MAF ICIMS™

Preparing an installation with Skype for Business

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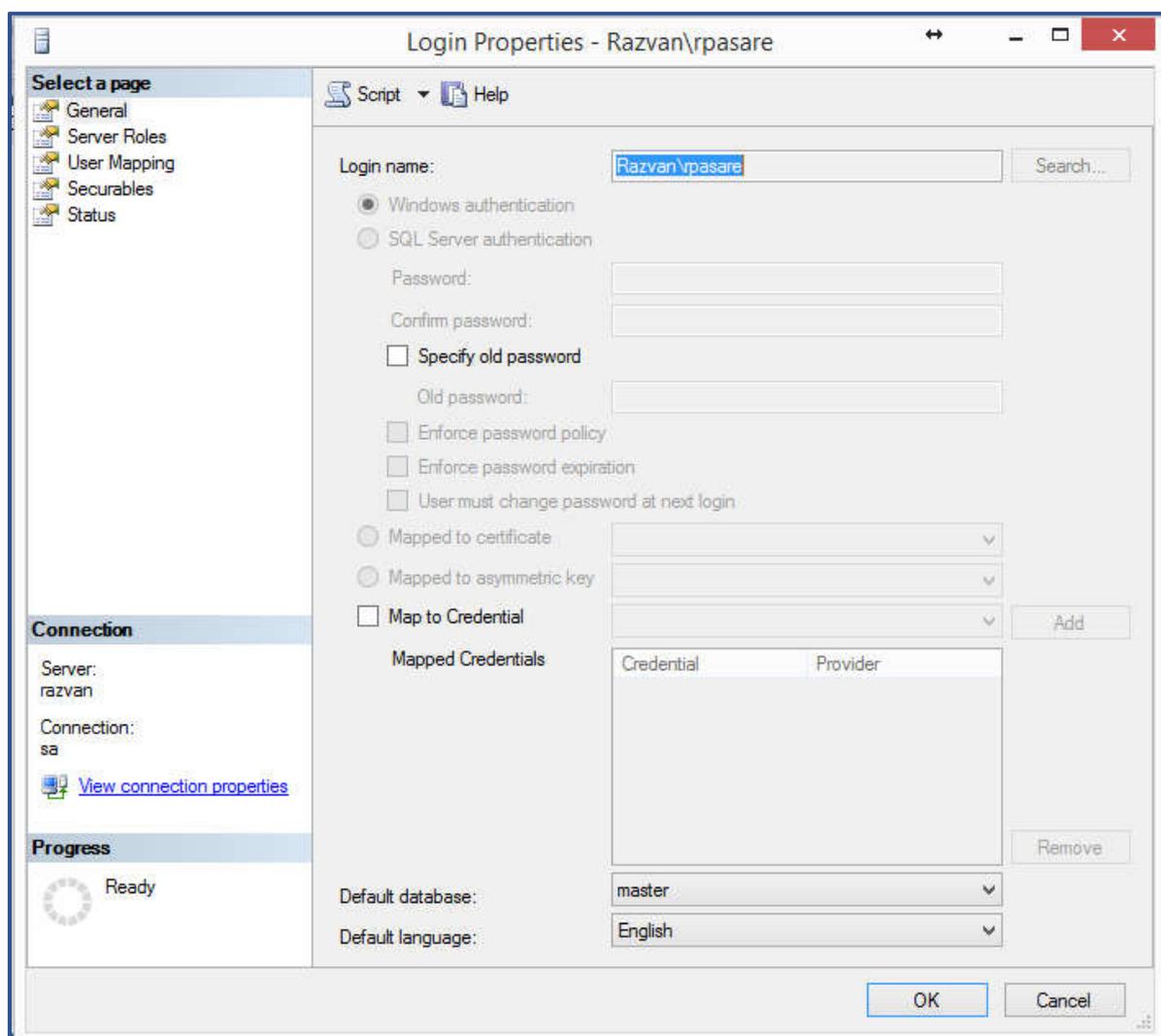
