



The UltraLiteJ Database Transfer Utility

A whitepaper from Sybase iAnywhere

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**This whitepaper was written in the context of SQL Anywhere 10.
However, its content may be applicable to previous and future releases.**

CONTENTS

Introduction	1
The Desktop Application	1
The Client Application	2
Conclusion	4

INTRODUCTION

The UltraLiteJ database transfer (ULjDbT) utility transfers UltraLiteJ databases from a BlackBerry smartphone to an external machine. It uses a client application that is installed on the BlackBerry device and a desktop application that listens for incoming transfer requests. As well as transferring databases, the ULjDbT utility can also be used to delete a database, display database information, or view and email the database transfer log.

The processes described in this document have been tested on SQL Anywhere 11.0.1.2044 and the BlackBerry 9000 Series (Bold) emulator. The tutorial assumes that you are using SQL Anywhere 11.0.1 and that you are familiar with the BlackBerry OS and development environment.

THE DESKTOP APPLICATION

The desktop application is able to receive UltraLiteJ databases over HTTP and USB protocols. It acts as a server in the sense that it listens on a particular port of the machine and waits for a BlackBerry smartphone to make a connection and transfer a database. The desktop application is launched from `%SQLAny11%\bin32\ULjDbT.cmd` and once started you will be presented with the Connect tab.

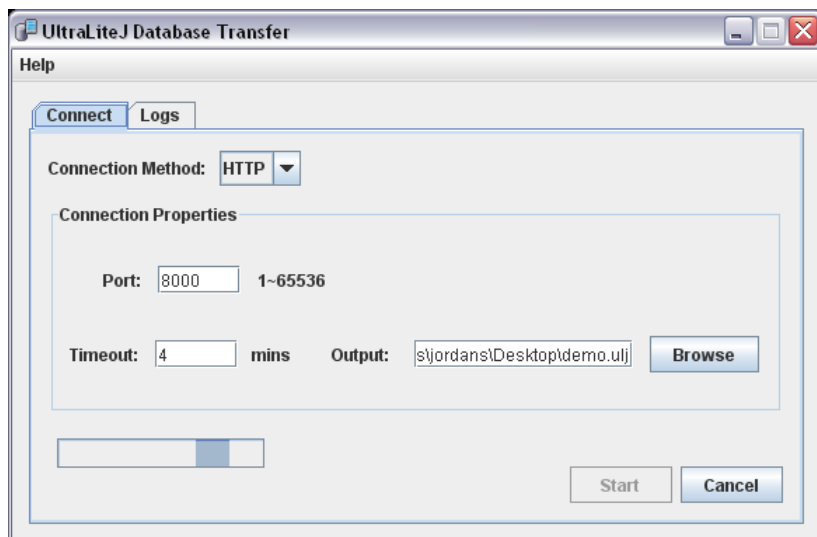


Figure 1 – Desktop Application

The connection tab displays/prompts for the following information:

Connection Method: Select the connection method from the dropdown list. You can select either USB or HTTP.

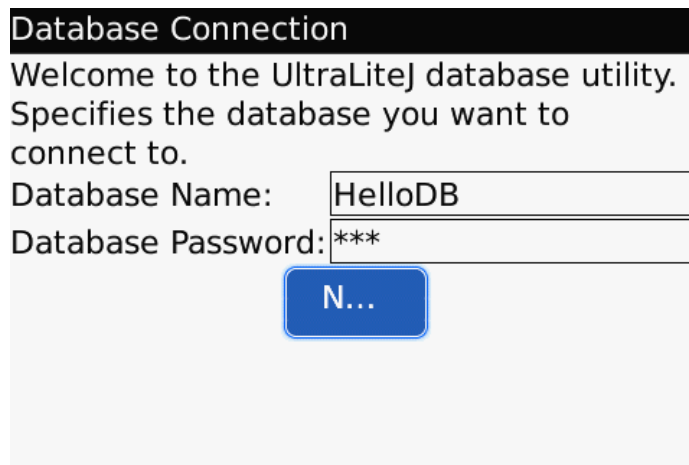
Connection Properties: The connection properties depend upon the connection method chosen.

- **Blackberry Password** – This field only applies to USB connections. Type the password used to access the connected BlackBerry smartphone when it is locked. Leave this field blank if there is no password.
- **Port** – This field only applies to HTTP connections. Type the TCP port number that you want the BlackBerry smartphone to connect to. Usually, this port number matches the port number specified to the UltraLiteJ Database Transfer utility (ULjDbT) running on the BlackBerry device; however, if you are using SSL, then this number can be different.
- **Timeout** – Specify the number of minutes to wait to establish a connection with the BlackBerry smartphone.
- **Output** – Specify a file name and location to save the transferred database.

Start: Click to open a connection to the BlackBerry smartphone. This server application waits until it either times out or establishes a connection. Click the Logs tab to view details on the server status and the transfer progress

THE CLIENT APPLICATION

The client application is used to send UltraLiteJ databases via USB or over HTTP. It also allows you to delete a database, display information about the database, or view and email the database transfer log. To start the client, load *ULjDatabaseTransfer.cod* from *%SQLAny11%\UltraLite\UltraLiteJ\J2meRim11*. Once the application is installed and launched, you will first be presented with the login screen.



Database Connection

Welcome to the UltraLiteJ database utility.
Specifies the database you want to connect to.

Database Name: HelloDB

Database Password: ***

N...

Figure 2 – Client Application – Log In

The login screen will prompt you for the database name and password. The database name will be the name of object store you defined in the application that created it. In figure 2, I used the sample HelloBlackBerry application found at *%SQLAnySamp11%\UltraLiteJ\HelloBlackBerry*. Opening *MyApp/DataAccess.java* will reveal the ConfigObjectStore object used to store the database named HelloDB. The password for the database will be **dba**. Once you have entered valid credentials, hit next and you will be presented with the main menu.

