



A MITEL
PRODUCT
GUIDE

Unify OpenScape Contact Center Enterprise

SAP ICI V11 R1

Integration Guide

07/2022

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1 About this guide

This guide provides an overview of the OpenScape Contact Center integration with the SAP Integrated Communication Interface (ICI).

1.1 Who should use this guide

This guide is intended for OpenScape Contact Center and SAP system administrators.

1.2 Formatting conventions

The following formatting conventions are used in this guide:

Bold

This font identifies OpenScape Contact Center components, window and dialog box titles, and item names.

Italic

This font identifies references to related documentation.

Monospace Font

This font distinguishes text that you should type, or that the computer displays in a message.

NOTE: Notes emphasize information that is useful but not essential, such as tips or alternative methods for performing a task.

IMPORTANT: Important notes draw special attention to actions that could adversely affect the operation of the application or result in a loss of data.

About this guide

[Documentation feedback](#)

1.3 Documentation feedback

To report an issue with this document, call the Customer Support Center.

When you call, be sure to include the following information. This will help identify which document you are having issues with.

- **Title:** SAP ICI Integration Guide
- **Order Number:** A31003-S22B1-N104-01-7620

2 About the OpenScape Contact Center SAP ICI Integration

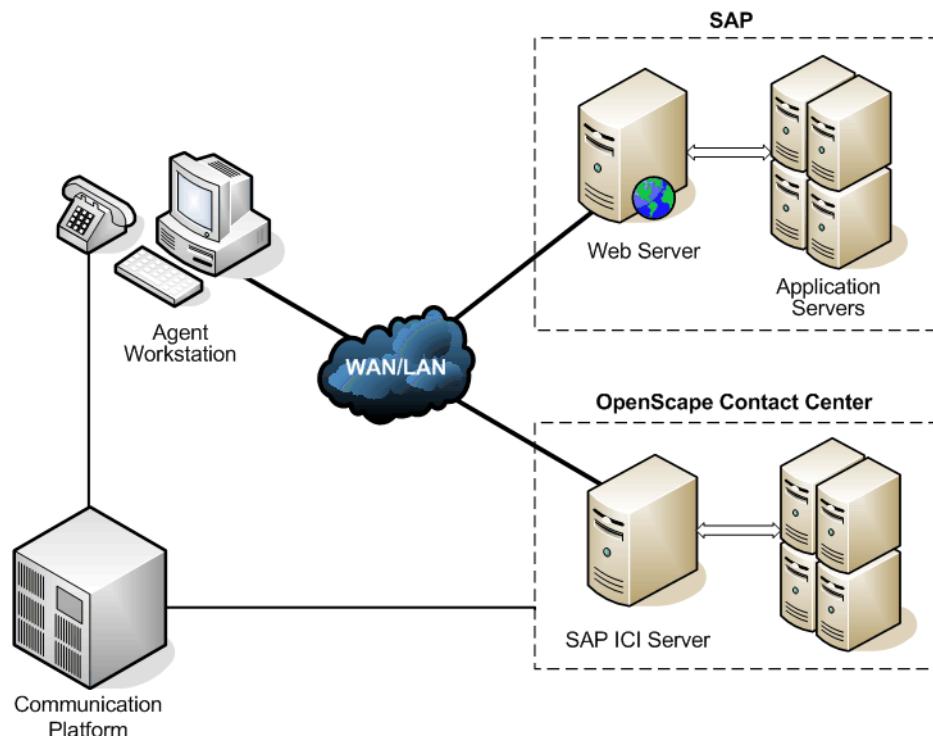
This chapter provides an overview of the OpenScape Contact Center integration with the SAP Integrated Communication Interface (ICI).

2.1 Overview

The OpenScape Contact Center system integrates with the SAP Integrated Communication Interface (ICI) to enable SAP ICI users to handle calls routed by the OpenScape Contact Center system using the SAP Interaction Center WebClient.

The OpenScape Contact Center SAP ICI Integration has been tested with SAP CRM 5.0 and SAP CRM 7.0 and has been certified with the SAP CA-ICI-CTI 3.07 Interface.

The main component of the OpenScape Contact Center system that handles the integration is the OpenScape Contact Center SAP ICI Server, which runs on either the main OpenScape Contact Center server machine or on an auxiliary server machine. The status of the OpenScape Contact Center SAP ICI Server can be monitored using the System Monitor application.