Preparing a MAF ICIMS™ Installation
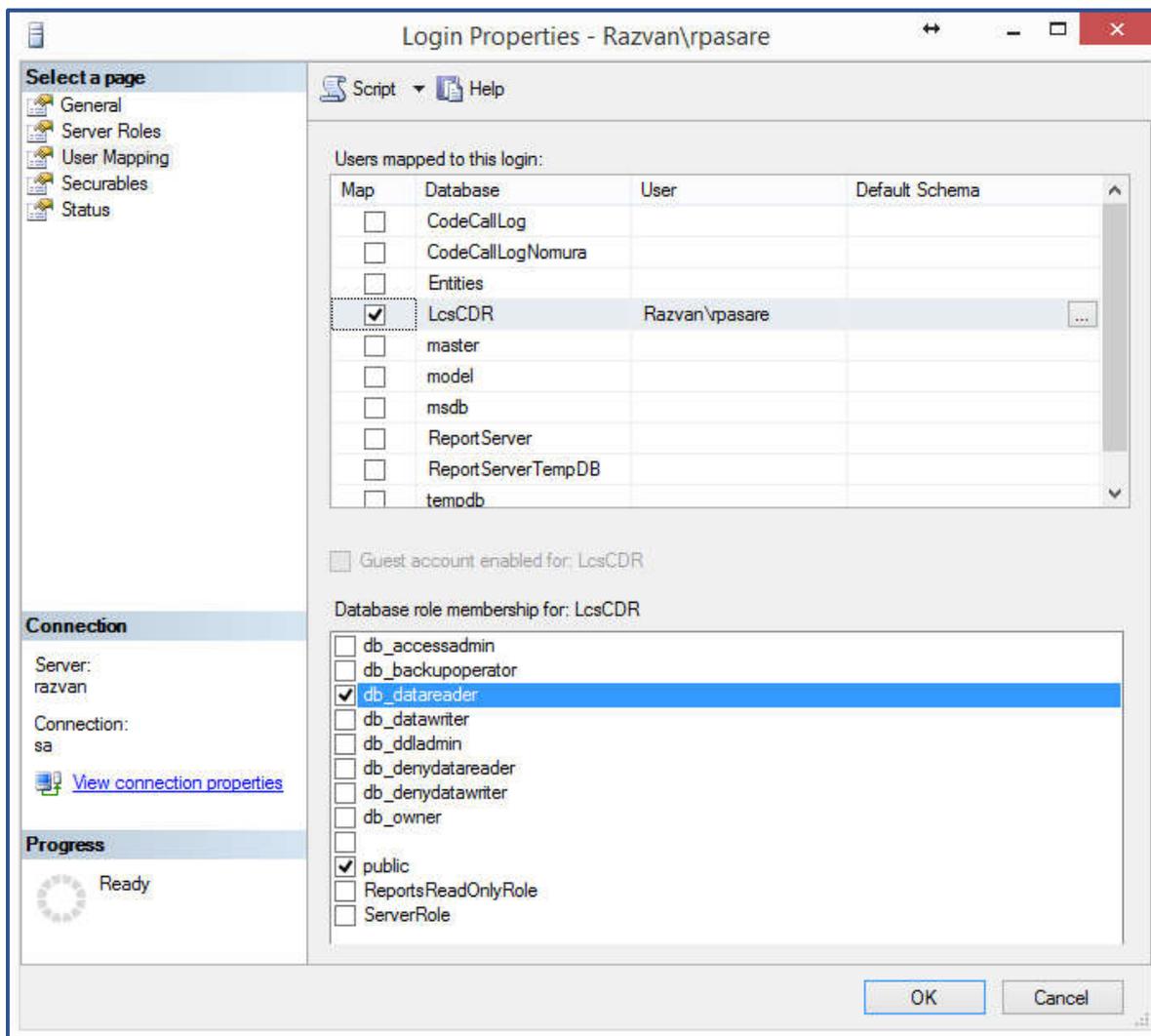
1. Collecting Calls from the MS Lync / Skype4B Server:

