Technical Write-up
CTI Integration for Microsoft Dynamics CRM

Unified Service Desk - USD

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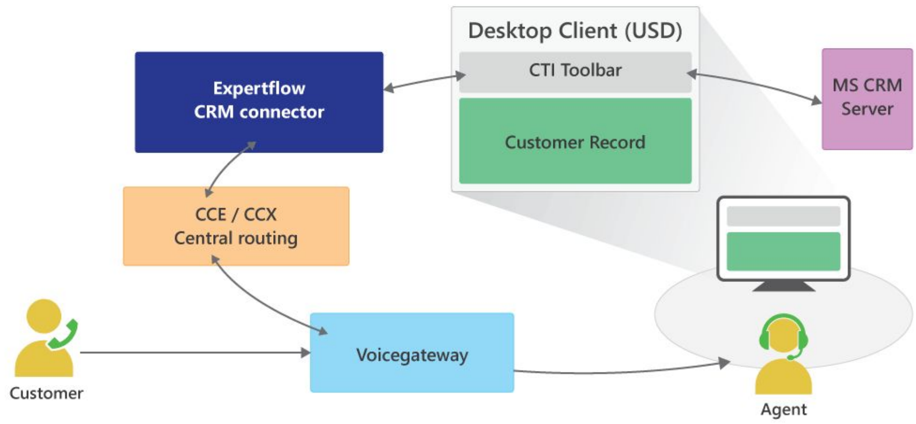
Overview

EF MS CRM CTI Connector is a **Unified Service Desk (USD)** based voice bridge that connects CISCO Unified Contact Center Enterprise (UCCE) or CISCO Unified Contact Center Express (UCCX) with Microsoft Dynamics CRM for CTI call controls through a unified desktop interface. This integrated solution enable agents to quickly and automatically identify customers as well as handle interactions from the same application resulting in improved efficiency as agents will no longer have to switch between the applications. It also provides a real time flow of interactions between USD and Cisco UCCX/UCCE, thus helping your business to be efficient, cost effective and interactive.

Unified Service Desk (USD)

Unified Service Desk for Microsoft Dynamics CRM is a desktop/thick client which provides a configurable framework for quickly building applications for call centers so that agents can get a unified view of the customer data stored in Microsoft Dynamics CRM. You can aggregate customer information from different areas in CRM into an integrated desktop that provides a 360° view of the customer interactions. This gives your customer service agents immediate access to business critical information so they can quickly engage with customers and address queries and issues.

Architecture



Workflow

ExpertFlow MS CRM Connector provides a real time flow of interactions between MS CRM user interface and Cisco UCCE/UCCX.

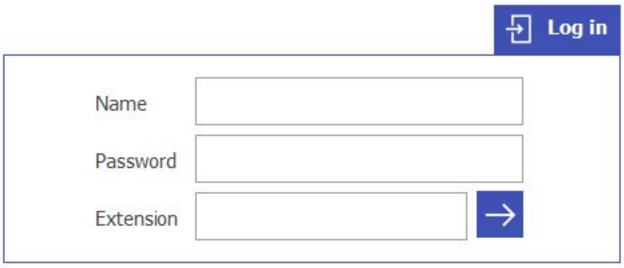
1. An agent logs into the Unified Service Desk by providing his Dynamics CRM credentials. By doing so, he is also automatically logged into the Cisco contact center. In case the agent credentials for contact center are not available in CRM, one time screen pop will allow him to enter his credentials manually.
2. By default the agent is in the 'not ready' state. He can change his state to "ready", using the agent state controls in the USD.
3. When a customer call lands on the voice gateway, the contact center central routing checks for an available agent. Let's assume, in this case it is our agent, to whom the call is routed.

4. Incoming call alert along with the customer information screen pop is shown in the USD.
5. The agent can then use the relevant “accept call” button to begin the interaction.

Features

Agent Login

USD Connector provides single sign on via MS CRM configurations which allows an agent to automatically logs into contact center which he logs into CRM using his CRM credentials. In case the configurations for SSO are not available, it provides a login form via a CTI Toolbar where agent can provide his username, password and extension to be able to login into contact center CTI.

