



Migrating to MySQL

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MySQL is Everywhere



MULTIPLE PLATFORMS



MULTIPLE LANGUAGES



C C++ C#

MySQL – Cross-Platform Flexibility



- Support for 20+ Platforms
- No Lock-in
- Develop/Test on X, release on LAMP, SAMP, WAMP etc.
- OEM/ISVs Embedding MySQL Ship into More Markets and Provide more Flexibility to End Users

Broad Language Support

MySQL Connectors



Developed by Oracle

- Connector/ODBC ODBC
- Connector/Net ADO.NET
- Connector/J JDBC
- Connector/C C API
- Connector/C++ C++ API

Community

- PHP
- Perl
- Python
- Ruby
- and more ...

Hardware: The Perfect MySQL Server

- CPU
 - ✓ MySQL 5.5 scales to 24 cores
 - ✓ MySQL 5.6 scales up to 48 (60) cores
- Memory
 - ✓ Normally more is better
 - ✓ InnoDB buffer pool need to hold “hot data”
- Network
 - ✓ At least 2 x NICs for redundancy
- For replication
 - ✓ Slaves should be as powerful as the Master



Hardware: The Perfect MySQL Server



- Disk subsystem (options next slide)
 - ✓ Fast HD (if possible 10-15k rpm)
 - ✓ More disks are often better! – 4x recommended, more spindles increase IO
 - ✓ RAID 10 best, RAID 5 'maybe OK' if very read intensive
 - ✓ Separate random and sequential IO (logs and table spaces)
 - ✓ Top performance:
 - ✓ SAN + BBWC
 - ✓ Fusion-IO cards

Hardware: Disk system

- Hardware RAID battery backed up cache is critical!
- Use LVM on Linux (Snapshots)
- Own disk/partition for mysql data
 - ✓ Location of data- and logfiles on different spindles?
- EXT4 and XFS good choice for Linux
 - ✓ mounting "noatime" an option?
 - ✓ mounting "noBarrier" an option?
 - ✓ Blocksize?
- Check settings & partitions for Windows as well!
 - ✓ HKLM\System\CurrentControlSet\Control\FileSystem\ is NtfsDisableLastAccessUpdate



