



# MAF ICIMS™

## CDR Retriever

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## OVERVIEW

This document is a step by step guide for the installation, configuration, deployment and trouble shooting for the MAF InfoCom™ ICIMS™ CDR Retriever.

The CDR Retriever is a service that facilitates the retrieval of the CDR's from a wide range of PBX and Unified Communications systems into a user defined file directory to be collected and processed by MAF InfoCom™ ICIMS™.

The configuration is manually done through the configuration XML file and can be deployed on dedicated machines.

Prerequisites: Microsoft .NET 4.5 runtime framework.

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## 1. Installation

Start by running the installer wizard executable ("CDRRetriever.exe").

Click **Next** on the first page of the install wizard.

Scroll-through and read the License Terms, click **Next** if you agree.

Click **Next** after choosing the installation path.

Input the active directory username and password if needed. Click **Next**.

Click **Install**.

Please **wait** while the installation proceeds further.

Click **Finish** when done.

## 1. Configuration

Residing in the chosen directory path is an XML configuration file (retriever.xml) that can be opened with any text or xml editors such as Microsoft Notepad.

For this configuration example we are using **Lync PBX**.

Retriever configuration should be set:

```
<add key="retriever_type" value="MicrosoftLync " />
```

Add the following lines for MS Lync Connection

```
<add key="data_directory" value="" />
<add key="LyncMonitorServer" value="" />
<add key="LyncMonitorFailoverServer" value="" />
<add key="LyncMonitorUserName" value="" />
<add key="LyncMonitorPassword" value="" />
<add key="LyncMonitorWinAuth" value="N" />
```

```
<add key="LyncArchiveCollectIMs" value="Y" />
<add key="LyncArchiveServer" value="" />
<add key="LyncArchiveFailoverServer" value="" />
<add key="LyncArchiveUserName" value="" />
<add key="LyncArchivePassword" value="" />
<add key="LyncArchiveWinAuth" value="N" />
```



Configuration description:

LyncMonitorServer : Lync PBX DB Monitor server DB address

LyncMonitorFailoverServer : Lync PBX DB Failover Monitor Server address

LyncMonitorUserName: the username credential for logging in to the PBX DB.

LyncMonitorPassword: password credential for logging in to the PBX DB

Retriever\_type – choose “MicrosoftLync”

Data\_directory – select the directory (relative path) as destination for the collected CDR's

LyncMonitorWinAuth : “Y” – use Windows Authentication Credentials

“N” – use SQL authentication Credentials.

LyncArchiveCollectIMs: “Y” – collect IM transcript records from the DB.

“N” – do not collect IM transcript records from the DB.

If you have selected “Y” to collect IM Archive transcripts, you need to configure the connection to the Lync Archive server as well:

LyncArchiveServer : Lync PBX DB IM Transcript Archive server address.

LyncArchiveFailoverServer: Lync PBX DB IM Transcript Archive failover server address.

LyncArchiveUserName: the username credentials for logging in to the Lync Archive DB

LyncArchivePassword: the password credentials for logging in to the Lync Archive DB

LyncArchiveWinAuth: “Y” – use Windows Authentication Credentials

“N” – use SQL authentication Credentials.



You can add `<add key="LyncMonitorStartDate" value="" />` to the config if you need to specify a start date for the CDR in ticks, if not added the default startdate is (1-JAN-2013)

### 3. FTP – sFTP - FTPs connection

For FTP configuration use the following configuration lines. **Make sure the FTP account has Read/Write access.**

Retriever configuration should be set:

```
<add key="retriever_type" value="FTP " />
```

Add the following lines for FTP / FTPs / sFTP

```
<add key="UserName" value=" " />
<add key="Password" value=" " />
<add key="Address" value=" " />
<add key="Port" value="" />
<add key="EnableSSL" value="" />
<add key="PassiveMode" value="" />
<add key="RemotePath" value="" />
<add key="DeleteFiles" value="" />
<add key="RemoteFile" value="" />
<add key="FileNameExcept" value="" />
<add key="FileNameExceptStr" value="" />
<add key="FileNameExceptType" value="" />
```

Configuration description:

Retriever\_type – choose "FTP" (FTP – FTPs – sFTP )

Data\_directory – select the directory (relative path) as destination for the collected CDR's

UserName – user account login for the FTP server

Password – user account password login

Address – FTP server address

Port – FTP server port



EnableSSL – Y or N - connect through SSL (Secure Socket Layer)  
Passive Mode – Y or N – Passive mode  
RemotePath – directory path on the FTP server on which the CDR's are located  
DeleteFiles – Y or N – deletes the file on the FTP server after they are collected  
RemoteFile – **"\*.dat"** – file mask used to identify the files to be retrieved  
FileNameExcept – Y or N – Use file exceptions to prevent certain files to be retrieved  
FileNameExceptStr – File exception string  
FileNameExceptType – 1, 2 or 3 – 1 – Beginning with, 2- Containing, 3 – Ending with.

