Configuring SAP BCM and SAP CRM Interaction Center

Applies to:
SAP Business Communication Management 5.5 SR1 For more information, visit the Customer Relationship Management

Summary
This Document describes the technical steps required to configure SAP BCM connection to SAP CRM Interaction Center.

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1. Prerequisites
This document will describe how to connect SAP BCM to SAP CRM Interaction Center. The items mentioned below need to be in place before you can start integrating these two applications.

1.1. Common
- Userid’s in both systems need to be the same (passwords can differ).
- Security settings for BCM and CRM IC websites must have been set in Internet Explorer options on Client systems.

1.2. BCM
- The reader is assumed to have Basic knowledge of BCM.
- A running SAP BCM 5.5 SR1 Service Pack 2 or higher system

1.3. SAP CRM
- The reader is assumed to have basic knowledge of SAP.
- A running SAP CRM 5.X / 2006 / 2007 system including Interaction Center
- User account’s need to have a role that grants access to the security object S_RFC for RFC communication.
- User account’s need to have been setup as a business partner.

1.4. Application parameters used in this document
- IP Address of the SAP BCM server used in this manual: 192.168.12.15
  - Substitute this value with the name or IP-address of your own BCM system.
- All BCM Virtual Unit names start with UPH_.
  - This is an arbitrary choice based on our company name and can be replaced with any desired naming convention.
- BCM Installation Media path: E:\install\BCM_55
  - This is the directory where I extracted the BCM ZIP file from Service Market Place to. Replace this folder with name of the directory where you extracted the files to.
- BCM Home Directory: E:\BCM
  - We choose to install BCM in E:\BCM. Replace this directory name with the Home directory of your BCM installation.
2. Setup BCM

2.1. Adding integration services

SAP BCM uses the Online Interaction Interface (OII) package to communicate with external applications. If not already present you therefore need to add this module to the BCM System by installing the Integration Services component. The Integration package contains a number of web services that are deployed to the IIS web server. The integration Services package should therefore be added to the Virtual Unit that runs the web server.

- In WVUMU add the package to the Virtual Unit:

![WVUMU interface showing the addition of a package to a Virtual Unit](image)

*Figure 1*
The values for the sap gateway host and service can be left at there default setting.

After that, check the file permissions of the following COM+ component (Simplify access to the Component services management console by creating a shortcut on your desktop to C:WINDOWSsystem32\Com\comexp.msc):

- Right click WicomFileAccess55 and choose properties.
- Add the same windows account here that has been used for the webroot component. In our case that account is bcmsrv\bcmadmin.
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Figure 4

This application will run under the following account:

Account:
- System Account:
  - Interactive user - The current logged on user
  - Local Service - Built-in service account
  - Network Service - Built-in service account with network access
  - Local System - Complete access to local machine

This user:

User: boxenAbcmadmin

Password: ***************

Confirm password: ***************

Server applications cannot run under system service accounts.

Figure 4
2.2. Configure BCM application

In BCM you need to set three parameters to enable OII for an application. In our case we created an application called CC (CallCenter) and configured that to work with OII.

![Configuration screenshot](image)

The relevant parameters are:

- **Category CEM** → **ExtraDataWhenAllocated** = XML, FirstBName, FirstBNumber
- **Category CEM** → **ExtraDataWhenCallOut** = XML, FirstBName
- **Category Integration Services** → **OIIPort** = 18025

The category Integration Services was introduced in SP2 of BCM 5.5 SR1, therefore if you are running SP1 then this category is not available for selection.
2.3. Checking OII

- Logon to the BCM server using RDP (192.168.12.15 in our case).
- Open Internet Explorer and navigate to:

- Click the start or GetState link.
  - If you choose start then click the invoke button on the next screen.
    - Note that this button is only displayed when opening the page from the server.