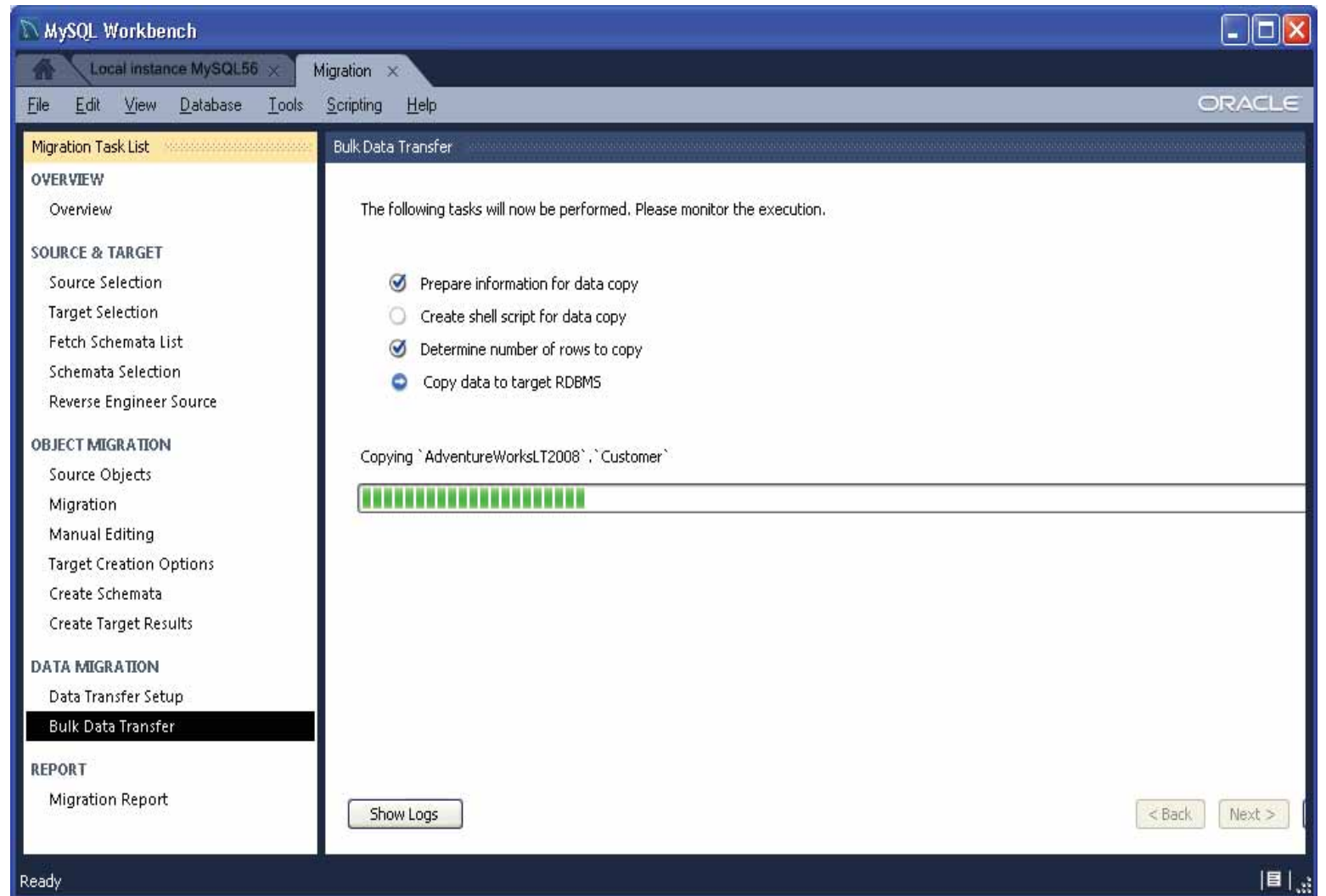
Migrating to MySQL



- Importing data to MySQL
 - mysqlimport
 - LOAD DATA INFILE
 - Read DML into mysql client using source command
- Complete tools for migrating data and objects
 - MySQL Workbench
 - SQLWays (from partner Ispirer)

Workbench – Easy Data Migration

- Easy Migration
 - Microsoft SQL Server
 - PostgreSQL
 - Sybase ASE
 - Sybase SQL Anywhere
 - SQLite, MS Access u. a.
- Normally based on ODBC



Workbench – Easy Data Migration



Migration project management

allows migrations to be configured, copied, edited, executed and scheduled.

Source and Target selection

allows users to define specific data sources and to analyze source data in advance of the migration.

Object migration

allows users to select objects to migrate, assign source to target mappings where needed, edit migration scripts and create the target schema.

Data migration

allows users to map source and target data and data types, set up data transfer and assign post data transfer events where needed.

Workbench – Easy Data Migration

The screenshot shows the MySQL Workbench interface in the 'Manual Editing' mode. The left sidebar contains a 'Migration Task List' with sections for 'OVERVIEW', 'SOURCE & TARGET', 'OBJECT MIGRATION', 'DATA MIGRATION', and 'REPORT'. The 'Manual Editing' option is selected under 'OBJECT MIGRATION'. The main window displays a comparison of source and target objects for the 'Categories' table. Below this, a SQL CREATE script is shown for the selected object, with options to 'Lock edited SQL' and 'Comment out'. At the bottom, there are buttons for 'Apply Changes', 'Discard Changes', 'Hide Code and Messages', '< Back', 'Next >', and 'Cancel'.