    Mandatory:

    1.1 MS Lync / Skype4B version;

    1.2 MS Lync / Skype4B LCSCDR, LCSLog, QoEMetrics databases server address, user, password with appropriate rights to access the databases (Lync Monitoring and Archiving Server installed, db_datareader assigned to the user)

1.3 The firewall should allow a connection between the MAF ICIMS™ computer and the MS Lync / Skype4B server.

1.4 Go to Administration->Sites>Main and press on New button

Complete the following fields:

- Data Source name: you can simply say Lync / Skype4B
- Client name is usually the MAF ICIMS™ server, leave it as it is
- Backup client: in case you use HA, specify the failover server
- Connection method: select Microsoft Lync /Skype4B
- Default extension type: Phone
- Parsers: Microsoft Lync / Skype4B

- Directory: Lync or Skype (this is the folder where CDRs are collected and processed)
- Enable GMT adjustments: in Lync/S4B time is in UTC, enable here the correct time zone
- Dialed number mask: you can mask a number of digits for privacy purposes
  In Communication tab, complete the following fields:
- Server: this is the monitoring server, where LCSCDR and QoEMetrics databases are (put the instance name as well, if there is an instance)
- Tick the checkbox "Windows authentication" : usually the MS SQL server where databases are stored is set to windows authentication
- If mixed authentication is set, then write the sql user and password.
- Same for archiving server (if archiving is not enabled, uncheck it)
- Start date: set the history log you want to collect (if you started using Lync from 1st of January 2014, set this date)
- Ignore synthetic transaction: these transactions create CDRs in the monitoring databases and can skew the results in reports. They can be ignored at collection

Data source

Enable	☑
Data source name	S4B
Client name	Razvan ▾
Backup client	(none) ▾
Connection method	Microsoft Lync ▾
Default extension type	Phone ▾
Parsers	Skype for Business ▾
Directory	S4B
Enable GMT Adjustments	☑ (UTC+00:00) Dublin, Edinburgh, Lisbon, Londc ▾
Dialed number mask	Will replace the trailing digits of the dialed number

☐ Add employee UDF 1 to third party extension

Communication   Parser parameters   Provisioning

◼ Monitor store details

Server	server
Failover server	
User name	sa
Password	••••••

☑ Windows authentication

☑ Ignore synthetic transactions

◼ Archive store details

☑ Collect instant messages

ⓘ Needed for collection of IMs

Server	server
Failover server	
User name	sa
Password	••••••

☑ Windows authentication

Start date	5/8/2017 📅

Save

To use windows authentication, you need to set MAF ICIMS™ services to Log on as user which has read rights on LCSCDR, LCSLog and QoEMetrics databases. Open run and type services.msc and locate Code services
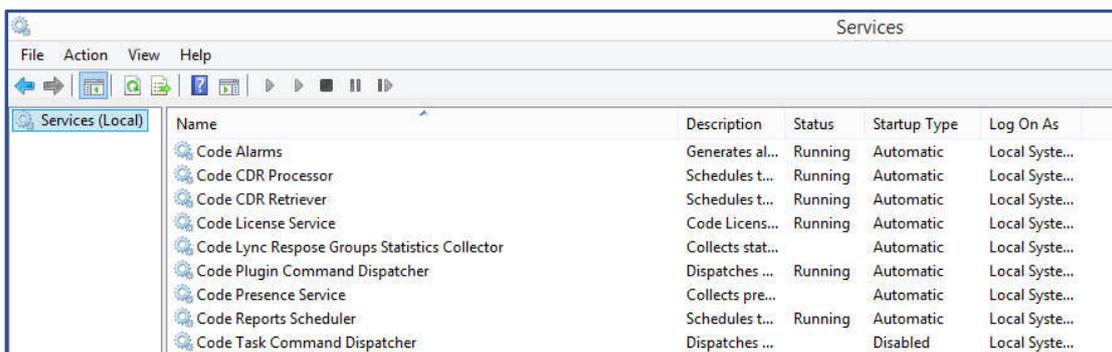
Stop all services, except Code License Service and Code Presence Service. Open them one by one and go to Log on:
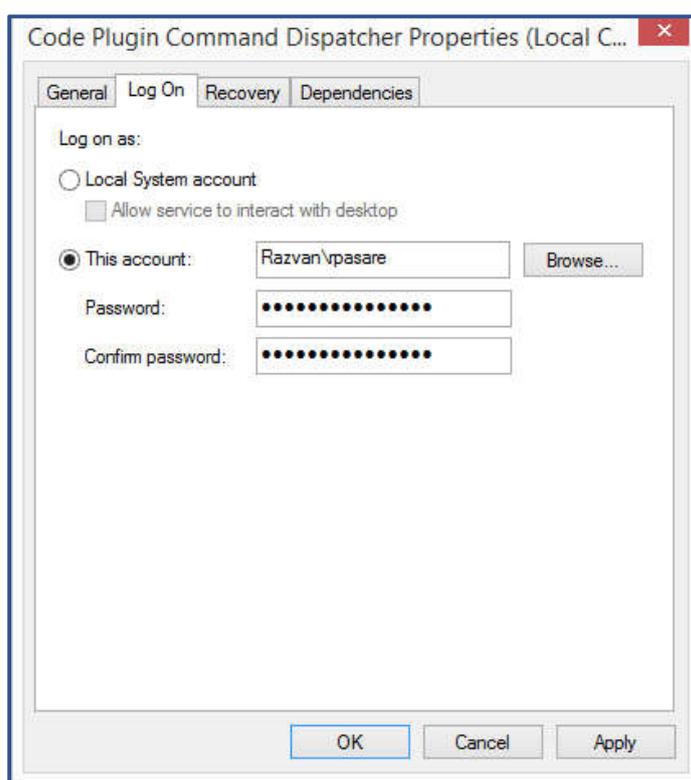
Set them to "This account:" and fill in with the user defined for windows authentication on the above steps. Start all services, if the user/pass is set correctly, the services starts without errors.