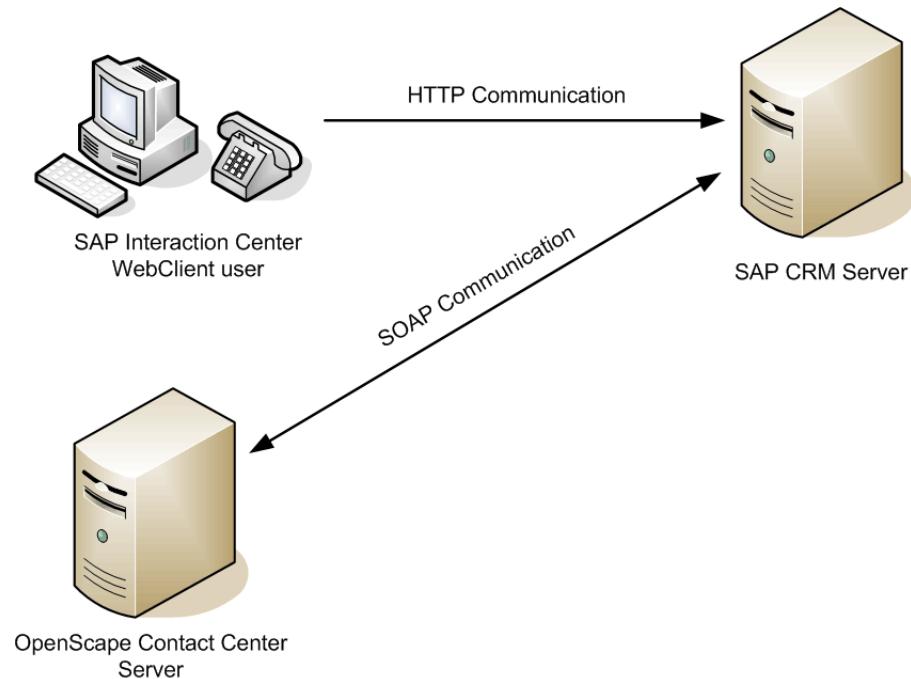
About the OpenScape Contact Center SAP ICI Integration

Network configuration

2.1 Network configuration

The following diagram shows a typical network configuration for the OpenScape Contact Center SAP ICI Integration.

- **HTTP Communication** — Required to handle HTTP requests from the SAP Interaction Center WebClient to the SAP CRM server.
- **SOAP Communication** — Required to handle SOAP traffic between the OpenScape Contact Center server and the SAP CRM server.



2.2 Understanding Automatic Number Identification (ANI) scripting

The OpenScape Contact Center SAP ICI Integration provides a scripting feature that enables users to modify the ANI (telephone number of the caller) passed from the communication platform to the SAP system so that it adheres to SAP standards.

Using an ANI script might be required if the format of the ANI passed by the communication platform does not match the format of the ANI stored in the SAP database. A mismatch would result in the SAP system being unable to generate a screen pop for the call.

Depending on the format of the ANI provided, you might have to do the following:

- In North America, add a country code and area code to the ANI provided for a local call, for example, change 5551430 to 14165551430.
- In Germany, strip out a leading zero and add 49 to the ANI provided for a national call, for example, change 08972289561 to 498972289561.

The following sample script files are installed on the OpenScape Contact Center server machine where the OpenScape Contact Center SAP ICI Server is installed:

- SapIciAniScript.vbs (VBScript)
- SapIciAniScript.js (JScript)

You can open one of these sample script files, modify the code to the specific needs of the contact center, and then save the file under a new name.

NOTE: For detailed information on how to enable and configure ANI scripting in OpenScape Contact Center, see the *Manager Help*.

2.3 Limitations

This section describes known limitations with the OpenScape Contact Center SAP ICI Integration.

Limitation	Description
Action Item Channel	The Action Item Channel feature is not supported.
Agent Portal	Running the Agent Portal application at the same time as the SAP Interaction Center WebClient is not supported
Agent Presence	The Agent Presence feature is not supported.
Camp On	The camp on feature is not supported.
Client Desktop application	Running the Client Desktop application at the same time as the SAP Interaction Center WebClient is not supported.
Conference	Removing individual participants from a conference call is not supported.
Conference (OpenScape Business)	The conference feature is not supported when connected to an OpenScape Business communication platform.
Conference on hold	Placing a call on hold while participating in a conference results in only the requestor being placed on hold. The rest of the participants remain in the conference.
End	Using the End feature to terminate a call and clear customer information from the screen is not supported until the user disconnects from the call.
Free Seating	The Free Seating feature is not supported.
Multiple contact handling	Multiple contact handling is not supported for SAP ICI users.
Multitenancy	The SAP ICI Integration is not supported in a multitenant environment.
Queue Presence	The Queue Presence feature is not supported.
Recall	The Recall feature is not supported and must be disabled on the communication platform.
Reject	The Reject feature is not supported.
Send DTMF	The Send DTMF feature is not supported.
Toggle	The Toggle feature is not supported. For example, if a user is handling a call and a second call, not routed by the OpenScape Contact Center system, is delivered to the user's extension, the user can choose to toggle between the two calls from the physical telephone. However, when the user toggles to the second call, the SAP Interaction Center WebClient will not display the details of the call.

*Table 1**Limitations*

Limitation	Description
Warm Transfer	<p>When performing a warm transfer using the SAP Interaction Center WebClient, the transfer can fail if the CAD Handling setting in SAP is configured incorrectly. To ensure that warm transfers work correctly, you must configure the CAD Handling setting as either:</p> <ul style="list-style-type: none">• A (Inherited / Not Copied Back)• C (Inherited / Copied Back)

*Table 1**Limitations*

About the OpenScape Contact Center SAP ICI Integration

Limitations

3 Configuring the OpenScape Contact Center SAP ICI Integration

This chapter describes how to configure the SAP and OpenScape Contact Center systems so that SAP ICI users can handle calls routed by the OpenScape Contact Center system using the SAP Interaction Center WebClient.

