral Premium
Call Management	✔+	*Very rich set of features*	✔	✔
Collaboration	✔		✔	✔
Contact Center	✔+	*Quality management, CRM & mobile integrations*	✔	✔
Desk Phone Capability	✔+	*MobileLink advanced mobile/desk phone integration with Mitel 6900*	✔	✔
Integrations	✔+	*More integrations than 8x8 or RingCentral*	✔	✔
Per-User Cost	$42.50	*Modular, flexible pricing structure. Includes 6900 Series Phone*	$50.00	$44.99
Data Center Infrastructure	✔+	*Tier 4 data centers*	✔	✔

Source: Tolly, January 2018   Table 1

Contact Center[1]

While Mitel, 8x8 and RingCentral all offer solutions that check most of the boxes relevant for integrated UCaaS/CCaaS. Mitel's long history in the contact center market gives them an edge on several capabilities important to larger contact centers.

Mitel's MiContact Center Business's ability to be deployed either as a multi-tenant or single-tenant hosted solution gives them a broader appeal. Open Media Routing allows customers to use MiContact Center Business to create state-of-the-art customer care applications, such as those that integrate video chat or rely on Internet of Things data.

Desk Phone Capability

Like 8x8 and RingCentral, Mitel supports industry-standard SIP VoIP phones from vendors such as Polycom, Cisco Systems and others. Unlike 8x8 and RingCentral, Mitel has over 45 years of telephony hardware experience and designs and manufactures its own phones as well. Thus, only Mitel can deliver desk phones designed and optimized for its VoIP systems and Cloud services.

Mitel leads the pack by designing what it calls "Mobile First" desk phones. The new line of Mitel MiVoice 6900 Series IP Phones recognize the primacy of mobile phones for many users and the Mitel MobileLink capability breaks new ground in mobile-desk phone integration. The desk phone will automatically detect the presence of the mobile phone, sync contacts between the two, and allow mobile phone conversations to move seamlessly to and from the desk phone as needed. Mitel's executive phones feature a 7" touchscreen compared to 4.3" screens for the competitors.

Mitel also provides a softphone desktop PC/Mac OS X application - as do 8x8 and RingCentral. Mitel's MiCollab softphone, is, as the name implies, a fully functional collaboration environment as discussed above.

Integrations

Mitel MiCloud integrates with major as well as niche CRM, email and other apps. Mitel supports Salesforce, Zendesk, Sugar, Oracle Sales Cloud, Microsoft Dynamics and NetSuite among other apps and is currently adding support for Microsoft Office 365, Google Apps and more. Mitel also currently provides integration with Microsoft Outlook. Mitel has key apps covered and is expanding its integration scope in 2018.

Cost

While the three vendors do not have identical pricing approaches and models, a basic comparison illustrates Mitel's competitive pricing. 8x8 charges $50 per-user, per-month and RingCentral charges $44.99 for the systems being compared. For a Mitel 500-user deployment (450 enterprise voice plus 50 contact center agents), the monthly cost is $42.50 with unlimited minutes - and the price includes a Mitel 6900 Series IP Phone.

---

[1] Contact Center analysis in collaboration with McGee-Smith Analytics, LLC.
www.mcgeesmith.com

Data Center Infrastructure

Like 8x8 and RingCentral, Mitel maintains two data centers in the US separated by 1,000 miles. Globally, Mitel maintains 14 data centers. 8x8 has 15 data centers in 9 countries. RingCentral does not publicly document its global data center footprint.

Of the three, Mitel is the only one that claims Tier 4 status (the highest possible) for its US data centers. Because Tier 4 certification requires full redundancy, Tier 4 is noted to require twice the equipment of a Tier 3 data center. With Mitel, there is full redundancy - power, cooling, storage, network connections, etc. Mitel also provides additional security and availability options including encrypted voice and applications and various active/active standby/failover functions for key VoIP applications.

End of Executive Summary.

Solution Analysis

Analysts compared documented features of the three enterprise-class cloud solutions. See Table 2.

Enterprise UC Cloud Solutions Analyzed			
Vendor	Cloud Solution	Collaboration/Team Component	Contact Center Component
Mitel Networks	MiCloud Flex	MiCollab/MiTeam	MiContact Center Business
8x8	Virtual Office X8	Virtual Office X8 collaboration. No team functionality	Virtual Contact Center
RingCentral	Premium	Glip	Contact Center Ultimate

Note: 8x8 provides collaboration capability but does not provide a teamwork component.

Source: Tolly, January 2018

Table 2

Call Management

Call management is the core feature area and foundation of unified communications. UC systems need to deliver the full range of communications functions across all manner of access -mobile devices, handhelds, desktop computers and desk phones.

