

# **TIBCO ActiveMatrix<sup>®</sup> Adapter for Amdocs CRM**

## **Examples**

*Software Release 5.5  
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# Preface

TIBCO ActiveMatrix Adapter for Amdocs CRM serves as a bi-directional gateway between a Amdocs CRM system and applications configured for the TIBCO environment.

## Topics

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- [Changes from the Previous Release of this Guide, page vi](#)
- [Related Documentation, page vii](#)
- [Typographical Conventions, page viii](#)
- [Connecting with TIBCO Resources, page x](#)

## Changes from the Previous Release of this Guide

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This section itemizes the major changes from the previous release of this guide.

### **Renaming TIBCO Adapter for ClarifyCRM**

The adapter is renamed to TIBCO ActiveMatrix Adapter for Amdocs CRM

### **Separating from TIBCO Adapter for ClarifyCRM User's Guide**

TIBCO ActiveMatrix Adapter for Amdocs CRM Examples is separated from TIBCO Adapter for ClarifyCRM User's Guide version 5.4.0.

## Related Documentation

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This section lists documentation resources you may find useful.

### TIBCO ActiveMatrix Adapter for Amdocs CRM Documentation

The following documents form the TIBCO ActiveMatrix Adapter for Amdocs CRM documentation set:

- *TIBCO ActiveMatrix Adapter for Amdocs CRM Concepts* Read this manual to gain an understanding of the product that you can apply to the various tasks you may undertake.
- *TIBCO ActiveMatrix Adapter for Amdocs CRM Installation* Read this manual for instructions on site preparation and installation.
- *TIBCO ActiveMatrix Adapter for Amdocs CRM Configuration and Deployment* Read this manual for instructions on creating, configuring, and deploying adapter projects.
- *TIBCO ActiveMatrix Adapter for Amdocs CRM Examples* Read this manual to work through the examples provided with the adapter.
- *TIBCO ActiveMatrix Adapter for Amdocs CRM Release Notes* Read the release notes for a list of new and changed features. This document also contains lists of known issues and closed issues for this release.

### Other TIBCO Product Documentation

You may find it useful to read the documentation for the following TIBCO products.

- TIBCO Designer™
- TIBCO Administrator™
- TIBCO ActiveMatrix BusinessWorks™
- TIBCO Rendezvous®
- TIBCO Enterprise Message Service™
- TIBCO Hawk®
- TIBCO® Adapter SDK
- TIBCO Runtime Agent™

# Typographical Conventions




The following typographical conventions are used in this manual.

Table 1 General Typographical Conventions

| Convention                           | Use  |
|--------------------------------------|--|
| <i>ENV_NAME</i><br><i>TIBCO_HOME</i> | <p>TIBCO products are installed into an installation environment. A product installed into an installation environment does not access components in other installation environments. Incompatible products and multiple instances of the same product must be installed into different installation environments.</p> <p>An installation environment consists of the following properties:</p> <ul style="list-style-type: none"><li>• <b>Name</b> Identifies the installation environment. This name is referenced in documentation as <i>ENV_NAME</i>. On Microsoft Windows, the name is appended to the name of Windows services created by the installer and is a component of the path to the product shortcut in the Windows Start &gt; All Programs menu.</li><li>• <b>Path</b> The folder into which the product is installed. This folder is referenced in documentation as <i>TIBCO_HOME</i>.</li></ul> |
| code font                            | <p>Code font identifies commands, code examples, filenames, pathnames, and output displayed in a command window. For example:</p> <p>Use <code>MyCommand</code> to start the foo process.</p>  |
| <b>bold code font</b>                | <p>Bold code font is used in the following ways:</p> <ul style="list-style-type: none"><li>• In procedures, to indicate what a user types. For example: Type <b>admin</b>.</li><li>• In large code samples, to indicate the parts of the sample that are of particular interest.</li><li>• In command syntax, to indicate the default parameter for a command. For example, if no parameter is specified, <code>MyCommand</code> is enabled:<br/><code>MyCommand [enable   disable]</code></li></ul>   |
| <i>italic font</i>                   | <p>Italic font is used in the following ways:</p> <ul style="list-style-type: none"><li>• To indicate a document title. For example: See <i>TIBCO ActiveMatrix BusinessWorks Concepts</i>.</li><li>• To introduce new terms For example: A portal page may contain several portlets. <i>Portlets</i> are mini-applications that run in a portal.</li><li>• To indicate a variable in a command or code syntax that you must replace. For example: <code>MyCommand <i>PathName</i></code></li></ul>   |



