# Cello How-To Guide

Tenant Wise Data Back-up

## Contents

# 1   Tenant Wise Data Back-up

Database Backup Utility primarily targeted for tenant Administrators and product owners to archive their mission critical data or move their data to another Database. Both CelloSaaS Metadata and Application Data can be backed up using the Administration Dashboard. The Backup utility is not a replacement or compliment for SQL Data backup functionality, the primary purpose is to provide simple and elegant data backup solution for critical data stored in Shared Database in day to day process without much technical knowledge.

Cello uses Message Queue mechanism to process the data backup functionality, When a data backup request is raised using the dashboard, the request is captured in the queue and processed as per the Configuration set in the Backup Process Service. Please refer this section to learn the Cello Backup Service Setup and Configuration.

## 1.1   Backup Types

The Destination of the Data backup could be any one of the following, they are

1. Database

2. File

   a. XLS

   b. CSV

   c. SQL

## 1.2   Database Backup

When chosen Database as the destination, the backup utility will automatically strip out the respective tenant data from the shared database and move it to the mentioned database automatically.

**Caution:**

1. Make sure the Username and Password given are correct

2. The given SQL login credentials must have necessary permissions to perform the backup operations. Required SQL permissions are create database, table, Schema, execute insert, update scripts.

## 1.3 Backup to File Destination

Choose Destination type as "File" to create the data backup using any of the File Format.

To back up the data in file format, refer the below steps

1. Choose the connection string from where the data has to be backed up.

2. Choose the appropriate backup mode

| None | Only tenant data (Tables with Tenant ID column only) |
|------|------------------------------------------------------|
| Full | Tenant data + Master data (including tables without Tenant ID column) |

3. Choose the Destination as "File"

4.  Check "Zip Files" to compress the Output Files.

5.  Click on Submit to initiate  the Backup Processing



## 1.3.1  Upload to FTP

To upload the output file to FTP, just check the "Upload to FTP" option and provide the following details



**Caution**:  Make sure the FTP details given are correct to upload the files properly.

### 1.4 Privileges associated with this feature

View_Backup   – The users with this privilege can view the backup request details and status.

Create_Backup – The users with this privilege are allowed to create backup request.

### 1.5 Data backup service setup

The CelloSaaS package will contain DatabackupServiceSetup.msi file. Install and change the connection to point to your CelloSaaS database.

### 1.6 Data backup request API

```
/// Creates the backup request.
string CreateBackupRequest(BackupRequest request);

/// Cancels the backup request.
bool CancelBackupRequest(string requestId);

/// Gets the backup request details.
BackupRequest GetBackupRequestDetails(string requestId);

/// Searches the backup request with the given search condition.
BackupRequestSearchResult SearchBackupRequest(BackupRequestSearchCondition condition);
```

### 1.7 Cello Backup Service Setup and Configuration

The Backup Service is available inside the "*CelloSaaS Service Installers*" folder; look for the folder by name "*DataBackup*", find the file named "install.bat", please refer the below steps to install the Backup utility

1. Run the *install.bat*

2. Make sure the backup Service Installed Properly

3. Run the *start.bat* to start the Backup Service

4. Open "*sql.config*" file to update the connection string of the Cello Metadata and Application Connecting Strings.

5. Refer "*CelloSaaS.DataBackupWindowsService.exe.xml*", in case if you want to change default parameters.

6. **Note:** Run the stop.bat to stop the backup service

```
<appSettings>
    <add key="MaxParallelThread" value="2"/>
    <add key="MaxTableParallelThread" value="2"/>
    <add key="BatchSize" value="10000"/>
    <add key="BulkCopyTimeout" value="6000"/>
    <add key="BackupProcessInterval" value="6000"/>
    <add key="NotifyAfter" value="10000"/>
</appSettings>
```

## 1.8   Backup Audit

All the backup requests raised by the respective tenants are audited. To view the audit details, navigate to My Account>>Data Backup.



**Note**

1.  If backup data scope is selected as Child tenants/Immediate child tenants/Selective tenants then those tenants' data should also reside in the parent tenant's database.

2.  Currently the source connection string for backup operation is taken from web.config connection string configuration section. Application developers are requested to change the source connection as per their need.

3.  File backup generated may not be directly down-loadable by the tenant. Application developer are requested to provided such functionality if required.

4.  The framework will not provide any data export functionality

## Contact Information

Any problem using this guide (or) using Cello Framework. Please feel free to contact us, we will be happy to assist you in getting started with Cello.

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