Documentation

OTRSCloneDB

The OTRS CloneDB package. Version 5.0.1 Edition

Build Date:

2015-10-15

Table of Contents

Preface

This package provides the 'OTRSCloneDB' feature.

It clones an OTRS source database into a target database, possibly on a different RDBMS.

If you have questions regarding this document or if you need further information, please log in to our customer portal at portal.otrs.com with your OTRS ID and create a ticket. You do not have an OTRS ID yet? Register here for free.

Chapter 1. Feature List

1. Clone DB

This script clones an OTRS database into an empty target database, even on another database platform. It will dynamically get the list of tables in the source DB, and copy the data of each table to the target DB.

Chapter 2. System Requirements

1. Framework

The following OTRS Framework is required:

- 5.0.x

2. Packages

The following packages are required:

- None

3. Operating System

This package requires one of the following operating systems:

- None

4. Third Party Software

This third party software is required to use this package:

- None.

Chapter 3. Installation

The following instructions explain how to install the package.

1. Admin Interface

Please use the following URL to install the package utilizing the Admin Interface (please note that you need to be in the "admin" group).

http://localhost/otrs/index.pl?Action=AdminPackageManager

2. Command Line

Whenever you cannot use the Admin Interface for whatever reason, you may use the following command line tool ("bin/otrs.Console.pl Admin::Package::Install") instead.

```
shell> bin/otrs.Console.pl Admin::Package::Install /path/to/OTRSCloneDB-5.0.1.opm
```

Chapter 4. Configuration

The package can be configured via the SysConfig in the Admin Interface. The following configuration options are available:

1. **CloneDB::TargetDBSettings.**

Group: OTRSCloneDB, Subgroup: Configuration.

Settings for connecting with the target database.

2. **CloneDB::SkipTables.**

Group: OTRSCloneDB, Subgroup: Configuration.

List of tables should be skipped, perhaps internal DB tables. Please use lowercase.

3. **CloneDB::BlobColumns.**

Group: OTRSCloneDB, Subgroup: Configuration.

This setting specifies which table columns contain blob data as these need special treatment.

4. **CloneDB::CheckEncodingColumns.**

Group: OTRSCloneDB, Subgroup: Configuration.

Specifies which columns should be checked for valid UTF8 source data.

5. **CloneDB::LogFile.**

Group: OTRSCloneDB, Subgroup: Configuration.

Log file for replacement of malformed utf8 data values.

Chapter 5. Usage

1. Cloning a Database

The goal of this example is to clone current database into another database engine.

1. Configure target database settings for this package (OTRSCloneDB).

    The following parameters should be configured:

    - TargetDatabaseHost

    - TargetDatabase

    - TargetDatabaseUser

    - TargetDatabasePw

    - TargetDatabaseType

    Where "TargetDatabaseHost" is the host name or ip address of the target system, "TargetDatabase" is the name if the target database, "TargetDatabaseUser" is the name of the user that connects to the target database, "TargetDatabasePw" is the password of the user, be aware that the field is not masked and it is stored in plain text, "TargetDatabaseType" is the type of the target database (mysql, mssql, postgresql or oracle).

    ### Note

    On 'CloneDB::TargetDBSettings' for Oracle you might want to configure extra parameters like:

    - TargetDatabaseSID

    - TargetDatabasePort

    If they are not set, the default values (XE and 1521 respectively) will be used.

    And please be aware to include the needed settings on the Config.pm file:

    - $ENV{ORACLE_HOME}

    - $ENV{NLS_DATE_FORMAT}

    - $ENV{NLS_LANG}

    If MSSQL is going to be used, a database parameter for 'Driver' should be configured:

    - TargetDatabaseDriver

    If not set, the default value "SQL Server" will be used.

    ### Note

    If you don't have access to the graphical user interface of the source OTRS system, for example during a migration, you can also perform the configuration directly in Kernel/Config.pm like this:

```
$Self->{'CloneDB::TargetDBSettings'} = {
    'TargetDatabaseHost' => 'localhost',
    'TargetDatabaseType' => 'mysql',
    'TargetDatabase'     => 'otrs_target',
    'TargetDatabaseUser' => 'otrs_target'
    'TargetDatabasePw'   => 'otrs_target',
};
```

2. Configure source database settings for this package (OTRSCloneDB). The only one setting currently available is CloneDB::SkipTables that allows you to set a list of tables should be skipped on the clone DB process, this feature is useful for internal use tables like for example in Oracle with the 'htmldb_plan_table' that is generated when you click on the 'Explain' Tab on the Oracle Web interface. Please use just lower case for this setting.

3. Run the `bin/otrs.Console.pl Maint::Database::Clone --clone` console command.

4. Verify the result.

Chapter 6. Technical Implementation Details

1. OTRS Clone DB

`Kernel/Config/Files/OTRSCloneDB.xml`: Holds all the needed settings for this package.

`Kernel/System/CloneDB/Backend.pm`: Is the common interface regardless the type of the database that is used.

`Kernel/System/CloneDB/Driver/Base`: Holds shared function for all database types.

`Kernel/System/CloneDB/Driver/mssql`: Implement Backend functions for mssql database.

`Kernel/System/CloneDB/Driver/myssql`: Implement Backend functions for mysql database.

`Kernel/System/CloneDB/Driver/oracle`: Implement Backend functions for oracle database.

`Kernel/System/CloneDB/Driver/postgresql`: Implement Backend functions for postgresql database.

`Kernel/System/Console/Command/Maint/Database/Clone.pm`: This is the console command that triggers the cloning of the databases.

Chapter 7. File List

This list shows all included files and the referring permissions.

- (644) Kernel/System/CloneDB/Backend.pm

- (644) Kernel/System/CloneDB/Driver/Base.pm

- (644) Kernel/System/CloneDB/Driver/mysql.pm

- (644) Kernel/System/CloneDB/Driver/postgresql.pm

- (644) Kernel/System/CloneDB/Driver/oracle.pm

- (644) Kernel/System/CloneDB/Driver/mssql.pm

- (644) Kernel/System/Console/Command/Maint/Database/Clone.pm

- (644) Kernel/Config/Files/OTRSCloneDB.xml

Chapter 8. Tests

This module has been tested on the current state of the art in quality.

1. Test Cases

To tests this package please follow the examples described in the Usage section, all the tests cases should return the expected results defined at the beginning of each example.

Chapter 9. Change Log

5.0.1 / 2015-10-15 05:37:21

- First release for OTRS 5