Table 1 General Typographical Conventions (Cont'd)

| Convention  | Use  |
|---|--|
| Key combinations  | <p>Key name separated by a plus sign indicate keys pressed simultaneously. For example: Ctrl+C.</p> <p>Key names separated by a comma and space indicate keys pressed one after the other. For example: Esc, Ctrl+Q.</p> |
|  | The note icon indicates information that is of special interest or importance, for example, an additional action required only in certain circumstances.   |
|  | The tip icon indicates an idea that could be useful, for example, a way to apply the information provided in the current section to achieve a specific result.   |
|  | The warning icon indicates the potential for a damaging situation, for example, data loss or corruption if certain steps are taken or not taken.   |

## Connecting with TIBCO Resources

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### How to Join TIBCOCommunity

TIBCOCommunity is an online destination for TIBCO customers, partners, and resident experts; a place to share and access the collective experience of the TIBCO community. TIBCOCommunity offers forums, blogs, and access to a variety of resources. To register, go to <http://www.tibcommunity.com>.

### How to Access TIBCO Documentation

You can access TIBCO documentation here:

<http://docs.tibco.com>

### How to Contact TIBCO Support

For comments or problems with this manual or the software it addresses, please contact TIBCO Support as follows:

- For an overview of TIBCO Support, and information about getting started with TIBCO Support, visit this site:

<http://www.tibco.com/services/support>

- If you already have a valid maintenance or support contract, visit this site:

<https://support.tibco.com>

Entry to this site requires a username and password. If you do not have a username, you can request one.

## Chapter 1      **Introduction**

This chapter contains an overview of the examples and the prerequisites required to run the examples packaged with the adapter. The examples are explained in the later chapters.

### Topics

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- [Overview, page 2](#)
- [Prerequisites, page 4](#)

## Overview

---

Examples of Publication, Subscription, Request-Response, and Request-Response Invocation services demonstrate the integration between the adapter and TIBCO ActiveMatrix BusinessWorks.

In the examples, following commonly used Amdocs CRM Business Objects are adopted to build an end-to-end enterprise wide integration and demonstrate the adapter capabilities:

- Site
- Contact
- Case

### Site

A Site typically represents a physical location.

Two kinds of sites are present in the Amdocs CRM system. Internal Site represents the location where the employees are located and External Site represents the physical address of the customer, partners and any other service provider.

A single customer can have several sites. It could typically be a development center, a manufacturing center, a testing center or a distribution center.



Before running the Site examples, ensure that the Address details are present in the Amdocs CRM database.

### Contact

A Contact in a support center typically consists of information about people who log calls. They could be employees of customers or a third party consultant. First Name, Last Name and Phone Number identify a contact in the Amdocs CRM system.



Before running the Contact examples, ensure that the Site details are present in the Amdocs CRM database.

### Case

A Case in a call support center typically consists of information about the nature of the call that is logged. It also has information about the person responsible for the case and the action taken to close the case.



Before running the Case examples, ensure that the Contact details are present in the Amdocs CRM database.

TIBCO ActiveMatrix BusinessWorks examples can be used to perform different operations on each of the Amdocs CRM Business Objects. [Table 2](#) shows the Amdocs CRM Business Object, the corresponding Amdocs CRM Module and the adapter service used.