Go to Administration->Plugins click on Collector and start it. Collector is now running and it collecting data under the folder set in CDR source, a simple way to verify this is to check if cdrXXXXXXX.dat file is created under that folder (note that as soon as collection end, processing of the CDR starts instantaneously and you might see buffer or error files which results at processing-this still means collection is fine).

1.5 For Presence it needs UCMA API 5.0 to be installed and Code Presence which is a special user in Lync / Skype4B with the following details: Lync / Skype4B Front End Pool server, user name, password, domain and sip address.

Go to Administration->Presence, click on new and fill in the details and press Save. If the details are correct, in the left side the name of connection appears with Connected.
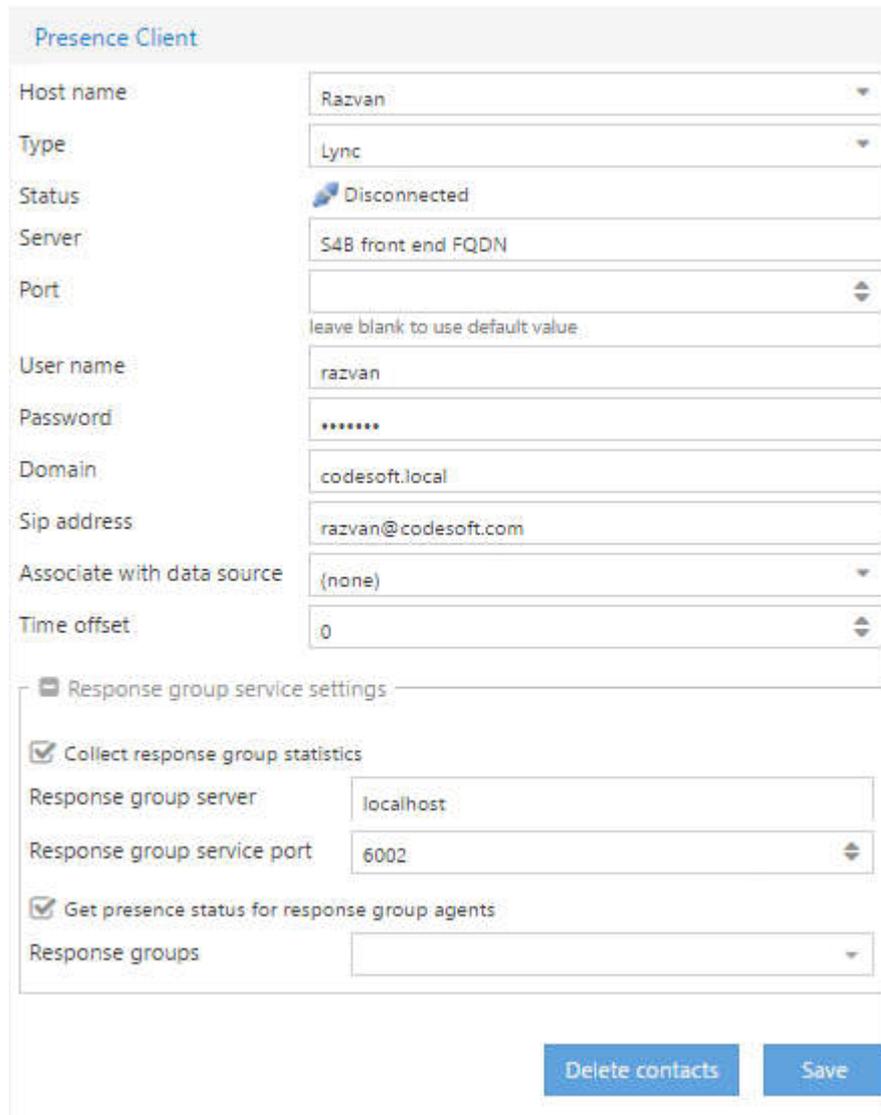
Presence Client