The Mitel solution provides the core call management capabilities that 8x8 and RingCentral feature as important areas. These include voicemail, presence, recording and call management functions. See Table 3 for an overview. Mitel offers users client applications for desktop and mobile devices. To maximize flexibility, Mitel also has a web client as well a softphones for PCs and mobile devices.

Some additional highlights:

Call Forward & Transfer

Mitel provides a rich set of options. Calls can be forwarded internally and externally as well as on busy and no answer. Call transfer choices are: blind, consultative, intercom, mailbox and whisper.

Call Recording

Mitel's call recording approach is flexible allowing for both "on demand" and "always on" recording.

Call Management Summary

Area	Solution		
	Mitel MiCloud Flex	8x8 Virtual Office X8	RingCentral Premium
Desktop & Mobile Apps	✔	✔	✔
Call Forward	✔	✔	✔
Call Transfer	✔	✔	✔
Call Park	✔	✔	✔
Call Recording	✔	✔	✔
Voice Mail	✔	✔	✔

Source: Tolly, January 2018

Table 3

Collaboration

Integrated collaboration is essential for optimizing interactions among both internal system users and outside partners, prospects and customers. Mitel offers a full-featured collaboration solution that includes audio, video and application-based conferencing and sharing. Mitel checks all the boxes when compared to the collaboration offerings from 8x8 and RingCentral. See Table 4.

Conferencing

MiCollab is Mitel's collaboration client. It offers comprehensive audio/video/web conferencing system provides for ad-hoc as well as scheduled conferences and webinars that includes a participant management module. Participants can share desktops and applications with no restrictions on data types presented. The conference calls and collaboration sessions can be recorded for archival or distribution purposes. Remote control support allows single-desktop collaboration, as well.

The video conferencing component supports multi-point video and can be used with ordinary webcams.

The messaging/chats during the conference can be public or private and can optionally be archived. In summary, Mitel provides the same rich feature set one would expect from a standalone conference/webinar product.

Team Collaboration

Recognizing the collaboration is typically an ongoing process often requiring shared document storage and work spaces, Mitel developed MiTeam. MiTeam users have access to persistent workspaces and project management functions that provide enhanced team collaboration.

Mitel "streams" are workspaces that capture start-to-finish project activity. This activity can include project content (i.e. files), chats, reviews, action items and so forth. This

Collaboration Summary

Area	Solution		
	Mitel MiCloud Flex	8x8 Virtual Office X8	RingCentral Premium
Teamwork Client and Functionality	✔	✘	✔
Presence	✔	✔	✔
Instant Messaging	✔	✔	✔
Desktop & Application Sharing	✔	✔	✔
Scheduled/Ad-hoc Conferencing and Webinars	✔	✔	✔
Multi-point Video Conferencing	✔	✔	✔
Conference Recording	✔	✔	✔
Web-based Collaboration	✔	✔	✔
Remote Control	✔	✔	✔

Source: Tolly, January 2018   Table 4

project microcosm can keep existing team members focused and provide a quick way for new project participants to get up and running quickly with project work.

Streams also provide integrated functionality to invite participants and launch a meeting in real time all from within the Stream.

The Mitel team collaboration environment is further enhanced by the presence of integrated search capabilities along with a project management "to do" list where action items and target dates can be defined and documented.

RingCentral offers a team collaboration environment called Glip. 8x8 does not appear to offer any teamwork-oriented functionality.

Unified Messaging

Mitel users can retrieve and manage voice mail, text and fax messages from one synchronized data store. For fax senders, transmission status information is pro-actively provided right in the email inbox. The Mitel plugin for Microsoft Outlook installs an additional toolbar within the application that allows users to manage their voice messages in the same environment as their email messages.

Contact Center Capability

As has been true for the past 35 years, contact center functionality is a key component of an overall enterprise communications suite. As the size of a company increases – both in number of employees and revenue - the need for a contact center increases as well. In some industries, the contact center is a core component, as in financial services and airlines; contact centers provide both revenue generation and customer care. In others, for example in manufacturing, the role of the contact center may be more centered on internally-focused applications, e.g., human resources or IT help desks.

In recent years, cloud-based contact centers became a deployment alternative for businesses with inflexible legacy systems, often past-due for a technology upgrade. Increasingly, companies are seeing the benefits of sourcing unified communications as a service (UCaaS) and contact center as a service (CCaaS) from a single vendor.

Mitel, 8x8 and RingCentral each offer CCaaS solutions as part of their communications suites:

- Mitel's MiContact Center Business is offered both as a multi-tenant solution hosted or as a single-tenant solution, hosted by either Mitel or a partner.