*Table 2 Business Object, Module, and Adapter Service of TIBCO ActiveMatrix BusinessWorks Examples*

| Adapter Service                     | Business Object | Amdocs CRM Module  |
|-------------------------------------|-----------------|--|
| Publication Service                 | Contact         | Contact - ClearContracts/ClearSupport                      |
| Subscription Service                |                 |  |
| Request-Response Service            | Case            | Amdocs Client - eFrontOffice                               |
| Request-Response Invocation Service | Site            | Site - ClearContracts/ Policies and Customers/ClearSupport |

## Prerequisites

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To try out the samples, you must first prepare Amdocs CRM components for the Publication and Request-Response Invocation services. For details, refer to the following sections from the *TIBCO ActiveMatrix Adapter for Amdocs CRM Configuration and Deployment*:

- Preparing Amdocs CRM Components for the Publication Service.
- Pre-requisites for Setting Up Request-Response Invocation Functionality using Amdocs ClearBasic Forms in a Non-Flexible Deployment.



- If the adapter connects to the Oracle 9i or Oracle 10g database, the following entry in the adapter .tra file should be uncommented:  
`adclycrm.oracle.useCLOB ON`
- The examples provided with the adapter installation work with Amdocs 8.1, and they are valid only for the Oracle database.

## Software Requirements

To run the examples with the TIBCO ActiveMatrix BusinessWorks, install the following software:

- TIBCO ActiveMatrix BusinessWorks
- TIBCO Administrator
- TIBCO ActiveMatrix Adapter for Amdocs CRM
- Amdocs CRM Client
- TIBCO Runtime Agent
- TIBCO Rendezvous
- TIBCO EMS



TIBCO Enterprise Message Service must be installed to run examples that use JMS as the transport. The EMS server must be running and accessible to the machine on which the adapter is installed.

TIBCO ActiveMatrix BusinessWorks examples use TIBCO Designer to create an Enterprise Archive File (EAR). One of the examples explains deploying the EAR file using TIBCO Administrator. All the other examples use the tester functionality of TIBCO Designer to run and test the examples.

In TIBCO Administrator, make sure all software components needed by the adapter instance are installed on one or more machines that are part of a TIBCO Administration Domain and that the software is registered in the domain.

- Use the TIBCO Domain Utility to add a machine to a TIBCO Administration Domain.

These topics are explained in the TIBCO Administrator documentation set.

## Location of the Examples Files

The files for the TIBCO ActiveMatrix BusinessWorks examples are in the following location:

*TIBCO\_HOME*\adapter\adclycrm\version\_num\samples\BusinessWorks

All the TIBCO ActiveMatrix BusinessWorks examples detailed in this guide use JMS as the transport type. The same procedure can be used to configure examples using TIBCO Rendezvous as the transport type.





## Chapter 2

## Request-Response Service Example for Case Business Object

This example shows how to use the adapter's Request-Response service within a TIBCO ActiveMatrix BusinessWorks process to query `Contact` details associated with a `Case` in Amdocs CRM. The example is deployed and run using the TIBCO Administrator GUI, with Java Messaging Service (JMS) as its transport type.



All files relevant to this example are located in the following location.

`TIBCO_HOME\adapter\adclycrm\version_num\samples\BusinessWorks\adclycrm_case_rpcserver_ems`

### Topics

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- [Example Description, page 8](#)
- [Setup the Example, page 9](#)
- [Deploy and Run the Example, page 12](#)
- [Expected Results, page 14](#)

## Example Description

---

This example illustrates how the adapter's Request-Response service can be used in a TIBCO ActiveMatrix BusinessWorks process, `Process_Case`.

`Process_Case` uses the adapter's Request-Response service to query the `contact` associated with a `Case`.