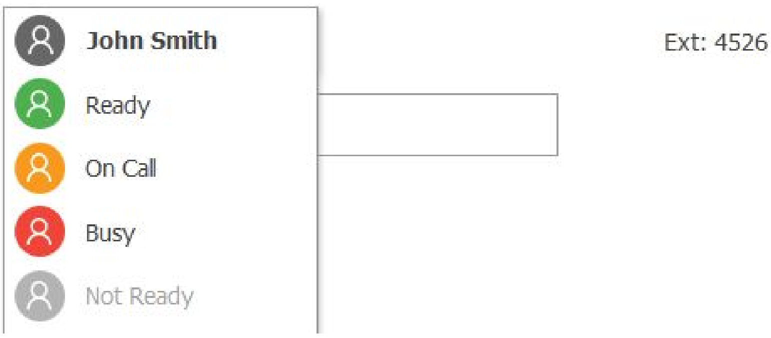


Agent Logout

Agents can Log out of Contact Center via MS CRM logout button.

Agent State Changes

The agent can change his/her state between ready and not-ready using the state change controls in the CTI toolbar.



Call Controls

Controls/buttons on the toolbar change based on the current state of the agent or call and based on the telephony event from the contact center. Using the CTI toolbar, the agent can perform the following actions.

Accept call

The agent can accept an incoming call using the **call answer** button on the toolbar.

Pause (Hold) an active call

The agent can use the **hold** button to hold the ongoing call.

Resume (Retrieve) call

A call that is on hold call can be resumed using the **retrieve call** button.

End (Release) call

The agent can end an ongoing call using the **end call** button.

Blind Transfer (UCCE Only)

An ongoing call can be transferred to another agent using the specified **transfer call** button.

Consult Call

While on a call with a customer, an agent can perform a consult call with another agent/supervisor using the specified consult call control. This will put the customer on hold, while the two agents are in call. After consult, the agent has two options:

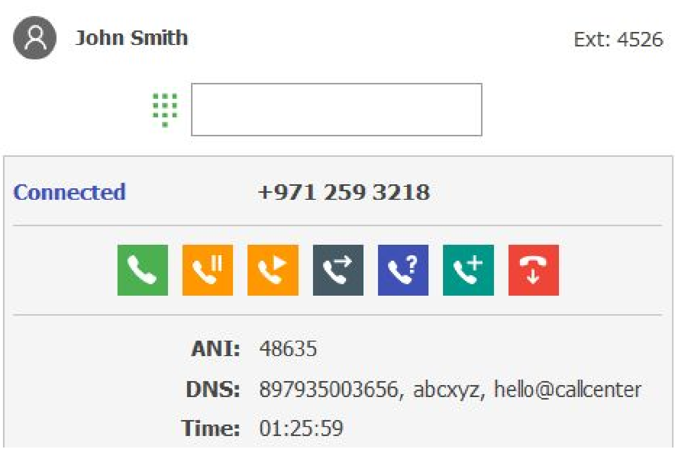
- End the call with supervisor, which will automatically resume the call with customer
- Transfer the call to supervisor (Consult-transfer)

Consult Transfer

While performing the consult call, an agent transfers the call to that agent/supervisor whom he is consulting with, using consult call button.

Conference call

If required, the agent can add another agent or supervisor into an ongoing call to make it a conference call i.e. between the customer, agent and supervisor.



Call wrap-up

Agent can select and push wrap-up codes to contact center at the end of call via a dropdown provided.