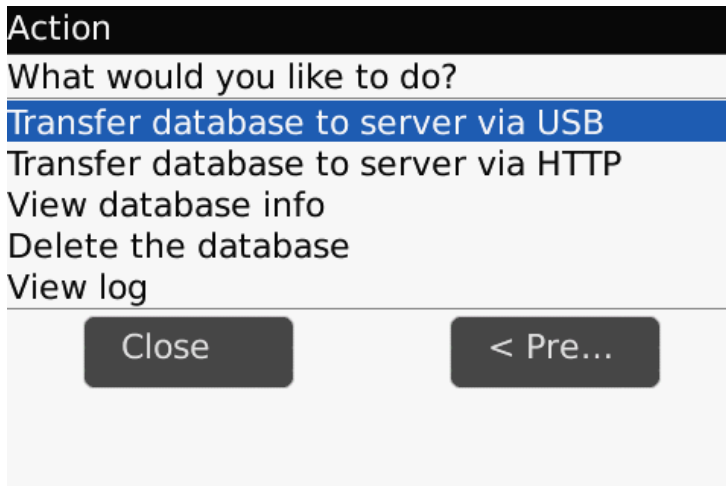


Figure 3 – Client Application – Main Menu

The main menu will present you with the option to transfer the database via HTTP or USB, view the database info, delete the database or view the log. To transfer the database using USB, connect the device or if using an emulator go to "Simulate" -> "USB Cable Connected". Once connected, press the trackwheel on "Transfer database to server via USB" and follow the instructions. Transferring the database over HTTP is similar to the USB method but will prompt you for the hostname and port to connect to.

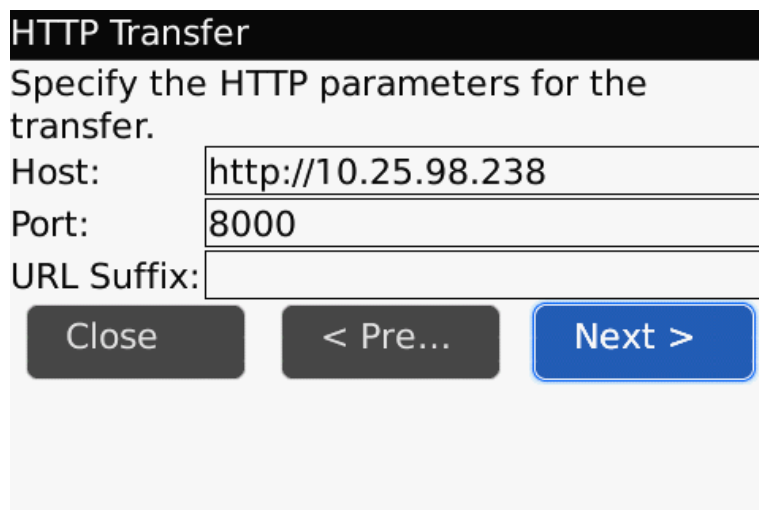


Figure 4 – Client Application – HTTP Transfer

Make sure when transferring over http to include the `http://` prefix when specifying the hostname. The URL suffix parameter will allow you to control which type of network to transfer the database over. For example, on most devices `deviceside=true` will transfer the database using the BES server whereas `deviceside=false` will use direct tcp. You can also choose to transfer over wifi with the `interface=wifi` option. For more details on the different ways to make an HTTP or socket connection on the BlackBerry please visit <http://www.blackberry.com/knowledgecenterpublic/>. Once the database is finished transferring, you will be brought back to the main screen where you can view the log that was just created from the transfer, or view the database information.

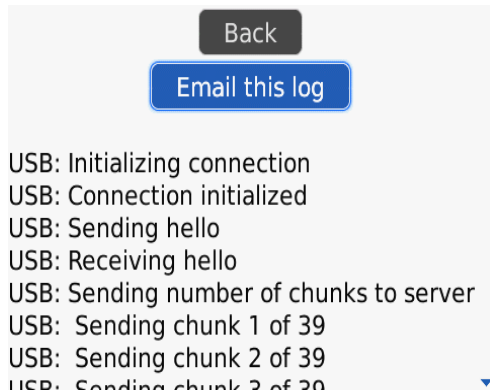


Figure 5 – Client Application – The Log

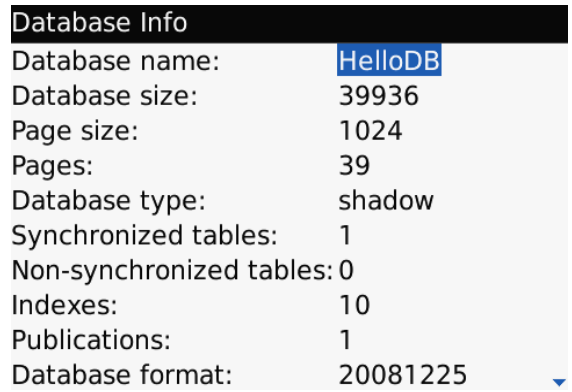


Figure 6 – Client Application DB Info

CONCLUSION

The UltraLiteJ Database Transfer utility is a fast and easy way to move an UltraLiteJ database from the BlackBerry object store to an external machine. The utility provides the capability to inspect the contents of the output file with tools such as ULjInfo or reload the database with ULjUnload/ULjLoad. Currently, the Ulj DbT utility only has the capability of transferring databases off of a BlackBerry device. It does not allow users to transfer .ulj databases to the device.

Reference: <http://dcx.sybase.com/>

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