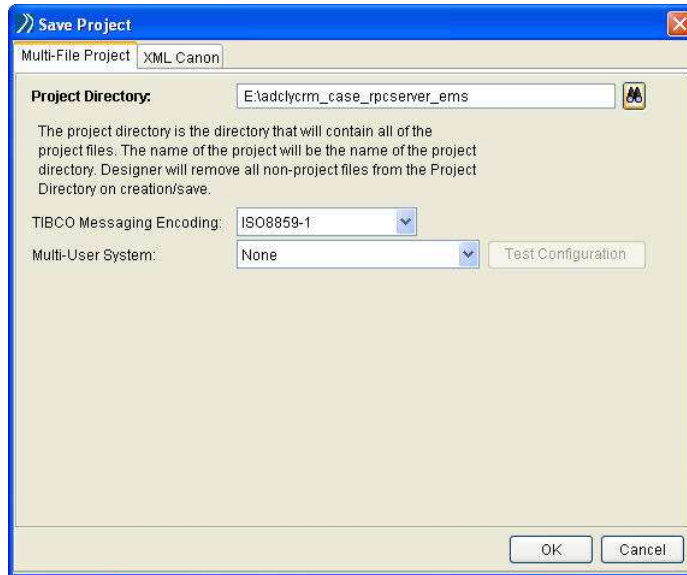
The Request-Response Invocation plugin within the `Process_Case` is invoked as soon as the process is started. The plugin sends the preconfigured query to the adapter's Request-Response service and waits for the reply. The response from the adapter is mapped against an `xsd` (`Schema_Case`) and the output is written to an XML file. The adapter response can be checked in the output file.

## Setup the Example

Before starting the example, you must import the sample project zip file and save as a new project in TIBCO Designer.

1. In the initial TIBCO Designer dialog box, click **New Empty Project** to create a multi-file project by the name `adclycrm_case_rpcserver_ems`.

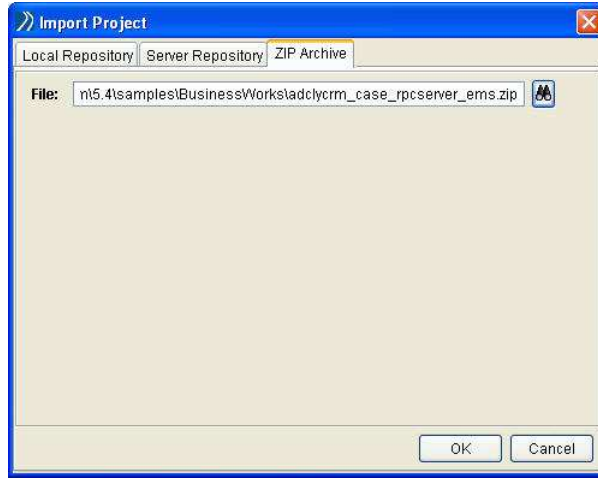
*Figure 1 Create a Project*



2. Click **Project>Import Full Project**.
3. Click the **Zip Archive** tab and browse to locate the `adclycrm_case_rpcserver_ems.zip` file. The file is located in the following folder

`TIBCO_HOME\adapter\adclycrm\version_num\samples\BusinessWorks\adclycrm_case_rpcserver_ems`

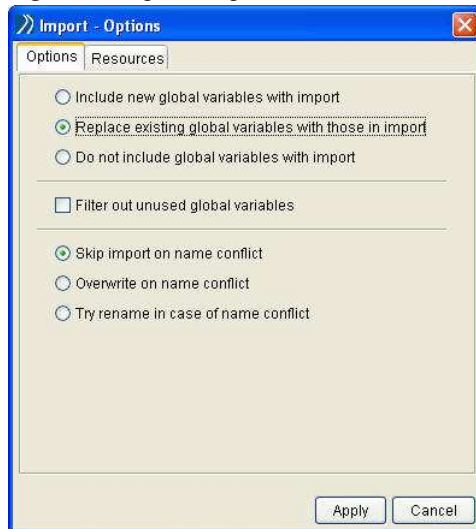
Figure 2 Import the Sample Project Zip File



Click **OK**.