3.1 Configuring the OpenScape Contact Center system

To integrate the OpenScape Contact Center system with the SAP Integrated Communication Interface (ICI), you must configure the SAP ICI port number and script settings using the Manager application.

In addition, you must configure the user ID and extension of each SAP ICI user who will handle calls routed by the OpenScape Contact Center system using the SAP Interaction Center WebClient.

NOTE: For detailed instructions on how to configure the SAP ICI settings and configure the user ID and extension of each SAP ICI user, see the *Manager Help*.

3.2 Configuring the SAP system

To integrate the OpenScape Contact Center system with the SAP Integrated Communication Interface (ICI), you must configure the SAP system. For detailed instructions on how to perform these procedures, see your SAP documentation.

To configure the SAP system:

1. Using the System Monitor application, ensure that the OpenScape Contact Center SAP ICI Server is running.

NOTE: For detailed instructions on how to monitor the status of the OpenScape Contact Center SAP ICI Server, see the System Monitor Help.

2. In the SAP system, open the **SAP BCB Administration** page.

Configuring the OpenScape Contact Center SAP ICI Integration

Configuring the SAP system

3. Create a new connection as follows:
 - In the **Host name** box, type the host name of the server machine where the OpenScape Contact Center SAP ICI Server resides.
 - In the **Port** box, type the port number that the SAP system uses to communicate with OpenScape Contact Center.
 - In the **Path** box, type `soapdispatcher`.
4. Select **Default**, and then click the **Test** button. A green light indicates success and a red light indicates failure. A failure typically indicates that:
 - The OpenScape Contact Center SAP ICI Server is not running.
 - A firewall is blocking communication.
 - The wrong port is configured.
 - The wrong host name is configured.
 - A proxy server is not working.
5. When the test is successful, click **Save Settings**.

4 Handling SAP Item Attached Data

This chapter describes how the OpenScape Contact Center system handles SAP item attached data.

NOTE: For more information on SAP item attached data, its structure, and how screen pops are initiated, see your SAP documentation.

4.1 Overview

SAP describes item attached data as application data related to a contact. For example, it could be the customer ID of the calling party or the number of an order that the customer has requested information on. OpenScape Contact Center functions as a transparent transportation layer.

OpenScape Contact Center and the OpenScape Contact Center SAP ICI Integration are responsible for the following:

- Transporting the data from one SAP ICI user to another
- Transporting the data to the SAP system

OpenScape Contact Center and the OpenScape Contact Center SAP ICI Integration are not responsible for the following:

- An analysis of the data to see if it is correct, complete, or damaged
- Ensuring that the data is valid in the SAP system
- Generating the screen pop within the SAP system

Handling SAP Item Attached Data

Processing SAP item attached data

4.2 Processing SAP item attached data

OpenScape Contact Center contact data is organized as a list of key/value pairs. The following key/value pairs are reserved for the SAP ICI Integration.

Key/value pair components	Description
Contact data - key	<p>The value of the key part of the OpenScape Contact Center contact data used for the SAP implementation is always the reserved constant:</p> <p><code>SAP_ICI_CALLATTACHEDDATA</code></p>
Contact data - value	<p>The SAP data is transported in the value field of the OpenScape Contact Center contact data. To transport multiple values within the OpenScape Contact Center contact data field, the caret (^) character should be used to delimit the end of each key field and the pipe () character should be used to delimit the end of each value field.</p> <p>The maximum number of characters in the SAP data is 128, which includes the special characters for the field delimiters</p> <p>Note: CHAR15 and CHAR16 are special internal characters that should not be used in the contact data key or value fields.</p>

Table 2

OpenScape Contact Center key/value pairs

The call data is sent by the OpenScape Contact Center SAP ICI Server to the SAP system in XML format.

A screen pop with the caller information can then be displayed in the Account area of the SAP Interaction Center WebClient when the ANI (telephone number of the caller) matches the ANI defined in the SAP database.

NOTE: To learn how the SAP data must be organized in your specific SAP environment, we strongly recommend that you read the appropriate SAP documentation and contact a professional SAP consultant if required.

4.3 Sample conversion

In the following example, the SAP data is converted to the supported OpenScape Contact Center contact data format.

The following example shows the original SAP data.

BUS1001

The following example shows how the original SAP data is sent to the SAP system in XML format.

```
<IciEventNS:attachedData>
  <ItemAttachedData>
    <Application id="IVR">
      <Calldata>
        BUS1001
      </Calldata>
    </Application>
  </ItemAttachedData>
</IciEventNS:attachedData>
```

When using an IVR, you must use the IVR API function `SetContactData` to add the appropriate SAP-formatted key/value pair to the contact data of the call as in the following example.

```
SetContactData('9431139498449002', 'SAP_ICI_CALLATTACHEDDATA',
  'BUS1001', 0)
```

After the contact data is set, you must use the IVR API function or VoiceXML subdialog `Enqueue` or `EnqueueForAgent` to transfer the contact data to the OpenScape Contact Center system from where it is sent to the SAP system.

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