

# ALE Quick Start



HELP.CABFAALEQS

**Release 4.6C**



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## ALE Quick Start

## ALE Quick Start

This guide describes the steps involved in setting up an ALE distribution of application data in R/3 Systems.

You will learn how to set up a message flow between two clients and to distribute material master data between them.

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For more details about ALE see:

- [ALE Introduction and Administration \[Ext.\]](#)
- [ALE Programming Guide \[Ext.\]](#)

## Setting up Clients

First of all, you have to set up two clients to enable communication between logical systems. The two clients may be located in the same R/3 System or in separate systems.

You can either use existing clients or you can create new clients by making copies of existing ones (for example, a copy of client 000 or a client of the International Demo and Education System (IDES)). To set up a new client, from the SAP standard menu choose *Tools* → *Administration* → *Administration* → *Client administration* → *Client maintenance*.



Clients 100 and 200 are provided. Both are copies of client 000.

**See also:**

[Copying and Transporting Clients \[Ext.\]](#)

Go to next step: [Defining Logical System Names for Clients \[Page 8\]](#)

## Defining Logical System Names for Clients

### Defining Logical System Names for Clients

To avoid any confusion, participating systems in a distributed environment must have a unique ID. The name of the logical system is used as the unique ID. This name is assigned explicitly to one client in an R/3 System.

When you have set up two clients for the exercise, you must notify them which logical systems exist in the distribution environment and what the description of their own client is. You can find the functions required for this in the R/3 Implementation Guide under *Basis* → *Application Link Enabling (ALE)* under *Sending and Receiving Systems* → *Logical Systems*.



Client 100 is named logical system LOGSYS0100.

Client 200 is named logical system LOGSYS0200.

To maintain the logical systems in the distribution environment (function *Rename Logical System*):

- Execute the function and enter a logical system (LOG. SYSTEM) and a short text for each of your clients.
- Save your settings.

If you are using two clients in different systems, make sure your settings are the same in both systems. When using two clients in one physical R/3 System, you only have to make the settings once, since the entries are client-independent.



Log. System	Short text
LOGSYS0100	System A, client 100
LOGSYS0200	System B, client 200

Assign the respective logical system to both the clients. Choose *Assign Logical System to Client*.

- Execute the function in both clients.
- To display the client maintenance screen, double-click on a client.
- In the *Logical system* field, enter the logical system to be assigned to the individual client.
- Save your entry.



Client	Logical system
100	LOGSYS0100
200	LOGSYS0200

Go to next step: [Defining Communication Parameters \[Page 10\]](#)





## Defining the Communication Parameters

### Defining the Communication Parameters

For the two logical systems to be able to communicate with one another, they must know how to connect to each other. The RFC destination provides this information.

In each of the two clients, you must assign the RFC destination for the other logical system. In Customizing for ALE choose *Sending and Receiving Systems* → *Configure Systems in Network* → *Define RFC Destination*.

- Execute the function.
- Choose *Create*.
- Enter the RFC destination:
  - Use the name of the logical system that is to be the destination (use UPPERCASE letters).



For client 100 enter the RFC destination LOGSYS0200.

For client 200 enter the RFC destination LOGSYS0200.

- Select 3 as the *Connection type*.
- Enter a description of the RFC destination.



For example, 'RFC destination for the logical system LOGSYS0200'.

- As logon parameters, enter the logon language (for example, EN), the logon client (for example, 200 for LOGSYS0200) and the logon user (user ID with target system password).
- Select *Continue*.
- Enter the target system and the system number:

The target system indicates which receiving system application server is to handle the communication. The specifications could be the UNIX host name, the host name in DNS format, the IP address or the SAP router name.

The system number indicates the service used (TCP service, SAP system number).

In SAP logon you can determine the target system and the system number by selecting the button *Server*:

Select the relevant system and then select *Generate list*. The system displays a list of all available application servers. To display the system number (instance), select an application server and choose *Add*. A window appears displaying the system number.

In Transaction SM51 you can display a list of the SAP servers in the target system.

- Save your settings.

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**Defining the Communication Parameters**

- After saving the RFC destination, you can use *Test connection* to test the connection, and try to logon via *Remote Logon*. If you succeed, the system displays a new window for the other system. To check that you are in the correct client choose *System* → *Status*.

**See also:**

[RFC Destination for Outbound Communication \[Ext.\]](#)

Go to next step: [Modeling the Distribution \[Page 12\]](#)

## Modeling the Distribution

# Modeling the Distribution

The systems involved in the distribution must know which messages are to be distributed. They must know where the messages are coming from and where they are going to. This information is specified in the distribution model. The distribution is based on the distribution model and is directly controlled by it.

The following sections show you how to model a message flow between your two logical systems. You are going to distribute material master data from one logical system to another.

Modeling involves maintaining model views of the distribution model. To create a new distribution model view follow the steps below:

- Logon to the logical system from which you want to send materials to another system (sending system **LOGSYS0100**).
- From the R/3 Implementation Guide screen, choose *Basis* → *Application Link Enabling (ALE)* → *Modeling and Implementing Business Processes* → *Maintain Distribution Model*.
  - Create the model view. Select *Create model view*. Enter the technical name **GETSTART** and a description for it.
  - Define the sending and receiving systems and the message type. Position the cursor on **GETSTART** and select *Add message type*.  
A dialog box appears.  
Enter the logical system name of the sender **LOGSYS0100** and the receiver **LOGSYS0200** and the message type **MATMAS**.
  - Save the distribution model.

**See also:**

[Modeling the Distribution \[Ext.\]](#) in *ALE Introduction and Administration*.