4. In the next screen, Import - Options, select the **Replace existing global variables with those in import** radio button and click **Apply**.

Figure 3 Import - Options



5. Save the project.
6. Select **adclcrm\_case\_rpcserver\_ems** in the project panel.
7. Create an enterprise archive file. For more information, refer to the section, "Create an EAR File in TIBCO Designer" in *TIBCO ActiveMatrix Adapter for Amdocs CRM Configuration and Deployment*.

8. Exit TIBCO Designer.

## Deploy and Run the Example

---

Perform the following tasks to deploy and run the example.

### Task A Deploy the Example

In TIBCO Administrator:

1. Click the **Installed Software** link on the left panel.  
Check if TIBCO ActiveMatrix Adapter for Amdocs CRM is registered. If the software is not registered, register by clicking the **Add Custom Software** button. Refer to the TIBCO Administrator documentation for details.
2. Go to **Application Management**.
  - a. Click **New Application**.
  - b. Upload the EAR file created in the previous section and click **OK**.
  - c. On the following screen, clear the **Quick Configure** checkbox and then click **Save**.
3. Click **Configuration** in the newly created application. Click the top-level application name in the configuration view.
  - a. Go to the Advanced tab and provide the values for `adclycrm.connection.database`, `adclycrm.connection.host`, `adclycrm.connection.password`, `adclycrm.connection.server`, `JMSProviderUrl`, `adclycrm.connection.user`, and `adclycrm.DTAJmsProviderURL`.
  - b. Click **Save**. The Configuration screen appears.
  - c. Click the Adapter archive and click **Add To Additional Machines**.
  - d. Select the machine and click **OK**. Click **Save** in the following screen.
  - e. In the Configuration screen click **Deploy**, which will take you to the next screen. The Start successfully deployed services check box is selected by default. Click **OK**. The `.tra` files are created in `TRA_HOME/domain/DomainName/application`.
4. When the deployment status displays as `success`, click **Service Instances** under the application. The adapter is listed. Both the case creation process and the adapter instance are started.

### Task B Run the Example



Create a case test case in Amdocs CRM before running the example.

The TIBCO ActiveMatrix BusinessWorks process, `Process_Case`, is triggered as soon as it is started. The process triggers the Request-Response Invocation service, which then sends the preconfigured query request to the Request-Response service of the adapter.

The Request-Response service executes the query, which retrieves the `Contact` information associated with that `Case`. The Request-Response service then sends back the reply to TIBCO ActiveMatrix BusinessWorks.

TIBCO ActiveMatrix BusinessWorks receives the reply, renders it into an XML form and writes that to the `Output.xml` file.

## Expected Results

---

The example results can be viewed in the XML file written to:

*TIBCO\_HOME\adapter\adclycrm\version\_num\samples\BusinessWorks\adclycrm\_case\_rpcserver\_ems\adclycrm\_case\_rpcserver\_ems\_output.xml*

