# Transact-Tech/Symphonize Database Installation

This document will provide you with the instructions to implement the database for the Azure based authentication management system. You will create the database and restore to an initialized state ready for testing. The database restore media has been delivered as part of the deliverable material. These instructions will show you how to move the backup to the recovery location, how to create the database system in Azure and how to restore the database from the backup media.

## Prerequisites

The required components are a Windows or Mac desktop and an Azure account.

The document assumes that your have the following resources at your disposal:

1. A reasonably current browser to access the Azure portal.
2. The backup of the database used to set initial values

The case and spacing, or lack thereof, of the text used to configure the system is important in setting the application variables. It must match exactly the values in the application or adhere to global technical requirements.

## Introduction

The components to be built from the application include a database server, a database, a storage group and various components used to manage communications and infrastructure. Our deliverables including this document are locate in this git:

<https://symphonize.git.beanstalkapp.com/transact.git>

1. From a Windows or Mac system and a browser, log in to the appropriate Azure portal account.

<https://portal.azure.com/#home>

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1. Define a Resource Group (Optional)

If you choose to create a resource group click “Resource groups” at the top of the screen. Then click on “Create” on the top left. The database components will reside in this resource group. Select the location based on the geography of your customers. Multiple server farms can be located throughout the world.

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1. Locate the Azure SQL product

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1. Graphical user interface, text, application, Word

   Description automatically generatedClick “Create”
2. Graphical user interface, application

   Description automatically generatedConfigure the DB Environment

Click on the box on the right “SQL Database”, select “Single database” the create. Many of the next few options are going to be dependent on the purpose of the application environment. Make sure the text box in the left most window has “single database” in it. Click “Create”.

1. Configure Server and DB Authentication Method

Enter the server name, “transactdbserver”. This value must match configuration setting within the app. In the short term leave it as shown. Enter location, Authentication should be Use SQL Authentication. The Server admin login should be “Transactadmin” and the password should be “Transactandazure#1”

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1. Network Configuration

The next screen presented is the networking screen. Make sure the “Allow Azure service and resources access to this server” and “Add current client IP address “ is set to “No”.

The remaining screens in creating the server are left to your discretion.

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   Description automatically generatedDefine and Restore the Database

On the resource groups page, click on the resource group you are using. Locate the box that has “SQL Database” written next to it. Click on “Create”

1. Define the Database

On this page many of the values must match values in the application. “Resource Group” should be the one you are using. “Database name” should be “TransactDB “. “Server” should be “transactdbserver”.

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1. Download the application project from the git repo

Ensure the “Allow Azure services…” is set to “yes” and the “Add current client IP address” is set to “no”.

This completes the construction of the server, the database and the storage infrastructure.

1. Upload the Restore media

Move the restore media from the Symphonize deliverables to your desktop machine. From the resource group page, click on the “Storage account” line.

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1. Click on “Containers” on the left side of the screen

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1. Click on the “vulnerability-assessment“ line.

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1. Click on “Upload”

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1. Click on “Select a file” and select the restore media on your machine. Click on “Upload”. At this point the restore media is accessible to the database server and ready to begin the restore.

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1. From the resource group screen, click on the database server row. Then click on “Import Database” on the top row of this screen..

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   Description automatically generatedClick on “Select backup”
2. Double click on the line that has the resource group as the database name. In this case it is the sqlvak… line

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   Description automatically generatedClick on “vulnerability-assessment” and you should be the restore media we uploaded in a prior step. Click on the restore media then click “Select” on the bottom left.
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   Description automatically generatedReplace the restore media name with “transactdb”. Server Admin login should be “transactadmin” with password “Transactandazure#1”. Then press “OK”

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1. From the SQL server screen you can monitor the progress of the restore. Click on “Import/Export history”.
2. You can validate the restore by querying the database. From the resource group screen click on the database line. On the SQL database screen , click on “Queryeditor”. Use the usual userid and password. In the Query editor, click on the word, “Table” and you should see seven tables in the pull down. Right click on the User table and left click “Select Top 1000 Rows”. The rows from the table will appear in the bottom right panel. There should be 9 rows.

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1. Conclusion

These steps present cloud computing in a good light. It shows the complex internals of the system can be build or rebuilt in a few minutes reducing the time to market for valuable business tools.