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PRODUCT
GUIDE

MiContact Center Enterprise

Knowledge Base Integration - Description

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INTRODUCTION

This document describes how to integrate a 3rd party knowledge base product with MiCC Enterprise. Detailed instructions on the configuration as well as how to build an adapter are included.

When an agent opens an email, chat or SMS, a knowledge base request will be made based on the contents of the e-mail, SMS or incoming chat messages from the customer. Script Manager has blocks to make a knowledge base request as well.

CREATING AN ADAPTER

GENERAL

To integrate the knowledge base with MiCC Enterprise, an adapter must be created. The adapter must be a .NET assembly that implements the `IKBIntegration` interface found in the `[InstallDir]\services\bin\MiCC Enterprise.KBIntegration.dll` assembly.

IKBIntegrationInterface

The interface only contains 1 method,

```
namespace Solidus.KBIntegration
{
    public interface IKBIntegration
    {
        GetKBInfoResponse GetResults(GetKBInfoRequest request);
    }
}
```

GETKBINFOREQUEST

This is the parameter passed into the `GetResults` Method

PARAMETER NAME	DESCRIPTION	OPTIONAL/REQUIRED
SessionID	Unique invocation ID for this request. Generally will be increased for each request.	Required
TenantID	Record ID of the tenant the session is allocated to	Required
ServiceAccessID	Record ID of the service access requesting the info.	Optional
ServiceGroupID	Record ID of the service group requesting the info.	Optional
Subject	Email Subject	Optional
Data	Data to lookup in the request	Optional
AdditionalData	Reserved for future use.	Optional
MediaType	Type of media (e-mail, chat or SMS)	Required
ContextID	Context ID returned from the last <code>GetResults</code> call. Does not apply to manual searches.	Optional
MaxResults	Maximum number of results to return.	Required

	0 = unlimited.	
CallID	Internal ID associated to the current media session. Only applies for requests made from the Agent desktop application.	Optional
AgentID	ID of the agent making the request. Only applies for requests made from the Agent desktop application.	Optional
PrivateData	Private data associated to the current media session. Only applies for requests made from the Agent desktop application.	Optional

GETKBINFORESPONSE

This object is returned from the GetResults method

PARAMETER NAME	DESCRIPTION	OPTIONAL/REQUIRED
SessionID	The SessionID passed into the GetResults method	Required
Result	Result of the request	Required
Responses	List of KBInfo results	Required if successful
ContextID	Adapter may return a context ID which will be passed into the next GetResults call for the same chat or e-mail session.	Optional

KBINFO

This object maps to a successful result from the knowledge base

PARAMETER NAME	DESCRIPTION	OPTIONAL/REQUIRED
ConfidenceLevel	The confidence level of the result if provided by the 3 rd party knowledge base. A value of null indicates confidence level not supported. Range is 0 -100.	Optional
Data	The knowledge base result. The results may contain identifiers that will be replaced when the response is inserted into the e-mail, chat or SMS. See the section <i>Replaceable Identifiers in Response Files and KB Responses</i> in the document <i>Advanced Configurations</i> .	Required

C# EXAMPLE

This example was created using Visual Studio 2013.

Steps:

1. Create a new class library project targeting the .NET Framework 4.5.1
2. Add a reference to the [InstallDir]\services\bin\Solidus.KBIntegration.dll assembly
3. Create a new class and have it implement the Solidus.KBIntegration.IKBIntegration interface.
4. Implement the GetResults method by querying the 3rd party knowledge base.
5. Build the release configuration.

The sample project can be found on the MiCC Enterprise DVD in the
Tools\SampleCode\KBIntegration.Example directory.