Sample of the output XML file is given next.

```
<?xml version="1.0" encoding="UTF-8"?>
<ns0:case xmlns:ns0="http://xmlns.example.com/unique/default/namespace/1064219568188"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:ns1="http://www.tibco.com/xmlns/ae2xsd/2002/05/ae/Clarify/ClarifyAdapterConfiguration/Request-ResponseS
ervice" xsi:type="ns1:case">
  <objid>268435457</objid>
  <title>test case</title>
  <id_number>1</id_number>
  <creation_time>02/04/03 01:41:42 PM</creation_time>
  <internal_case>0</internal_case>
  <hangup_time>01/01/53 12:00:00 AM</hangup_time>
  <alt_phone_num/>
  <phone_num>6601857</phone_num>
  <pickup_ext/>
  <case_history>Case Business object forwarded by adapter</case_history>
  <topics_title/>
  <yank_flag>5</yank_flag>
  <server_status/>
  <support_type/>
  <warranty_flag/>
  <support_msg/>
  <alt_first_name>6601857</alt_first_name>
  <alt_last_name>6601857</alt_last_name>
  <alt_fax_number>6601857</alt_fax_number>
  <alt_e_mail>vaideyakolar@indiatimes</alt_e_mail>
  <alt_site_name>Main Office</alt_site_name>
  <alt_address>abcd</alt_address>
  <alt_city>bgl</alt_city>
  <alt_state>karnatak</alt_state>
  <alt_zipcode/>
  <fcs_cc_notify>0</fcs_cc_notify>
  <symptom_code/>
  <cure_code/>
  <site_time>01/01/53 12:00:00 AM</site_time>
  <alt_prod_serial/>
  <msg_wait_count>0</msg_wait_count>
  <reply_wait_count>0</reply_wait_count>
  <reply_state>0</reply_state>
  <oper_system/>
  <case_sup_type/>
  <payment_method/>
  <ref_number>6601857</ref_number>
  <doa_check_box>0</doa_check_box>
  <customer_satis>0</customer_satis>
  <customer_code/>
  <service_id/>
```



```

<alt__phone/>
<forward__check>0</forward__check>
<cclist1/>
<cclist2/>
<keywords/>
<ownership__stmp>01/01/53 12:00:00 AM</ownership__stmp>
<modify__stmp>04/28/03 04:04:09 PM</modify__stmp>
<dist>0</dist>
<arch__ind>0</arch__ind>
<is__supercase>1</is__supercase>
<dev>0</dev>
<contact>
  <objid>268435457</objid>
  <first__name>klm</first__name>
  <last__name>kbvaln</last__name>
  <phone/>
  <fax__number/>
  <e__mail/>
  <mail__stop/>
  <expertise__lev>0</expertise__lev>
  <title/>
  <hours/>
  <salutation/>
  <mdbk/>
  <state__code>0</state__code>
  <state__value/>
  <address__1/>
  <address__2/>
  <city/>
  <state/>
  <zipcode/>
  <country/>
  <status>0</status>
  <arch__ind>0</arch__ind>
  <alert__ind>0</alert__ind>
  <dev>0</dev>
  <update__stamp>11/19/05 12:00:00 AM</update__stamp>
</contact>
</ns0:case>

```



## Chapter 3

## Publication and Subscription Services Example for Contact Business Object

This example shows how to use the adapter's Publication and Subscription services within a TIBCO ActiveMatrix BusinessWorks process to create a *Contact* in Amdocs CRM. The example uses Java Messaging Service (JMS) as its transport type.



All files relevant to this example are located in the following location.

*TIBCO\_HOME*\adapter\adclycrm\version\_num\samples\BusinessWorks\adclycrm\_contact\_pubsub\_ems

### Topics

---

- [Example Description, page 18](#)
- [Setup the Example, page 19](#)
- [Run and Test the Example, page 21](#)
- [Expected Results, page 22](#)

## Example Description

---

This example shows how the adapter's Publication and Subscription services can be used in a TIBCO ActiveMatrix BusinessWorks process, `Process_Contact`. The process uses the adapter services to create a `Contact` in Amdocs CRM.

`Process_Contact` listens to the message published by the adapter's Publication service and again publishes the message to the adapter's Subscription service after transforming the message.

A message published by the adapter's Publication Service triggers the `Process_Contact` process. The process transforms the incoming message to fit it into the subscriber schema and again publishes the message to the adapter's Subscription Service, which creates a new `Contact` for an existing `Site` in Amdocs CRM.

## Setup the Example

### Task A Enable the Amdocs CRM Client for the Publication Functionality

The Amdocs CRM Client must be enabled for the Publication functionality.

For details, refer to the section, *Enable the Publication Service for LAN Client* in the *TIBCO ActiveMatrix Adapter for Amdocs CRM Configuration and Deployment*.

### Task B Import the Project and Save as Multi-file Project in TIBCO Designer

Before starting the example, you must import the sample project zip file and save it in a new project.