MySQL Workbench

Migration Task List

Manual Editing

OVERVIEW

- Overview

SOURCE & TARGET

- Source Selection
- Target Selection
- Fetch Schemata List
- Schema Selection
- Reverse Engineer Source

OBJECT MIGRATION

- Source Objects
- Migration
- Manual Editing**
- Target Creation Options
- Create Schemata
- Create Target Results

DATA MIGRATION

- Data Transfer Setup
- Bulk Data Transfer

REPORT

- Migration Report

Review and edit migrated objects. You can manually edit the generated SQL before applying them to the target database.

Migrated Objects View: All Objects

Source Object	Target Object	Migration Message
Employees	Employees	
Categories	Categories	
Columns	Columns	
CategoryID INT	CategoryID INT	
CategoryName VARCHAR(30)	CategoryName VARCHAR(30)	Collation SQL_Latin1_General_CP1_CI_AS migrated to u...
Description LONGTEXT	Description LONGTEXT	Collation SQL_Latin1_General_CP1_CI_AS migrated to u...
Picture IMAGE	Picture TINYBLOB	
Indices	Indices	
PRIMARY	PRIMARY	
CategoryName	CategoryName	
ForeignKeys	ForeignKeys	
Triggers	Triggers	
Customers	Customers	
Shippers	n/a	

You can rename target schemas and tables and change column definitions by clicking them once selected.

SQL CREATE Script for Selected Object

```
1 CREATE TABLE IF NOT EXISTS `Northwind`.`Categories` (  
2   `CategoryID` INT NOT NULL AUTO_INCREMENT,  
3   `CategoryName` VARCHAR(30) NOT NULL,  
4   `Description` LONGTEXT NULL,  
5   `Picture` TINYBLOB NULL,  
6   PRIMARY KEY (`CategoryID`),  
7   INDEX `CategoryName` (`CategoryName` ASC))
```






Lock edited SQL
 Comment out

Apply Changes
Discard Changes

Hide Code and Messages

< Back Next > Cancel

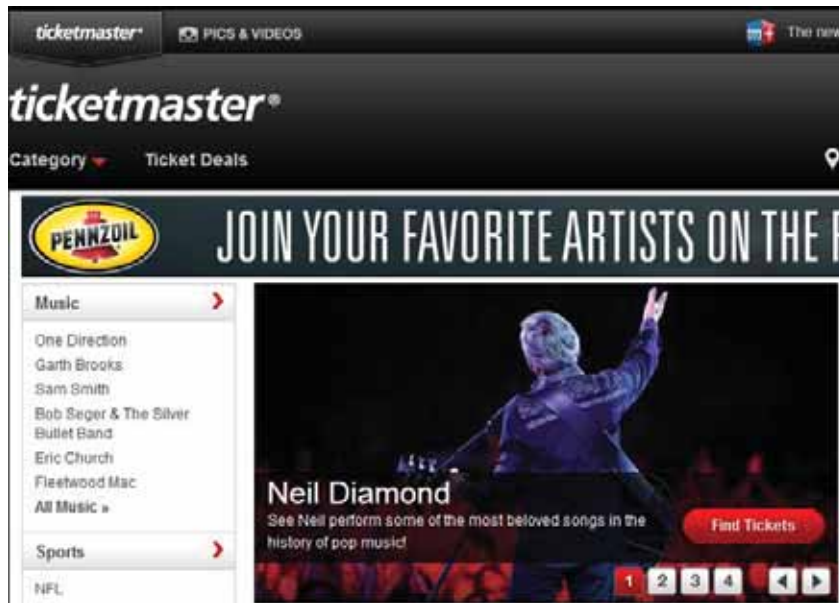
MySQL Architecture Comparison (Example)

 Area	MySQL	Microsoft SQL Server
 Memory Caches	<ul style="list-style-type: none">• InnoDB data cache• InnoDB log cache• MyISAM key cache• Dictionary cache• Query Cache• User caches	<ul style="list-style-type: none">• Buffer cache• SQL cache• Misc caches (lock, connection, workspace, etc.)
 Redo/Undo Logs	<ul style="list-style-type: none">• InnoDB Undo Space• InnoDB Logs• Binary Log	<ul style="list-style-type: none">• TempDB (2005+)• Transaction Logs
 Data Storage	<ul style="list-style-type: none">• Tablespaces• Table/Index Files• Format files	<ul style="list-style-type: none">• Filegroups• Files
 Optimizer	<ul style="list-style-type: none">• Cost-based	<ul style="list-style-type: none">• Cost-based