Phone call activity

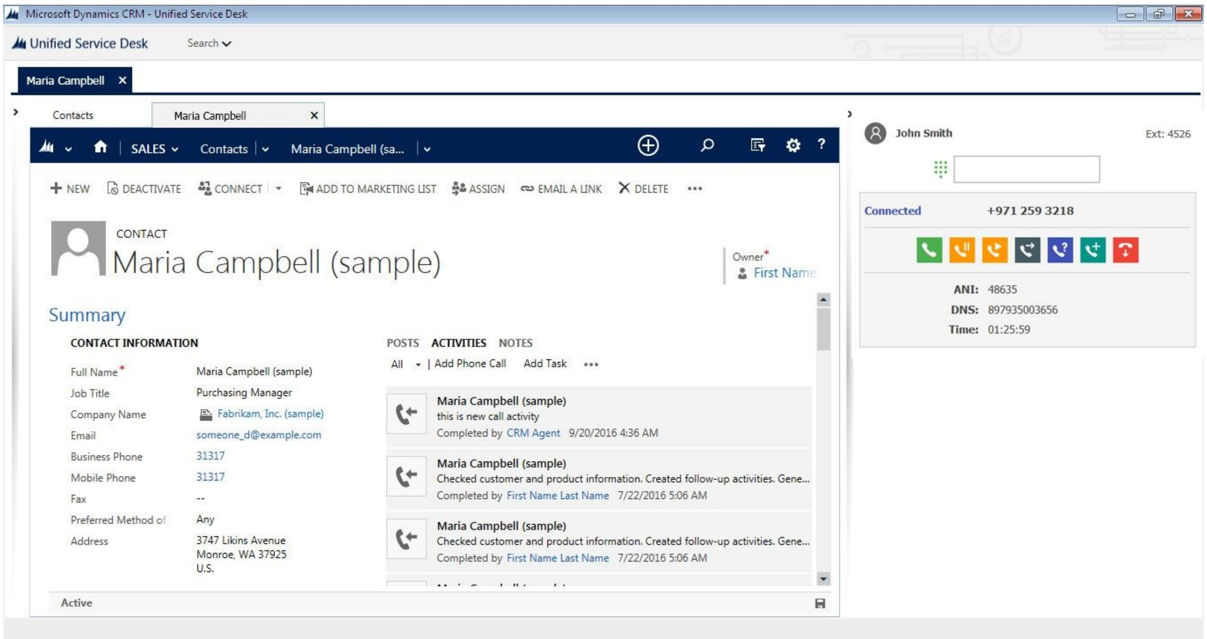
A phone call activity is automatically created and linked to the matched caller account in Microsoft CRM. Any call notes that your write while handling the call are also saved along with the phone call activity.

Click to Call

Click to call a contact from a contact's phone number or via entering the number directly in the CTI panel's dialpad.

Caller Account Popup on Call Arrival

The caller account popup on call arrival takes place based on the caller's phone number. The caller's phone number is matched with one of the MS CRM Contact's phone number fields and the popup takes place within the MS CRM interface.



System Requirements for Expertflow Connector

Hardware Requirements

Component	Requirement
Processor	2-cores
Memory	8-GB RAM

Hard disk	160 GB of available hard disk space*

*Hard disk requirement is dependant on how long do you need to maintain the logs. Exact requirements can be discussed with technical team at the time of deployment.

Software Requirements

- Windows Server 2012 R2 64-bit or above
- Locale Settings: English (recommended)
- Java Runtime (JRE) 8

System Requirements for Client/Agent Machine (for Unified Service Desk)

Hardware Requirements

Component	Minimum	Recommended
Processor	x86- or x64-bit 1.9 gigahertz (GHz) dual core with SSE2 instruction set or faster processor	x86- or x64-bit 1.9 gigahertz (GHz) dual core with SSE2 instruction set or faster processor
Memory	2-GB RAM or more	4-GB RAM or more
Hard disk	1.5 GB of available hard disk space	2 GB of available hard disk space 7200 RPM or more

Software Requirements

- Windows 10, Windows 8.1, Windows 8, or Windows 7
- Internet Explorer 11, Internet Explorer 10, or Internet Explorer 9*
- Microsoft .NET Framework 4.5.2 (installed during Unified Service Desk Setup if missing)
- Windows Identity Foundation 3.5 (installed during Unified Service Desk Setup if missing)
- Recommended screen resolution (in pixels): 1920 x 1080
- Recommended zoom level in Magnifier: 100%

***Internet Explorer 9 is supported for use only with Microsoft Dynamics CRM 2013 Service Pack 1 (SP1) organizations. Also, Internet Explorer 9 may work for systems that are not Microsoft Dynamics CRM.**

Reference: https://technet.microsoft.com/en-us/library/dn646882.aspx