- 8x8 offers a multi-tenant cloud contact center solution, Virtual Contact Center.

- RingCentral has, since 2015, offered a white label of the NICE inContact CCaaS solution.

While all three solutions check most of the boxes relevant for an integrated CCaaS solution, Mitel's long history in the contact center space gives them an edge on several capabilities important to larger contact centers. See Table 5 for a summary of contact center capabilities.

- Mitel's MiContact Center Business' ability to offer both a multi-tenant or a single-tenant hosted solution gives them a broader appeal. Some larger firms prefer a hosted solution and neither 8x8 nor RingCentral can offer this option.

- While all three offer IVR self-service solutions, only Mitel offers speech-enabled IVR without requiring an additional partner.

- While all three offer quality management solutions, Mitel's is via Mitel-owned technology and both 8x8 and RingCentral offer partner solutions.

- As noted elsewhere in this document, Mitel has a richer set of CRM (as well as other application) integrations.

- Mitel's emphasis on mobile applications across the business has resulted in benefits in it's contact center solution set. Both supervisors and agents can work on the MiContact Center Business from mobile devices. RingCentral offers this capability for supervisors only and 8x8 has no mobile application functionality for the contact center.

- Open Media Routing is the ability to route, queue and report on any kind of interaction using the contact center. MiContact Center Business has used this capability to work with customers to allows customers to create state-of-the-art customer care applications, such as to route Internet of Things (IoT) notifications, Facebook Messenger interactions and video chats to agents.

Contact Center Summary

Area	Solution		
	Mitel MiContact Center Business	8x8 Virtual Contact Center	RingCentral Contact Center Ultimate
Architecture	✔+	✔	✔
Omnichannel Routing	✔	✔	✔
Outbound	✔	✔	✔
Self-Service	✔+	✔	✔
Quality Management	✔+	✔	✔
Workforce Management	✔	✔	✔
Collaboration Capabilities	✔	✔	✔
CRM Integrations	✔+	✔	✔
Mobile Application Integrations	✔+	✘	✔
Open Media Routing	✔+	✘	✘

Source: McGee-Smith Analytics, January 2018   Table 5

Desk Phone Capability

In this age of mobility, the desk phone remains an important communications tool. VoIP users worldwide benefit from the universal adoption of the session initiation protocol, more commonly referred to as SIP, by VoIP system vendors.

Thus, all three UC cloud providers support a variety of SIP-based phones (desk, conference and wireless) from vendors such as Polycom, Cisco Systems and others.

Mitel, however, is the only one of the three companies that designs and manufactures desk phones. Building on over 45 years of experience in the industry, the Mitel desk phones deliver breakthrough functionality not available on the competing systems. So, while there is no problem with using multi-vendor handsets, the trade-off is that functionality typically trails behind the leading edge. With Mitel MiVoice 6900 Series IP Phone and Mitel Mobile Link, there are no tradeoffs - you are at the leading edge.

Mitel MiVoice 6900 Series IP Phones

Mitel MiVoice 6900 Series IP Phones with MobileLink leverage bluetooth technology and tight software integration to bridge the gap between desk phone and mobile allowing the two devices to function as one.

To best understand what you get from Mitel MiVoice 6900 IP phones with MobileLink integration - and not from 8x8 or RingCentral - consider the following Mitel MobileLink usage scenario with the Mitel MiVoice 6940 IP Phone.

The executive walks into the office, bluetooth-based mobile presence detects that the paired cell phone is in the room. The current contact information syncs up between the mobile and desk phones. This way, the user could sit down and use the desk phone to dial a brand-new contact acquired since last leaving the office.

If, upon entering the office, the executive has a call in progress on the mobile phone, the audio from that call can be moved seamlessly to the desk phone and, if required, back again to the mobile phone.

With 8x8 and RingCentral such seamless integration is not available. And while you can migrate mobile calls to a desk phone, it requires the conversation to be put on hold while a "flip" function is executed to migrate the call.

See Table 6 for some comparison points between the Mitel MiVoice 6940 IP phone and the comparable, executive 3rd-party phone offered by 8x8 and RingCentral - the Polycom VVX 601.

In addition to offering the same advanced features as the other vendors - USB ports, HD audio, etc - the Mitel phone boasts a 7" screen compared to the 4.3" screen on the Polycom phone.