MySQL Core Feature Set Comparison (Example)

Feature	MySQL	Microsoft
Standard Heap Tables and B-Tree Indexes	✓	✓
Partitioned Tables/Indexes	✓	✓
ACID Transaction Support	✓	✓
Row-Level Locking, MVCC (readers don't block writers)	✓	✓
Server-Enforced Referential Integrity	✓	✓
Advanced Indexing (Clustered, Full-Text)	✓	✓
Robust datatype support (BLOB's, varchar, datetime, numerics, etc.)	✓	✓
Replication	✓	✓
Stored Procedures, Triggers, Functions, Cursors, Updateable Views	✓	✓
Highly-Available Clustered Database	✓	✓
Cost-based Optimizer	✓	✓
Online Backup with Point-in-Time Recovery	✓	✓
Terabyte Database Size Capable	✓	✓
Open Source	✓	

Ticketmaster



Company Overview

Ticketmaster and Live Nation merged to create Live Nation Entertainment, the world's leading live entertainment company selling tickets to millions of fans.

Application

By migrating from Microsoft SQL Server to MySQL and Oracle, Ticketmaster.com improved scalability by 4X.

Why MySQL and Oracle?

"At Ticketmaster, we use MySQL and Oracle to complement each other. The end result is a highly-distributed, optimal-performing database environment that powers one of the largest e-commerce and ticketing sites in the world." Ed Presz, Vice President, Database Services, Ticketmaster/Live Nation Entertainment, Inc.



COMPANY OVERVIEW

- Leading telecoms provider across Europe and Asia. Largest Nordic provider
- 184m subscribers (Q2, 2010)

CHALLENGES / OPPORTUNITIES

- Extend OSS & BSS platforms for new mobile services and evolution to LTE
- OSS: IP Management & AAA
- BSS: Subscriber Data Management & Customer Support

SOLUTIONS

- MySQL Cluster
- MySQL Server
- MySQL Support Services

CUSTOMER PERSPECTIVE

"Telenor has been using MySQL for fixed IP management since 2003 and are extremely satisfied with its speed, availability and flexibility. Now we also support mobile and LTE IP management with our solution. Telenor has found MySQL Cluster to be the best performing database in the world for our applications."

- Peter Eriksson, Manager, Network Provisioning

RESULTS

- Launch new services with no downtime, due to on-line operations of MySQL Cluster
- Consolidated database supports Subscriber Data Management initiatives
- MySQL Cluster selected due to 99.999% availability, real time performance and linear scalability on commodity hardware

Gina Tricot

Company Overview

Swedish fashion chain with over 180 stores, and selling online in 28 countries.

Application

Cloud-based e-commerce application powered by MySQL Enterprise Edition (initially built on Community Edition).

Why MySQL Enterprise Edition?

"MySQL Enterprise Edition enables us to expand and grow online sales in both existing and new countries while maintaining a low TCO. It is a high performance, scalable and easy to monitor database; we're extremely pleased with it." Nicklas Griphem, Manager Server & Infrastructure, Gina Tricot



Workbench Center



- Query Database... Ctrl+U
- Manage Connections...
- Reverse Engineer... Ctrl+R
- Migrate...**
- Edit Type Mappings for Generic Migration...

MySQL Doc Library MySQL Utilities Database Migration Oracle Issue Reporter

Workspace

SQL Development
Connect to existing databases and run SQL Queries, SQL scripts, edit data and manage database objects.

Data Modeling
Create and manage models, forward & reverse engineer, compare and synchronize schemas, report.

Server Administration
Configure your database server, setup user accounts, browse status variables and server logs.