Host name	Razvan
Type	Lync
Status	Disconnected
Server	S4B front end FQDN
Port	
	leave blank to use default value
User name	razvan
Password	•••••••
Domain	codesoft.local
Sip address	razvan@codesoft.com
Associate with data source	(none)
Time offset	0

Response group service settings

☑ Collect response group statistics

| Response group server | localhost |
| Response group service port | 6002 |

☑ Get presence status for response group agents

| Response groups | |

Delete contacts   Save

1.6 For RGS real time monitoring it needs access to Lync / Skye4B RTC instance, and specifically db_datareader rights for the user at point 1.2 for **rgsdyn** and **rgsconfig** databases

2. MAF ICIMS™ System Configuration:

   Mandatory:

2.1 Information about the hierarchy levels that will be implemented;

2.2 Active Directory source with information about departments. This should contain the following:

   Mandatory: Descriptions and the ancestor name (if there is a multi-level organization).

   Optional: Department address.

2.3 Active Directory source with information about the employees. This should include the following:

   Mandatory: userprincipalname, givenname, sn, mail, department/company attributes

2.4 Active Directory source with information about extensions/URI's. This should include:

   Mandatory: Extension number (msRTCSIP-line,mail, msRTCSIP-primaryuseraddress), userprincipalname, givenname, sn attributes.

2.5 Optional: Address, Employee ID, Location, Service.

2.6 Active Directory is used for importing the above information, provide the following:

   - Server name, LDAP Base, LDAP port, LDAP Authentication type, User/Password and filter

2.7 Information about the SMTP server – IP/name, a valid user for it.

2.8 Information about the phone directories/phone directory groups used (phone numbers and assigned destination names for them).

3. Organization Hierarchy

Firstly, the organization hierarchy must establish the direct relationships between the data sets. A simple example would be:

Organization	→ Division	→ Department	→ Employee	→ Extension	→ Device
Tel Inc	→ Enterprise	→ Support	→ Joe Bloggs	→ 88001	→ Phone

*Hierarchy levels vary depending on the company structure.

4. Hierarchy Relationship

Once the organizational hierarchy is established, the categories need to be defined for each hierarchy level. A simple example of Hierarchy data sets is presented in the following example:

Organization → Department → Employee → Extension

Organization

Organization
CODE

Division

Division Name	Organization
Enterprise	CODE
Information	CODE

Department

Department Description	Division Name
Support	Enterprise
Development	Information

Employee

Employee ID	Employee Name	Employee Surname	Email	Department Name
100	Joe	Bloggs	Joe.BLoggs@code.com	Support
101	Tony	Platt	Tony.Platt@code.com	Development

Extension

Extension	Extension Type	Employee
1000	1 Phone	100 Joe Bloggs
1001	2 Fax	100Joe Bloggs

Extension "1000" is assigned to Employee "100" (Joe Bloggs). This Employee is part of the Department "Support". This Department of the "CODE" Organization.

