Workforce Management Administrator's Guide

Using the Backup-Restore Utility

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Using the Backup-Restore Utility

The WFM Backup-Restore Utility (BRU) is included in the WFM Database Utility (DBU) Installation Package (IP). Unlike the old backup file (.MDB format), which had a maximum 2 Gb size limit, the BRU uses a new backup file format (.DB) and has no file size limit.

This backup file format, which is much faster than DBU format, replaces the backup file format used in previous WFM releases. The BRU can backup and restore MSSQL and Oracle databases to the new backup file (.DB) format, and a backup created from one database type can be restored to a different database type.

Incompatibilities in Database Schema

The BRU is designed to mitigate minor incompatibilities in database and file schema that might occur if the backup file was created with an unofficial (not Generally Available) or minor release of the BRU. The BRU attempts to restore to the database to a non-empty database, while retaining (or updating, if needed) the database version. In this case, the existing data is overwritten. However, in some cases the database is successfully restored. For example, a 7.6 database backup could not be restored to an 8.x non-empty database, because the two schema are very different.

If, for some reason, the BRU backup process is cancelled at the mid-way point, the BRU continues from the latest point after the backup process is restarted.

The backups created by BRU are accepted by Genesys Customer Care.

Command Line and Usage

Use the following command line and usage commands syntax:

```
WFMBRU.exe <command> <data source> -FILE <file name>.db
```

Table: Usage Commands

Option	Description
`-BACKUP`	Backup the WFM database to a backup file.
`-ANONYMIZE_PII`	Personal Identifiable Information (PII) is anonymized. **Note:** This option can be used only with `-BACKUP` command, specified right after the backup argument. For example: `WFMBRU.EXE -BACKUP -ANONYMIZE_PII <rest of the parameters>`
`-ANONYMIZE_FULL`	All PII and all customer-created names, comments, and descriptions are anonymized, making it

Option	Description
	impossible to trace data back to the customer. **Note:** This option can be used only with `-BACKUP` command, specified right after the backup argument. For example: `WFMBRU.EXE -BACKUP -ANONYMIZE_FULL <rest of the parameters>`
`-RESTORE`	Restore the WFM database from the backup file (database is created if it does not exist).
`-UPDATE`	Update the WFM database to the latest schema version (can be combined with `-RESTORE`). Can also be used to create the latest schema on an empty database (the database is created if it does not exist).
`-VERSION`	Retrieve the WFM database version.

Table: Data Source (Connection Strings)

Connection string	Description
`-DSN <OLE DB connection string>`	Enables specification of the OLE DB connection string directly (should not be used with –DB option)
`-DB <Connection String>`	Specifies the connection in simplified syntax that is later translated into OLE DB connection string format. See usage examples in Table: -DB String Format for Various Databases for details.

The DB connection string for the Config Server DAP is extended with optional parameters `CfgBackupHost` and `CfgBackupPort`.

If both the `-DSN` and `-DB` connection strings are specified, the BRU used the `-DSN` string.

> **Tip**
>
> To support secure connections to MS SQL Server, you must install the latest Microsoft OLE DB Driver (SQLOLEDB) and configure the -DSN connection switch differently. For more information, see Secure connections between WFM servers and MS SQL database.

Table: -DB String Format for Various Databases

Database	String format	Example
MSSQL	`"mssql;<server>;<database>;<user>;<password>"`	`mssql;dbhost;dbname;sa;password`
MSSQL (Fast Native Client)	`"mssql++;<server>;<database>;<user>;<password>"`	`mssql++;dbhost;dbname;sa;password`
Oracle	`"oracle;<tnsaddressname>;<user>;<password>"`	`oracle;ORA11;scott;tiger`

> **Tip**
>
> If you plan to use the MSSQL (Fast Native Client) connection string format (see Table: -DB String Format for Various Databases), ensure the BRU host is preinstalled with a version of the MSSQL Native Client that is the same version as the DBMS.

Examples of Usage Command Lines

To back up the database, follow example 1 or 2:

Backup Oracle database:

1. WFMBRU.EXE -BACKUP -DB "oracle;<tnsaddressname>;<user>;<password>" -FILE <backup>.db

2. WFMBRU.exe -BACKUP -DSN "Provider=OraOLEDB.Oracle;Data Source=<DBMS Name>;User ID=<User Name>;Password=<Password>;" -FILE <backup>.db

Backup MSSQL database:

1. WFMBRU.EXE -BACKUP -DB "mssql;<server>;<database>;<user>;<password>" -FILE <backup>.db

2. WFMBRU.exe -BACKUP -DSN "Provider=SQLOLEDB;Data Source=<DBMS Name>;Initial Catalog=<Database Name>;User ID=<User Name>;Password=<Password>;" -FILE <backup>.db

Backup Oracle database with PII anonymization enabled:

1. WFMBRU.EXE -BACKUP -ANONYMIZE_PII -DB "oracle;<tnsaddressname>;<user>;<password>" -FILE <backup>.db

2. WFMBRU.exe -BACKUP -ANONYMIZE_PII -DSN "Provider=OraOLEDB.Oracle;Data Source=<DBMS Name>;User ID=<User Name>;Password=<Password>;" -FILE <backup>.db

Backup MSSQL database with full anonymization:

1. WFMBRU.EXE -BACKUP -ANONYMIZE_FULL -DB "mssql;<server>;<database>;<user>;<password>" -FILE <backup>.db

2. WFMBRU.exe -BACKUP -ANONYMIZE_FULL -DSN "Provider=SQLOLEDB;Data Source=<DBMS Name>;Initial Catalog=<Database Name>;User ID=<User Name>;Password=<Password>;" -FILE <backup>.db

Restoring old .MDB Format Backups

BRU can convert old .MDB format backups to the new format by *backing up* the old backup format into the new one. The Microsoft Access Database Engine 64-bit version must be preinstalled so BRU can locate the provider for conversion.

Examples:

```
WFMBRU.exe -BACKUP -DSN "Provider=Microsoft.ACE.OLEDB.12.0;Data Source=<backup>.mdb"
-FILE <backup>.db
WFMBRU.exe -BACKUP -DB "access;<backup>.mdb" -FILE <backup>.db
```