Executive Phone: Mobile/Desk Phone Integration Comparison

Area	Solution		
	Mitel MiCloud Flex	8x8 Virtual Office X8	RingCentral Premium
Executive Phone	**Mitel MiVoice 6940**	**Polycom VVX601**	
	Mobile Phone <-> Desk Phone Integration		
Mobile-Desk Phone Integration	✔ **MobileLink**	✘	✘
Mobile Presence Detection for Seamless Hot-desking	✔	✘	✘
Move Cell Network Call Audio To/ From Desk Phone Seamlessly	✔	**Manual Flip**	**Manual Flip**
Use Desk Phone for Cell Phone Audio	✔	✘	✘
Manage VoIP and Cell Calls From Desk Phone	✔	✘	✘
Auto Sync Mobile and Desk Phone Contacts	✔	✘	✘
	Phone Hardware Characteristics		
High-resolution Color Display	**7" (800 x 480)**	**4.3" (480 x 272)**	
HD Audio	✔	✔	
Bluetooth Enabled	✔	✔	
USB Ports	✔	✔	

Notes: The Polycom VVX-601 is an executive class VoIP desk phone compatible with and sold by 8x8 and RingCentral. 8x8 and RingCentral mobile/desk phone integration features are marked as "x" when no reference found to feature.

Source: Tolly, January 2018   Table 6

Integrations

Integrations are essential for leveraging existing CRM and other environments with the UC cloud system. Mitel integrates with popular CRM systems such as Salesforce, NetSuite and Zendesk as well as various up-and-coming systems. See Table 7 for a list of Mitel integrations compared to 8x8 and RingCentral.

Mitel has or will have integrations with all the key environments supported by 8x8 and RingCentral - and then some.

Integrations Summary

Area	Solution		
	Mitel MiCloud Flex	8x8 Virtual Office X8	RingCentral Premium
Salesforce	✔	✔	✔
Sugar	✔	✔	**Not documented**
Microsoft Dynamics	✔	✔	✔
NetSuite	✔*	✔	✔
Infusionsoft	✔*	**Not documented**	**via 3rd party**
Zendesk	✔*	✔	✔
Oracle Sales Cloud	✔*	**Not documented**	✔
Microsoft Outlook	✔	✔	✔
Microsoft Skype for Business	✔	✔	✔
ZOHO	**Available 2018**	✔	✔
Microsoft Office 365	**Available 2018**	✔	✔
Google Apps	**Available 2018**	**Not documented**	✔
Close.io	**Available 2018**	**Not documented**	**Not documented**

Note: Microsoft Skype for Business formerly knows as Lync. * Premium package features not currently supported.

Source: Tolly, January 2018   Table 7

Cost

Where Mitel offers cloud, hosted or hybrid deployment models, 8x8 and RingCentral solutions are cloud-only. As an established vendor of enterprise-class solutions, Mitel also takes a more granular approach to pricing. Thus, readers should be aware that an actual Mitel price quote would reflect the specific number of, say, user seats and contact center agents.

For the purposes of this comparison, Mitel provided pricing for 450 enterprise seats and 50 contact center agents along with various supporting software licenses. 8x8 and RingCentral costs were as advertised as of January 2018.

Even this basic comparison shows significant per-seat cost benefits of Mitel. The average per-user cost for Mitel is $42.50 per month which includes unlimited minutes[2] and includes a Mitel 6900 Series IP Phone for each user. See Table 8.

Cost Summary

Area	Solution		
	Mitel MiCloud Flex	8x8 Virtual Office X8	RingCentral Premium
Plan Name	**Elite**	**Pro**	**Premium**
Monthly Cost Per User	**$42.50**	**$50.00**	**$44.99**
Included Minutes	**Unlimited**	**Unlimited**	**2,500**
Cost For Extra Minutes	**0.0¢ (No cost)**	**0.0¢ (No cost)**	**3.9¢**

Note: Vendors have different plans. The plans across vendors do not have exact matches. Prospective users should request vendor quotes for specific features and numbers of enterprise voice and call center agents.

Source: Tolly, January 2018   Table 8

---

[2] Mitel Unlimited does not include Toll-Free charges. See Mitel representative for Toll-Free charge rate.

Data Center Infrastructure Considerations

Data Center infrastructure, ultimately, dictates security, reliability and availability characteristics of any hosted UC solution. Mitel, 8x8 and RingCentral provide two data centers each in the continental US - East coast and West coast - presumably all over 1,000 miles apart. Perhaps for security or other reasons, details about 8x8 and RingCentral data centers are minimal.

Globally, Mitel has 14 data centers in all. This is comparable to 8x8 that maintains 15 data centers across nine different countries.

Mitel's integrated solution is cloud-enabled and geo-redundant. Thus, it provides a flexible and secure solution for global companies looking to reduce CapEx and optimize OpEx.