- In both cases (start or GetState) the next page should show the status "Initialized":

| EnumClients |
| EnumItems |
| GetLogPath |
| GetState |
| SetLogLevel |
| Start |
| Stop |
| Unload |
| UpdateSettings |

- Click the start or GetState link.
- If you choose start then click the invoke button on the next screen.
  - Note that this button is only displayed when opening the page from the server.

| Start |
| Test |

To test the operation using the HTTP POST protocol, click the 'Invoke' button.

- In both cases (start or GetState) the next page should show the status "Initialized":

<?xml version="1.0" encoding="utf-8" ?>
<string xmlns="http://wicom.com/ws/011/">Initialized</string>
• If OII does not start correctly then check whether the parameters provided in WVUMU are reflected in the windows registry (HKLM\Software\Wicom).
• It is possible that there is a mismatch between these two. If so then you can workaround this bug by editing the file app.config in <BCM_HOME>\VU\<VU_NAME>\web\OII.
• It must have the correct values for the database and OII server. In our case they are as follows:

```xml
<?xml version="1.0" encoding="utf-8" ?>
<appSettings>
  <add key="LOG_LEVEL" value="3"/>
  <add key="LOG_KEEP_DAYS" value="7"/>
  <add key="LOG_DETECT_REPEATED" value="False"/>
  <add key="LOG_SHOW_THREAD" value="True"/>
  <add key="VU" value="UPH"/>
  <add key="CEM_SERVER" value="BCMSRV\BCM"/>
  <add key="CEM_DATABASE" value="UPH_CEM"/>
  <add key="CEM_USER_ID" value=""/>
  <add key="CEM_PWD" value=""/>
  <add key="CEM_NAME" value="UPH_CEM"/>
  <add key="CEM_APP_NAME" value="CC"/>
  <add key="OII_SERVER" value="localhost"/>
  <add key="OII_PORT" value="18025"/>
  <add key="MAIL_ROOT" value="C:\Inetpub\mailroot"/>
  <add key="ICIUSER_AUTOMATIC_UNSUBSCRIBE" value="True"/>
  <add key="SERVICEPOINTMANAGER_EXPECT100CONTINUE" value="False"/>
  <add key="SERVICEPOINTMANAGER_USENAGLEALGORITHM" value="False"/>
  <add key="SERVICEPOINTMANAGER_MAXSERVICEPOINTIDLETIME" value="0"/>
</appSettings>
```

• When finished restart the CEM server via WIM.
3. Setup CRM

3.1. Create RFC Destination

- In transaction SM59 create a new HTTP RFC connection to your BCM system (192.168.12.15 in our case).
- Remember the name of the Connection since you need to provide it as input later on.

![RFC Destination BCM](image-url)
• Test the connection

![Connection Test HTTP Destination BCM](image)

**Figure 10**

3.2. Define BCM as a communication system.

• Add BCM as a Communication Management System via Transaction CRMM_IC_MCM_CCADM

![Change View "Maintain System Settings": Details](image)

**Figure 11**

• Add a Channel for the created entry.
• The result should look like the picture below.
• Highlight the entry on the right and click on Channels
• Add a new telephony channel (E-mail and chat are optional).
• The result should look like the picture on the next page.
• Highlight the Telephony Channel and click on Queues to add a queue.
• The result should look like the picture below (queue ID can be any number).
3.3. Define Connections

- Start Transaction CRMM_BCB_ADM to link the RFC connection to the Communication Management Software by creating a new entry.
- The result should look like the picture below.

![Change View "Communication Management Software Connections"](image1)

Figure 14

3.4. Define Profiles

- Start transaction CRMC_IC_MCM_CC_PRO and create a New Entry.
- The result should look like the picture below.

![Change View "Define Communication Management Software Profiles"](image2)

Figure 15

3.5. Assign System to Profile

- Start Transaction CRMM_IC_MCM_CCLNK and create a New Entry.
- The result should look like the picture below.