1. In the initial TIBCO Designer dialog box, click **New Empty Project** to create a multi-file project by the name **adclycrm\_contact\_pubsub\_ems**.
2. Click **Project>Import Full Project**.
3. Click the **Zip Archive** tab and browse to locate the **adclycrm\_contact\_pubsub\_ems.zip** file, click **OK**.
4. In the next screen, Import - Options, select the **Replace existing global variables with those in import** radio button and click **Apply**.
5. Save the project.
6. Include appropriate values for the following global variables. Sample values for the global variables are given next.

Table 3 Global Variables of Publiation and Subscription Services Example

| Global variables             | Sample values        |
|------------------------------|----------------------|
| adclycrm.connection.database | clrfy125             |
| adclycrm.connection.host     | blrkec09825d         |
| adclycrm.connection.password | xyz                  |
| adclycrm.connection.server   | clfy125w             |
| JMSProviderUrl               | tcp://localhost:7222 |
| adclycrm.connection.user     | sa                   |
| adclycrmDTAJmsProviderURL    | tcp://localhost:7222 |

### **Task C Start EMS Server**

This example uses JMS as the transport type. Ensure that the EMS server is running and accessible to the machine on which the adapter is installed before running the process.

## Run and Test the Example

---

Perform the following tasks to test the example.

### Task A Run the Adapter using TIBCO Designer

1. Select **Tool > Show Adapter Tester**.
2. In the Adapter Tester window, select the instance and in the Run Settings tab, give the following parameters:
  - Working Directory: Specify a directory of your choice
  - Adapter Executable: Select the adapter executable file
3. Click **Apply** and then **Start**.

### Task B Run the TIBCO ActiveMatrix BusinessWorks Process and Publish a Message

1. Carry out the following steps in TIBCO Designer:
  - a. From the project panel, select the `Process_Contact` process.
  - b. Click the **Set breakpoints** button in the toolbar.
  - c. In the window that appears, click **Select All**, then click **OK**.
  - d. Click the Tester tab.
  - e. Click the **Start testing viewed process** button in the tester panel.
  - f. In the process selection window that appears, `Process_Contact` is selected by default. Click **Load & Start Current**. The process enters Test mode.
2. Create or update a contact using the Amdocs CRM client.
3. Go back to TIBCO Designer and carry out the following steps:
  - a. Once the process starter is highlighted (indicating a process has started), click the **Step to next activity** button in the tester panel to step through the process.
  - b. Click the **Stop Testing** button to return to design mode.
4. Exit TIBCO Designer.

## Expected Results

---

A new contact is created in the Amdocs database. You can check if a new record containing the details of the contact is created in the `TABLE_CONTACT` table.



## Chapter 4

## Request-Response Invocation Service Example for Site Business Object

This example shows how to use the adapter's Request-Response Invocation service within a TIBCO ActiveMatrix BusinessWorks process. The example uses Java Messaging Service (JMS) as its transport type.



All files relevant to this example are located in the following location.

*TIBCO\_HOME*\adapter\adclycrm\version\_num\samples\BusinessWorks\adclycrm\_site\_rpcclient\_ems

### Topics

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- [Example Description, page 24](#)
- [Setup the Example, page 25](#)
- [Run and Test the Example, page 27](#)
- [Expected Results, page 28](#)

## Example Description

---

This example shows how the adapter's Request-Response Invocation Service can be used in a TIBCO ActiveMatrix BusinessWorks process, `Process_Site`.

The adapter's Request-Response Invocation Service receives a request from Amdocs CRM (acting as a Request-Response client). On receiving the message from the Request-Response client, the adapter converts it to the configured schema and sends it out as an ActiveEnterprise request to external applications.

On receiving the reply from an external RPC Server (in this case the TIBCO ActiveMatrix BusinessWorks process, `Process_Site`), it sends the reply back to the Amdocs CRM as a TIBCO EMS message. (Refer to "Request-Response Invocation Service Functionality" in the *TIBCO ActiveMatrix Adapter for Amdocs CRM Configuration and Deployment* for details).

