Cello How-To Guide

Tenant Wise Data Back-up



How-To – Tenant Wise Data Back-up

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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 <u>this</u> 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.



CelloSaaS						ad	min@company.com 🔻	≓ Change Tenant
My Account Subscription Ten	%	rol Configuration	Business Events	Notifications	Workflow	Reporting	O Monitor	
New Data Backup Request								Back Submit
	Source Database Primary Tenant * Destination Type	Company		ckup Common Data DB Connection string Tenant Scope Description	None Default Tenant S	v cope	Select the Sc	ope
Database Destination Details								
	Server Address *		Bac	kup Database Name *			Fill the De	stination Details
	User Name *			Password *				
Database Destination Details							ß	Back Submit
	Server Address *	100.23.52.63\SQLEXPRESS		Backup Database N	ame * TodoAp	рDB		
	User Name *	ToDo_DB_UserName		Passw	vord *	•		Back Sub

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

💧 New Data Backup	Request ×									- 0 ×
← → C 🗋	ocalhost:50337/Data	Backup/Mana	ageBackupRequest						5	🖻 📕 🐚 🗏
🦲 Tester 🕒 New T	ab 📋 Demo 🚞 Skill	Select 🛛 💋 Suke	sh Marla 📋 Cloud Blogs	o Techcello Support	🕨 Pluralsight 🛛 🗀 Web De	velopment 🛛 Zopim			board »	📋 Other bookmarks
CelloSa	aaS						Ap ad	p min@company.com	• ≓C	hange Tenant
My Account	Subscription	Tenant	Access Control	Configuration	Business Events	Notifications	Workflow	Reporting	Monitor	DEBU
New Data Bac	kup Request								Bac	ck Submit
		Source D	atabase Application	ConnectionS 🔻	Back	up Common Data	None	Ŧ		
	Tenan	it Name	Acme			Scope	Default Tenant S	cope 🔹		
		Destinati	on Type File	v		Description		h		
File Destinat	ion Details									E
		Fi	le Path * D:\Backup			Zip Files				
		File	Format * CSV	T		Upload to FTP				
			CSV XML SQL						Bac	ck Submit

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

Ftp Details

Server Address *		FTP Path *	
User Name *		Password *	
	21 (Default: 21, Should be between 65535)	1 to	

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
- Open "sql.config" file to update the connection string of the Cello Metadata and Application Connecting Strings.
- 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></appsettings>	
<add key="MaxParallelThread" value="2"></add>	
<add key="MaxTableParallelThread" value="2"></add>	
<add key="BatchSize" value="10000"></add>	
<add key="BulkCopyTimeout" value="6000"></add>	
<add key="BackupProcessInterval" value="6000"></add>	
<add key="NotifyAfter" value="10000"></add>	

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.

CelloS	aaS					App admin@compa	any.com •	≓ Chang	e Tenant
My Account	Subscription Te	nant Access Cont	rol Configuration	E usiness Events	s Notifications	Workflow Report		r	
Tenant Data	Backup Management					Tenant: Acme	9	•	Create
Backup Status	All	Destination Type	All	From Enter from	m requested To Enter to	o requested da		Reset	Search
Tenant Name	Source Database Name	Destination Type	Requested Date	Backup Status	Started Date	Completed Date	Backup Size	View	Cancel
Acme	Source Database Name TodoAppDB	Destination Type File	Requested Date 11/21/2013 1:00 PM	Backup Status Completed	Started Date 11/21/2013 1:00 PM	Completed Date 11/21/2013 1:00 PM	Backup Size	View	Cancel
Acme	TodoAppDB	File	11/21/2013 1:00 PM	Completed	11/21/2013 1:00 PM	11/21/2013 1:00 PM	2 MB	۲	
Acme Acme	TodoAppDB TodoAppDB	File File	11/21/2013 1:00 PM 11/21/2013 12:59 PM	Completed Completed	11/21/2013 1:00 PM 11/21/2013 12:59 PM	11/21/2013 1:00 PM 11/21/2013 12:59 PM	2 MB 2 MB	•	

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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