![Change View "IC MCM Com Mgmt Software Link Profile & System"](image3)

Figure 16
3.6. Define IC Web client Profile

- Start transaction PFCG
  - Create a new empty role (in our case we named it BP_ICAGENT_BCM)
  - Start transaction SPRO and navigate to “Define Business Role”:

![Display IMG](image1)

- Either create a new Business role or copy an existing entry

![Change View "Define Business Roles": Overview](image2)

- If you decide to copy an existing role then use the IC_AGENT role as a source.
- For the new profile set the value PFCG Role ID to the value of the new role you created in transaction PFCG (BP_ICAGENT_BCM)
In this case we named the new role BP_ICA_BCM.

Select the new role from the right windowpane and click on Assign Function Profiles in the left window pane.

Set the CONTACTCENTER parameter and save the profile.

The value has to match the value you entered in CRMM_IC_MCM_CCADM.
3.7. Assign business role to user

- Navigate to Interaction Center → Supporting Processes → IC Structure → Create Organization and Staffing (or start transaction PPOCW).
• If you have already created an organizational model hit cancel on the next screen.

Figure 13

• IF needed create a new position. We created one based on the existing position called IC Agent Sales and added "+ BCM" to the name of the position.

Figure 24
• Select the position and go to the menu option “Enhanced Object Description” as listed below.

![Figure 25](image1)

• Select Business Role form the infotype list and click the new button.

![Figure 26](image2)
- From the input help for the business role select the role created for BCM:

![Create Business Role](Figure 27)

- Save and exit.
- Now assign all users that need to use BCM from Interaction Center to the new position.
- In our case we created a user named Kim Vanderbilt (See figure 28 on next page) and assigned her to the position.

![Business Role List](Figure 28)
- She will automatically get the correct roles assigned in SU01 and will be able to use BCM,
4. **Appendix A - Internet Explorer Client Settings**

Please read Paragraph 2.2.2 from the BCM Client Workstation Installation Guide.

[Http://service.sap.com/instguides](http://service.sap.com/instguides)

Installation & Upgrade Guides

→ SAP Solution Extensions

→ SAP Business Communications Management

→ 5.5 SR1 Installation and Administration Guides

→ Client Workstation Installation Guide
Related Content

Creating Business Value With Communication-Enabled CRM Processes
SAP Insider - CRM 2008 Post Presentation Q&A - The fundamentals of SAP CRM Interaction Center
What is Computer Telephony Integration (and Why Do I Need It?)
CRM: Contact Center Simulator Setup

For more information, visit the Customer Relationship Management
Company Profile

Uphantis provides services and products that smoothen the integration of business processes within medium-sized to large companies. We are convinced that technology should be the starting point in order to achieve the intended business advantages, and thus our company policy is based on this view.

Uphantis is Greek for ‘weaver’ and weaving is exactly what we do: by applying advanced information technology, Uphantis’ specialists weave and integrate the various technologies that still exist next to each other within organisations, designing a completely new and innovative IT landscape that offers a new functionality and new possibilities for business success.

This approach appears to meet the needs of the corporate sector. Since its formation in 2005, Uphantis has grown to be a company with 230 employees and about 75 regular customers, consisting of medium-sized and large companies. Uphantis operates from the Netherlands and has offices in Ede, Amsterdam, ‘s-Hertogenbosch and Maastricht.

With 8 years of IT experience in SAP basis consulting, systems management, database management, EAI and storage I consider myself a technical consultant with a broad knowledge base that can relate to customers on many topics.

In April this year I got involved with BCM (Business Communication Management) due to the fact that Uphantis is striving to be on top of new technology related to SAP’s portfolio. As SAP CRM is one of Uphantis focus areas and CRM Interaction Center a well-established expertise, it was very relevant for us to become acquainted with SAP BCM. I have therefore attended a training course at SAP in Finland and have setup a demo environment to further test the various BCM functionalities. Furthermore I am participating for Uphantis in the BCM 6.0 ramp-up program so that we have hands-on experience with the new version when it is released to customers.

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