Open Connection to Start Querying
Or click a DB connection to open the SQL Editor.

Open Existing EER Model
Or select a model to open or click here to browse.

Server Administration
Or click to manage a database server instance.

localhost
User: root Host: 127.0.0.1:3306



mysql@localhost
Local Type: Windows

New Connection
Add a new database connection for querying.

Edit Table Data
Select a connection and schema table to edit.

Edit SQL Script
Open an existing SQL Script file for editing.

Manage Connections
Modify connection settings or add connections.

- Create New EER Model**
Create a new EER Model from scratch.
- Create EER Model From Existing Database**
Create by connecting and reverse engineering.
- Create EER Model From SQL Script**
Import an existing SQL file.

New Server Instance
Register a new server instance to manage.

Manage Import / Export
Create a dump file or restore data from a file.

Manage Security
Manage user accounts and assign privileges.

Manage Server Instances
Add, delete and update server instance settings.



MySQL Workbench

Migration x

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Migration Task List

OVERVIEW

- Overview

SOURCE & TARGET

- Source Selection
- Target Selection
- Fetch Schemata List
- Schemata Selection
- Reverse Engineer Source

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- Data Transfer Setup
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- Migration Report

Overview

Welcome to the MySQL Workbench Migration Wizard

This wizard will assist you in migrating tables and data from a supported database system to MySQL. You can also use this to copy databases from one MySQL instance to another.

Prerequisites

Before starting, check the following preparation steps:

- The Migration Wizard uses ODBC to connect to the source database. You must have an ODBC driver for the source database installed and configured, as Workbench does not bundle any such drivers. For MySQL connections, the native client library is used.
- Ensure you can connect to both source and target RDBMS servers.
- Make sure you have privileges to read schema information and data from the source database and create objects and inserting data in the target MySQL server.
- The max_allowed_packet option in the target MySQL server must be enough to fit the largest field value to be copied from source (especially BLOBs and large TEXT fields).

The wizard supports migrating from specific database systems, but a "generic" RDBMS support is also provided. The generic support is capable of migrating tables from many RDBMS that can be connected to using ODBC, although certain type mappings may not be performed correctly. A manual mapping step is provided for reviewing and fixing any migration problems that could occur.

Start Migration

View Documentation

Migration Wizard was started

MySQL Workbench Migration x

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Source Selection

Source RDBMS Connection Parameters

Database System: Microsoft SQL Server Select a RDBMS from the list of supported systems

Stored Connection: Select from saved connection settings

Connection Method: ODBC (native) Method to use to connect to the RDBMS

Parameters Advanced

Driver: SQL Server Native Client 10.0 The name of the ODBC driver you are using.

Server: 10.154.111.66 Address\instance name of the server.

Username: sa Name of the user to connect with.

Password: Store in Vault ... Clear The user's password. Leave blank to input when needed.

Database: The database to connect to. Leave blank to select it later.

Store connection for future usage as

Test Connection < Back Next > Cancel

Source DBMS connection is OK

MySQL Workbench

Migration x

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Target Selection

Target RDBMS Connection Parameters

Stored Connection: localhost Select from saved connection settings

Connection Method: Standard (TCP/IP) Method to use to connect to the RDBMS

Parameters Advanced

Hostname: 127.0.0.1 Port: 3306 Name or IP address of the server host. - TCP/IP port.

Username: root Name of the user to connect with.

Password: Store in Vault ... Clear The user's password. Will be requested later if it's not set.

Default Schema: The schema to use as default schema. Leave blank to select it later.

Store connection for future usage as

Test Connection < Back Next > Cancel

Migration Wizard was started

MySQL Workbench

Migration ×

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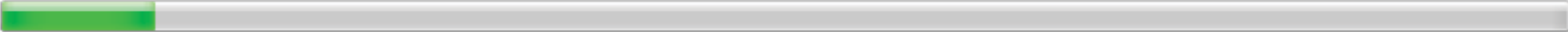
Fetch Schema List

The following tasks will now be performed. Please monitor the execution.