An example with a hard-coded result is shown below:

```
using System;
using System.Collections.Generic;
using System.Text;

namespace Solidus.KBIntegration.Example
{
    public class KBIntegration : IKBIntegration
    {
        public GetKBInfoResponse GetResults(GetKBInfoRequest request)
        {
            if (null == request)
                throw new ArgumentNullException();

            GetKBInfoResponse response = new GetKBInfoResponse();
            response.Result = KBResultType.Success;
            response.SessionID = request.SessionID;
            response.Responses = new List<KBInfo>();

            // Rather than the hard-coded data below, a connection to the 3rd party knowledge
            // base should be implemented here and the responses from it returned.
            response.Responses.Add(new KBInfo { ConfidenceLevel = 90, Data = "Response 1" });
            response.Responses.Add(new KBInfo { Data = "Response 2" });
            response.Responses.Add(new KBInfo { ConfidenceLevel = 50, Data = "Response 2" });

            return response;
        }
    }
}
```

CONFIGURATION

To configure the adapter, follow these steps:

1. On the MiCC Enterprise server, verify that the E-mail service is installed. The knowledge base integration is housed in the E-mail service. Install if necessary.
2. Copy the adapter to the server where the E-mail service is installed.
3. Run Configuration Manager.
4. Open the Contact Center properties (Tenant Properties for a tenanted system).
5. At the bottom of the General Tab, enable the Knowledge Base integration.
6. Enter the full path and file name of the adapter.
7. Enter the full Integration Type Name.

The screenshot below shows how the example class listed above would be configured:

The screenshot shows the 'Contact Center System Properties' dialog box with the 'General' tab selected. The 'E-mail' sub-tab is active. The 'Enable Knowledge Base Integration' checkbox is checked. The 'Integration Assembly Path' is set to 'c:\kb\CustomIntegration.dll' and the 'Integration Type Name' is 'Solidus.KBIntegration.Example.KBIntegration'. Other settings include 'User Name Format' set to 'LastName, FirstName (Smith, Mary)' and 'EWT Calculation Method' set to 'Use Last Ten Calls'.

Open Media	Chat	Default Language Path	LDAP Directory
General	Call	Queue Handling	Agent
Phone Agent	Report	E-mail	E-mail Server

☐ Enable Agent Privacy

EWT Calculation Method

☐ Use Agent Availability

☒ Use Last Ten Calls

Call (mm:ss)

Minimum Duration for Outgoing Call: 00 : 00

Minimum Duration for Session: 00 : 00

Minimum Duration for Abandoned Call: 00 : 00

Duration for Short Call: 00 : 00

User Name Format: LastName, FirstName (Smith, Mary)

Storage Path for Recorded Files:

Logo File: Change... Remove

☒ Enable Knowledge Base Integration

Integration Assembly Path: c:\kb\CustomIntegration.dll

Integration Type Name: Solidus.KBIntegration.Example.KBIntegration

OK Cancel Advanced... Help

8. Knowledge Base Integration must also be enabled for each service group where it applies.
9. Open the Service Group Properties for the desired service group.
10. At the bottom of the General Tab, enable the Knowledge Base integration.

The screenshot shows the 'Service Group Properties: Sales' dialog box with the 'General' tab selected. The 'Name' field is 'Sales' and the 'Purpose' is 'E-mail'. The 'Service Level Goal' is set to '80 % of Calls to be Answered Within 1 Days 0 : 00 (hh:mm)'. The 'Performance Calculation' interval is '30 minutes' and the workday is from '12 : 00 AM' to '9 : 00 AM'. The 'Associated Call Qualification Code Template' is '<None>'. The 'IVR Label for Agent Dispatch Display' is empty. The 'Voice Recording' is set to 'Use System Setting'. The 'Display in Dispatch' checkbox is unchecked, and the 'Knowledge Base Integration' checkbox is checked. The 'Text Response File' field is empty. At the bottom are buttons for 'OK', 'Cancel', 'Permissions...', and 'Help'.

Service Group Properties: Sales	
General Agent Selection Skills Thresholds E-mail Agent Action	
Name:	Sales
Purpose:	E-mail
Service Level Goal	
80	% of Calls to be Answered Within 1 Days 0 : 00 (hh:mm)
Performance Calculation	
Interval:	30 minutes
Workday:	From: 12 : 00 AM To: 9 : 00 AM
Associated Call Qualification Code Template:	<None>
IVR Label for Agent Dispatch Display:	
Voice Recording:	Use System Setting
<input type="checkbox"/> Display in Dispatch	
<input checked="" type="checkbox"/> Knowledge Base Integration	
Text Response File:	
OK Cancel Permissions... Help	