On receiving the request from the adapter, `Process_Site` sends a preconfigured reply back to the adapter. The adapter sends the response to the Amdocs CRM system as a TIBCO EMS message.

## Setup the Example

### Task A Enable the Amdocs CRM Client for Request-Response Invocation Service

The Amdocs CRM Client has to be enabled for the Request-Response Invocation Service.

For details refer to the section, "How the Request-Response Invocation Service" Works in the *TIBCO ActiveMatrix Adapter for Amdocs CRM Configuration and Deployment*.

### Task B Setup the TIBCO ActiveMatrix BusinessWorks Process in TIBCO Designer

Before starting the example, you must import the sample project zip file and save it in a new project.

1. In the initial dialog box, click **New Empty Project** to create a multi-file project by the name **adclcrm\_site\_rpcclient\_ems**.
2. Click **Project>Import Full Project**.
3. Click the **Zip Archive** tab and browse to locate the **adclcrm\_site\_rpcclient\_ems.zip** file, click **OK**.
4. In the next screen that appears, select the **Replace existing global variables with those in import** radio button and click **Apply**.
5. Save the project.
6. Include appropriate values for the following global variables. Sample values for the global variables are given next.

Table 4 Global Variables of Request-Response Invocation Service Example

| Global variables            | Sample values        |
|-----------------------------|----------------------|
| adclcrm.connection.database | clrfy125             |
| adclcrm.connection.host     | blrkec09825d         |
| adclcrm.connection.password | xyz                  |
| adclcrm.connection.server   | clfy125w             |
| JMSProviderUrl              | tcp://localhost:7222 |
| adclcrm.connection.user     | user                 |

Table 4 Global Variables of Request-Response Invocation Service Example (Cont'd)

| Global variables          | Sample values        |
|---------------------------|----------------------|
| adclycrmDTAJmsProviderURL | tcp://localhost:7222 |

**Task C Start EMS Server**

This example uses JMS as the transport type. Before running the process, ensure that the EMS server is running and accessible to the machine which hosts the adapter.

## Run and Test the Example

---

Perform the following tasks to test the example.

### Task A Run the Adapter using TIBCO Designer

1. Select **Tool > Show Adapter Tester**.
2. In the Adapter Tester window, select the instance and in the Run Settings tab, give the following parameters:
  - Working Directory: Specify a directory of your choice
  - Adapter Executable: Select the adapter executable file
3. Click **Apply** and then **Start**.

### Task B Run the TIBCO ActiveMatrix BusinessWorks Process in TIBCO Designer

1. From the project panel, select `Process_Site`.
2. Click the **Set breakpoints** button in the toolbar.
3. In the window that appears, click **Select All**, then click **OK**.
4. Click the **Tester** tab to the left of the project panel.
5. Click the **Start testing viewed process** button.
6. In the Select Processes to Load window that appears, the `Process_Site` process is selected by default. Click **Load & Start Current**. The process is now in Test mode. A request from the Amdocs CRM system acting as a Request-Response client triggers the process.
7. Once the process starter is highlighted (indicating a process has started), click the **Step to next activity** button to step through the process.
8. Click the **Stop Testing** button to return to design mode.
9. Exit TIBCO Designer.

## Expected Results

---

The response can be viewed in the Amdocs CRM system acting as a Request-Response client. The response is displayed as a pop up in the Amdocs CRM system screen.

For running the Site example (adelycrm\_site\_rpcserver\_ems) with Request-Response Service, refer to [Request-Response Service Example for Case Business Object on page 7](#). Create a site test site in Amdocs CRM before running the example.

For running the Site example (adelycrm\_site\_pubsub\_ems) with Publication and Subscription services, refer [Publiation and Subscription Services Example for Contact Business Object on page 17](#).

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