A RingCentral Data Center Overview document from 2012 notes only that RingCentral has multiple data center sites that are geographically diverse and lists some physical security aspects of the locations.

Apparently, one needs to contact RingCentral and 8x8 directly or sign a non-disclosure document to get more details. Given the lack of details available for the competing vendors, this paper will focus on Mitel and highlight some key attributes of the Mitel service environment in the US. See Table 9.

Data Center Infrastructure Summary

Area	Cloud UC Vendor		
	Mitel	8x8	RingCentral
USA Data Centers	**2**	**2**	**2**
Global Total	**14**	**15 (9 countries)**	**Not documented**
Redundant Power	✔	✔	✔
Redundant Cooling	✔	**Not documented**	✔
Redundant Storage	✔	**Not documented**	**Not documented**

Note: Infrastructure information for 8x8 and RingCentral as found on websites and public documents. Readers should check with those providers for details.

Source: Tolly, January 2018

Table 9

Mitel Service Environment

Data Centers

Mitel operates two "Tier 4" (the highest grade) data centers in the US[3]. In short, Tier 4 data centers are the most advanced class of data center requiring redundant and dual-power of servers, storage, cooling and network links. Tier 4 data centers are built to provide 99.995% availability

The data centers are positioned 1,000 miles apart from one another in secure, unmarked facilities with onsite security personnel. Per the Tier 4 certification status, the data centers. The data centers are carrier neutral facilities with private and secure colocation space. The data centers have resilient network connections and multiple paths to carriers. Customers can connect to the Mitel data centers via dedicated connection, MPLS and/or public Internet. Mitel also provides enhanced options for security and availability.

---

[3] Tier levels specified by Uptime Institute. See http://uptimeinstitute.com

About Tolly…

The Tolly Group companies have been delivering world-class IT services for nearly 30 years. Tolly is a leading global provider of third-party validation services for vendors of IT products, components and services.

You can reach the company by email at sales@tolly.com, or by telephone at +1 561.391.5610.

Visit Tolly on the Internet at:
http://www.tolly.com

About Mitel MiCloud Flex

With MiCloud Flex, you can bring unified, mission-critical communications into the cloud for increased efficiency, simplicity and mobility. Designed for large enterprises and other companies that require a rich unified communications (UC) environment, MiCloud Flex delivers the highest levels of performance, reliability and security through our global, mobile cloud.

For more information visit:
http://www.mitel.com/products/cloud/micloud-enterprise

Terms of Usage

This document is provided, free-of-charge, to help you understand whether a given product, technology or service merits additional investigation for your particular needs. Any decision to purchase a product must be based on your own assessment of suitability based on your needs. The document should never be used as a substitute for advice from a qualified IT or business professional. This evaluation was focused on illustrating specific features and/or performance of the product(s) and was conducted under controlled, laboratory conditions. Certain tests may have been tailored to reflect performance under ideal conditions; performance may vary under real-world conditions. Users should run tests based on their own real-world scenarios to validate performance for their own networks.

Reasonable efforts were made to ensure the accuracy of the data contained herein but errors and/or oversights can occur. The test/ audit documented herein may also rely on various test tools the accuracy of which is beyond our control. Furthermore, the document relies on certain representations by the sponsor that are beyond our control to verify. Among these is that the software/ hardware tested is production or production track and is, or will be, available in equivalent or better form to commercial customers. Accordingly, this document is provided "as is", and Tolly Enterprises, LLC (Tolly) gives no warranty, representation or undertaking, whether express or implied, and accepts no legal responsibility, whether direct or indirect, for the accuracy, completeness, usefulness or suitability of any information contained herein. By reviewing this document, you agree that your use of any information contained herein is at your own risk, and you accept all risks and responsibility for losses, damages, costs and other consequences resulting directly or indirectly from any information or material available on it. Tolly is not responsible for, and you agree to hold Tolly and its related affiliates harmless from any loss, harm, injury or damage resulting from or arising out of your use of or reliance on any of the information provided herein.

Tolly makes no claim as to whether any product or company described herein is suitable for investment. You should obtain your own independent professional advice, whether legal, accounting or otherwise, before proceeding with any investment or project related to any information, products or companies described herein. When foreign translations exist, the English document is considered authoritative. To assure accuracy, only use documents downloaded directly from Tolly.com.

No part of any document may be reproduced, in whole or in part, without the specific written permission of Tolly. All trademarks used in the document are owned by their respective owners. You agree not to use any trademark in or as the whole or part of your own trademarks in connection with any activities, products or services which are not ours, or in a manner which may be confusing, misleading or deceptive or in a manner that disparages us or our information, projects or developments.

218101-nb-1-wt-2018-01-19-VerN-bis