5. Tariff Relationship

In order to successfully rate CDRs, Tariffs must be set up appropriately. Tariffs will be linked directly to Trunk Groups for rating purposes. The tariffs will require carrier costs (e.g. 10 pence per minute, 5 pence connection charge, etc.), price bands (peak, off-peak, weekend, etc.) and destinations (local, International, mobile, etc) in order to calculate costs based on call time, duration and destination. An example is provided below:

Gateways

Gateway	Number of Trunks	Name
128	20	Mobile
135	30	MPLS

Carrier

Trunk Group	Carrier
128	Tel Mob
135	Tel Inc

Tariff

Carrier	Dest Code	Days	Start Time	End Time	Initial Charge	Charge (per min)	Destination Type
Tel Inc	Zone1	1-5	08:00	18:00	0.50	0.30	International
Tel Inc	Zone1	1-5	18:00	08:00	0.25	0.10	International
Tel Mob	Zone1	1-7	00:00	24:00	2.50	0.20	International

Prefix

Prefix	Description	Dest Code
001	USA	Zone1
0800	Free	Free

Destination Type

Destination Code	Description
INTL	International
LOCAL	Local
UNDEFINED	Undefined

A call is made at 11AM through trunk 135 to a destination beginning with 001. The call is routed through trunk group "135" which is charged by the "Tel Inc" carrier. The call destination has "001" prefix (Zone1) and the call was made between "08:00-18:00" (Peak). Therefore, the call is charged at the "Peak" rate, for "Tel Inc" Carrier with "Zone1" Dest Code. The call will be charged at 0.30 per min plus a 0.50 initial charge.

In regard to rating calls, if more than one tariff is to be used for rating trunks belonging to the same trunk group, this can be set up if required (e.g. a trunk group has 50 trunks; however 20 trunks are rated against Tariff A and the other 30 trunks are rated against Tariff B). This will simply require the range of trunks or list of specific trunks along with the tariffs for them to be rated against.

6. Processing and charging calls:

Mandatory:

2.9 Information about the used tariff/tariffs: the Phone Network Operator that is used;

2.10 Information about the charges to locals, area, international destination types – the prefixes and the charges/minute (or any other used resolution) will be needed;

7. Reporting

2.11 The main currency in which CDR's will be calculated should be provided.

2.12 If specific reports are required, please provide a list with the name of the reports along with the criteria that they should meet – e.g. Report to show all outgoing calls made by employee "Joe Bloggs".

2.13 If specific report formats are required, please provide the reporting criteria in which you would like it to be available – e.g. Report to show extension number, ring time, employee id, employee name, time of call.

*The reports and report templates can be generated at a later stage as necessary.

8. Generating/Sending Reports via E-mail

Mandatory:

2.14 In order to send MAF ICIMS™ reports via e-mail, certain information will be needed about the used method. If SMTP is used, the server name and a user for authentication are required.

9. Scheduled Reports

In order to deliver scheduled reports, the following information needs to be provided:

2.15 A list of reports that require scheduling, the recipients of each report and also the frequency of each report;

2.16 To send reports via e-mail, information about the delivery method used will be required (e.g. SMTP - server name and user authentication details);

2.17 To save reports to a specific location, the format (PDF, XLS, DOC, etc) and directory location needs to be provided.

10. Additional Information

2.18 If there are any further requirements that need to be set up, additional information must be provided for them also (e.g. if selected employees need to be set up as part of a project; employees with certain security levels - full admin rights/administrator, only rights to run pre-defined reports, ability to edit reports, etc); any additional taxes/one-off charges; special days where an exceptional charge rate is required; additional currencies to be used).

About MAF InfoCom™

Formed in 2000, MAF InfoCom™ is a leading innovative technology provider with almost 20 years' experience in delivering solutions for Monitoring, Analytics, Reporting and Recording of telephony and Unified Communications, Call Management, Billing & Call Accounting.

We serve tens of thousands customers around the globe, in a large variety of branches. We have installations in over 50 countries ranging from SME's to multi-national global enterprises. In Europe MAF InfoCom™ is the largest provider of UC reporting solutions.

With the market trend towards Unified Communications we expand our sales across the globe rapidly. Our solutions work with every major (IP)PBX and UC manufacturer platform.

Our solutions are offered from the Cloud, On-Premises and Partner Hosted to enable our customers and partners to choose the best model for their needs.

Monitoring, Analytics, Reporting and Recording for Unified Communications.

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