Go to next step: [Generating Partner Profiles in the Sending System \[Page 13\]](#)

## Generating Partner Profiles in the Sending System

When you have created the distribution model, you must tell the participating systems how ALE is to execute the transfer the data. This is done in the partner profiles.

First, generate the partner profiles in the sending system (LOGSYS0100). To do this, log on to the relevant logical system.

- In the R/3 Implementation Guide under *Basis*, choose:  
*Application Link Enabling (ALE)*  
→ *Modeling and Implementing Business Processes*  
→ *Partner Profiles and Processing Time*  
→ *Generate Partner Profiles*
- Enter **GETSTART** as the name of your distribution model.
- Without changing the parameters proposed by the system, execute the program.

The partner profiles required have now been generated on the sending system.

Go to next step: [Distributing the Distribution Model \[Page 14\]](#)

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**Distributing the Distribution Model**

## Distributing the Distribution Model

To be able to generate the partner profiles in the receiving system, this system must be informed of all the messages flows in the distributed environment. This is achieved when you transport the distribution model views from the sending system to the receiving system.

Carry out the following steps in the sending system:

- In the R/3 Implementation Guide under *Basis Components*, choose:  
*Application Link Enabling (ALE)*  
→ *Modeling and Implementing Business Processes*  
→ *Maintain Distribution Model*  
*Edit* → *Model View* → *Distribute*.
- Enter the model view **GETSTART**.
- Select **LOGSYS0200**, the name of the receiving logical system.
- Execute the program.

Your distribution model view will be copied to the receiving system.

Go to next step: [Generating Partner Profiles in the Receiving System \[Page 15\]](#)

## Generating Partner Profiles in the Receiving System

When you have copied the distribution model to the receiving system, you can also generate the partner profiles here. To do this, log on to the receiving logical system (for example, LOGSYS0200).

- In the R/3 Implementation Guide under *Basis Components*, choose:  
*Application Link Enabling (ALE)*
  - *Modeling and Implementing Business Processes*
  - *Partner Profiles and Processing Time*
  - *Generate Partner Profiles*
- Enter the name of your distribution model view, in this case, **GETSTART**.
- Without changing the parameters proposed by the system, execute the program.

The required partner profiles will be generated in the receiving system.

Go to next step: [Creating Material Master Data \[Page 16\]](#)

## Creating Material Master Data

### Creating Material Master Data

Once you have made all the settings required to distribute materials, you can create a material and then distribute it.

Log on again to the sending system and follow these steps:

- Choose *Logistics* → *Materials management* → *Material master* from the material master maintenance.
- Choose *Material* → *Create (general)* → *Immediately*.
- Enter the material, industry sector and material type.



Make sure that the industry sector and material type you enter are known in the receiving system. Otherwise, errors will occur when you post the material in the receiving system.



Material: Material001

Industry sector: mechanical engineering

Material type: finished product

- Choose *Select view* and then *Basic data*.
- Enter the basic data of your material.



To avoid any errors occurring during data transfer, make sure that the receiving system will understand the information you have entered.



Material short text: *Material for ALE: First steps*

Base unit of measure: *ST*

- Save the material.

Go to next step: [Sending Material Master Data \[Page 17\]](#)



## Sending Material Master Data

You are now going to send the material you have just created to the receiving system.

- Choose *General* → *Material* → *Send*:
  - Enter the material you have created (for example, Material001).
  - Use 'MATMAS' Message type:
  - Enter LOGSYS0200, the logical receiving system
- Execute the program.

You should now be able to display your material in the receiving system. If the material is not available here, either the transmission has not yet finished or an error has occurred. The next step shows you how to check the communication and detect any errors.

**See also:**

[Distributing Master Data \[Ext.\]](#)

Go to next step: [Checking Processing Status \[Page 18\]](#)

## Checking Processing Status

### Checking Processing Status

The system provides functions for monitoring communication. These functions enable you to confirm whether ALE messages have been processed and transferred correctly or whether errors occurred. If an error did occur, the type of error is indicated.

You can monitor the processing status in both the sending system and the receiving system. Choose *Tools* → *ALE* → *Administration* → *Monitoring* → *Status monitor for ALE messages*.

Execute the function, and select the IDocs of the logical message type MATMAS which you created today.

A list of inbound and outbound IDocs grouped by status is displayed:

#### Outbound IDocs:

Status	Description of Status
03, 12, 38	IDoc successfully transferred
02, 04, 05, 25 26, 29	Processing error
30	Waiting status (still processing...)
>=50	Inbound IDoc (not relevant in this context)
Other	Not relevant in this context

#### Inbound IDocs:

Status	Description of Status
53	IDoc successfully updated by application
64	Waiting status (still processing...)
<50	Outbound IDoc (not relevant in this context)
51, 56, 60, 61, 63, 65	Inbound error
Other	Not relevant in this context

To display a list of IDocs with a particular status, double-click on a line. For detailed information on one of these IDocs, double-click on it. If an error occurs, you can display information about the cause of it by choosing *Process* → *Incorrect segments*.

#### Error Handling

If an error has occurred, use the monitoring function to resolve it. The cause of the error is likely to be a value in your material that the receiving system does not know and therefore cannot process it. Try to eliminate the cause of the error and send your material again.

If your IDoc in the sending system was successfully transferred (status 03) but does not appear in the receiving system, a technical communication error is the likely cause. You can use the status monitor in the sending system to check this. Choose *Goto* → *Transactional RFC* → *Display calls*.

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**Checking Processing Status**

If an error occurs you should consult your system administrator.