

# Data Crow

## *Client - Server*



## INTRODUCTION

Since Data Crow 4.0 it is possible to run Data Crow as a server. With version 4.1 a web module has been added. The server is a hybrid between an old fashioned application server and a web server. To one server both full clients and web clients can connect. This delivers ultimate flexibility.

Please note that the non-web clients will be slower compared to the web clients as they required more bandwidth as the actual (encrypted) data is transferred to the connecting client. A web client just downloads the pages from the server.

## DATA CROW SERVER SETUP

Download the server distribution from <http://www.datacrow.net#downloads> as well as a client version (either the installer or the zipped version).

## DATA CROW USER FOLDER

Data Crow can use existing user folders (databases and settings) or can initialize a new user folder to start with a clean slate.

## INSTALL THE SERVER

Here we'll setup the server software:

- Unzip the zipped Data Crow Server distribution to the installation location.

## RUNNING THE SERVER

The server has no graphical user interface (GUI) which means it relies fully on the command line. Open the terminal (Linux and Mac users) / command prompt (Windows users) and navigate to the Data Crow Server installation folder.

In the below example I will show <command> for the Data Crow start command;

- For Windows users substitute this with:
  - datacrow-server32bit.exe or  
*This is in case you have installed the 32bit version of Java.*
  - datacrow-server64bit.exe  
*This is in case you have installed the 64bit version of Java.*
- For other platforms use:
  - Java -Xmx1024m -jar datacrow-server.jar  
*The -Xmx1024m parameter specifies the amount of memory available to Data Crow. You can change this to another number if necessary.*

Now we are ready to start the server.

```
<command> -userdir:<user folder> -port:<portnumber>  
-imageserverport:<portnumber> -webserviceport:<portnumber>  
-credentials:<username>/<password>
```

Explanation:

- The <Command> I have explained above, make sure you use the correct syntax for the platform you are using.
- **-userdir:** specifies the user folder location.  
*Example (Windows): -userdir:c:/server-data*
- **-port:** specifies the main port number for the application server. The default port is 9000. If you do not supply the port parameter, port 9000 will be used. *Example: -port:9000*  
When the server has been started, clients connect by starting the Data Crow Client in client mode (-client parameter):  
datacrow64bit.exe -client, datacrow32bit.exe -client or java -Xmx512m datacrow.jar -client (depending on your environment).

- **-imageserverport:** specifies the port to use for the HTTP image server. The default is port 9001. If you do not supply the port parameter, port 9001 will be used. *Example:* - imageserverport:9001
- **-webserverport:** specifies the port to use for the web server. If not supplied, the web server module will not be started.  
*Example:* - webserverport:8080  
When started, clients connect to the server as follows:  
http://<server address>:<webserverport>/datacrow  
*Example:* http://192.168.178.12:8080/datacrow
- **-credentials:** username and password for the administrator. This is a required parameter for security reasons. The default user for Data Crow is SA with a blank password. It is recommended to set a password for each user when using the client-server setup.  
*Example #1 (user rwaals, pw 123456):* -credentials:rwaals/123456  
*Example #2 (default user):* -credentials:SA

A tip on the credentials; you can also supply these within the *datacrow.credentials* file. When this file is present in the installation folder of the Data Crow server Data Crow will read the credentials from this file and they don't have to be supplied anymore as a parameter. The file does not exist by default; create the file (a plain text file) and enter the credentials within this file: <username>/<password>. For example

rwaals/123456
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## CHECKING THE SERVER

If all is well the Server will reporting something similar to below:

```
INFO [main] (DcServer.java\:140) - Server has been started, ready for
client connections.
INFO [main] (DcServer.java\:141) - Client can connect to IP address
192.168.0.121 on port 9000 and on image port 9001
INFO [main] (DcServer.java\:144) - Listening for CTRL-C for server
shutdown.
```

It specifies the actual IP address as well as the assigned port numbers.

Errors will be displayed directly in the console. Additionally there is the default log file, located in the user folder (data\_crow.log).

If you want to debug the server (or see more messages) you can supply `-debug` parameter on startup.

## STOPPING THE SERVER

Press CTRL-C in terminal / command prompt window.

## STARTING THE DATA CROW (THIN) WEB CLIENT

Connecting to the web server is the easiest option. Navigate, using a web browser, to the server address, like so:

`http://<server address>:<web server port>/datacrow`

For example:

<http://192.168.178.12:8080/datacrow>

## STARTING THE DATA CROW (THICK) CLIENT

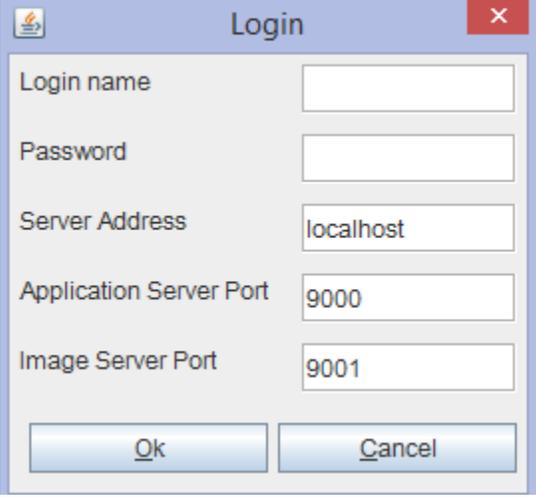
Any installation above 4.0 can connect to a server. It's a simple matter of supplying the `-client` command to your Data Crow startup:

In the below example I will show the `<command>` for the Data Crow client start command;

- For Windows users substitute this with:
  - `datacrow32bit.exe` or  
*This is in case you have installed the 32bit version of Java.*
  - `datacrow64bit.exe`  
*This is in case you have installed the 64bit version of Java.*
- For other platforms use:
  - `Java -Xmx512m -jar datacrow.jar`  
*The `-Xmx512m` parameter specifies the amount of memory available to Data Crow. You can change this to another number if necessary.*

```
<command> -client
```

When the client starts the following login dialog is shown:



The image shows a standard Windows-style dialog box titled "Login". It has a blue title bar with a close button (X) on the right. The dialog contains five text input fields arranged vertically. The first field is labeled "Login name" and is empty. The second field is labeled "Password" and is empty. The third field is labeled "Server Address" and contains the text "localhost". The fourth field is labeled "Application Server Port" and contains the number "9000". The fifth field is labeled "Image Server Port" and contains the number "9001". At the bottom of the dialog, there are two buttons: "Ok" and "Cancel".

- Login name: your username (the default user is SA)
- Password: your password (the password for user SA is blank)
- Server Address: the IP address of the Server (see the Server console for the IP address, for example within an internal network the IP could be 192.168.0.10).
- Application Server Port: the port as configured on the server (default is 9000). This setting is remembered.
- Image Server Port: the port as configured on the server (default is 9001). This setting is remembered.