## 4. Local File Connection

Allows for retrieving files stored on the same machine as the retriever by specifying a directory path.

Retriever configuration should be set:

```
<add key="retriever_type" value="LocalFile " />
```

Add the following lines for Local File Connection

```
<add key="Path" value="" />  
<add key="FileMask" value="" />  
<add key="DeleteFiles" value="" />  
<add key="data_directory" value="" />
```

**Path** – Physical Folder Directory path ex: "D:\CDRs\CDRStream".

**FileMask** – file extension mask.

**DeleteFiles** – should the retriever delete the original CDR's after collecting - "Y" or "N"

**data\_directory** – where should the retriever store the CDR's while retrieving/pushing



## 5. Active Directory Import Configuration

Active Directory Import Configuration

Add the following lines to the configuration file for Active Directory Import

```
<add key="LDAPServer" value="" />
<add key="LDAPPort" value="" />
<add key="LDAPBase" value="" />
<add key="LDAPScope" value="" />
<add key="AuthenticationType" value="" />
<add key="Filter" value="" />
<add key="HierarchyFilter" value="" />
<add key="PageSize" value="" />
<add key="PropertiesToLoad" value="" />
<add key="HierarchyPropertiesToLoad" value="" />
<add key="OutputFileName" value="" />
<add key="HierarchyOutputFileName" value="" />
```

LDAPServer – LDAP Server Address

LDAPPort – LDAP port number

LDAPBase – LDAP Search Base ex: "DC=fabrikam,DC=com"

LDAPScope – LDAP Search Scope ( Base, OneLevel, Subtree )

AuthenticationType – Authentication type for the LDAP Server ex:  
"Secure.Serverbind"

Filter – AD Filter for user search ex: "(objectClass=organizationalPerson)"

HierarchyFilter – AD filter for organization unit search.

PageSize – AD page size to use – ex: "1000"

PropertiesToLoad – properties for users

HierarchyPropertiesToLoad – Properties for organization units

OutputFileName – Output file for users

HierarchyOutputFileName – Output file for organization units



## 6. Uploading/Push Configuration

Remote CDR Retriever features the ability to push/upload CDR's and Organization Structure (AD) to a remote FTP by adding the following lines to the configuration file.

```
<add key="TransferTarget" value="" />
<add key="TransferMethod" value="" />
<add key="TransferPort" value="" />
<add key="TransferUser" value="" />
<add key="TransferPW" value="" />
<add key="RemotePath" value="" />
<add key="TransferFTPPassive" value="" />
<add key="TransferMode" value="1" /> <!-- 0 - fixed time. 1 - interval -->
<add key="TransferInterval" value="0001" /><!-- hhmm -->
<add key="ADRemotePath" value="" />
<add key="ADTransferMode" value="0" /> <!-- 0 - fixed time. 1 - interval -->
<add key="ADTransferTime" value="0600" /> <!-- hhmm -->
```

TransferTarget – remote address for the destination server

TransferMethod – Type of transfer method (ftp, sftp, ftps etc)

TransferPort – port that will be used for the uploading (default is 21)

TransferUser – Login username

TransferPW – login password in plaintext

RemotePath – remote server directory path for CDR's. Default is "/"

TransferFTPPassive – active or passive FTP mode (Y/N)

TransferMode – type of upload schedule for the CDR's (1 – fixed time or 0 – interval)

TransferInterval – schedule for the CDR's upload timing (hhmm)

ADRemotePath – remote server path for the organization structure – AD

ADTransferMode – type of upload schedule for the AD Org. Struct. (1-fixed, 0-interval)

ADTransferTime – AD upload schedule (hhmm) – 1134 for 11:34 AM or every 11 hours 34 mins depending on the ADTransferMode specified.





## 7. Deployment

Run "StartRetrieverService.bat" batch script with administrator privileges:

Verify the CDR Retriever is running by looking for it in the Services. (services.msc)

## 8. Troubleshooting

**Issue:** CDR Retriever service is not running/showing up in services.

**Fix:** Check in the Event Viewer for any errors linked to the service and verify that the retriever.xml configuration file is properly formatted to XML specification.

**Issue :** No call records have been retrieved:

**Fix:** Check that the configuration xml details are correct. Check the connection to the servers.

**Issue:** No data has been pushed

**Fix:** Check for Firewall settings.