The names of available schemas will be retrieved from the source RDBMS. The account used for the connection will need to have appropriate privileges for listing and reading the schemas you want to migrate. Target RDBMS connection settings will also be checked for validity.

- Connect to source DBMS
- Check target DBMS connection
- Retrieve schema list from source

Fetching catalog names...



Show Logs

< Back Next > Cancel

Migration Wizard was started

MySQL Workbench

Migration x

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Schemata Selection

Select the schemata you want to migrate:

Include	Catalog/Schema
<input checked="" type="checkbox"/>	Northwind
<input checked="" type="checkbox"/>	dbo

1 schemata selected Unselect All

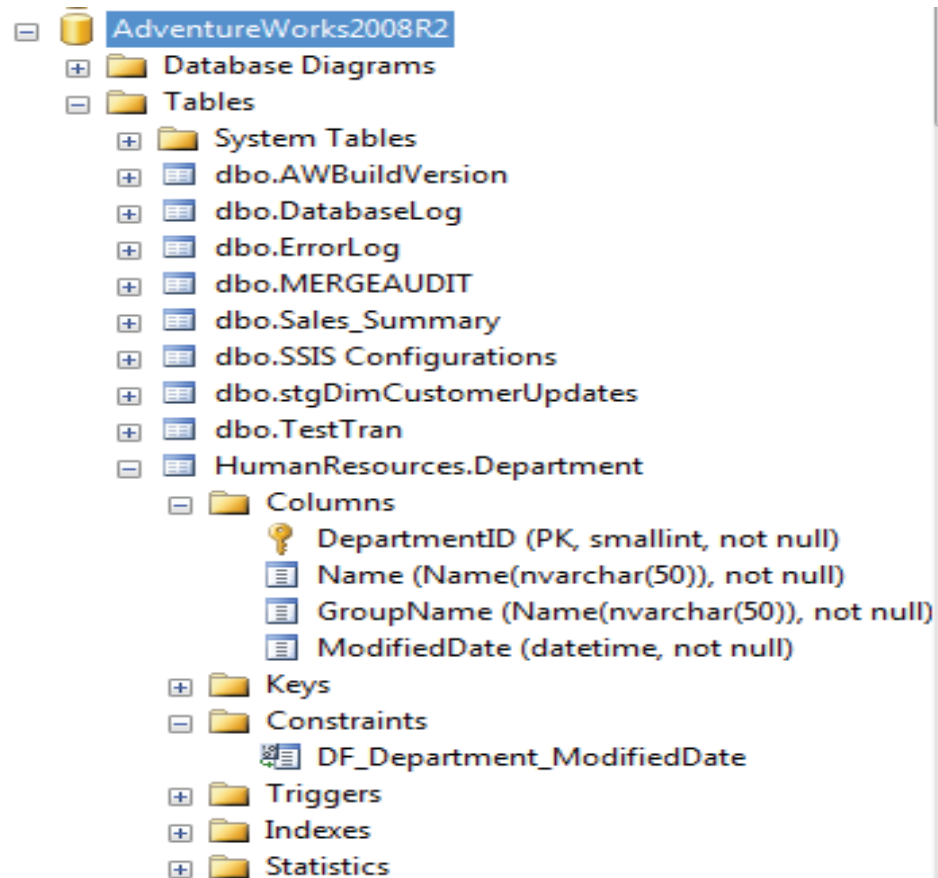
Schema Name Mapping Method

Choose how the reverse engineered schemata and objects should be mapped.

- Keep schemata as they are: Catalog.Schema.Table -> Schema.Table
- Only one schema: Catalog.Schema.Table -> Catalog.Table
- Only one schema, keep current schema names as a prefix: Catalog.Schema.Table -> Catalog.Schema_Table

Source DBMS connection is OK

MS SQL Server Catalog/Schema mapping



- Catalog.Schema.<object>
- AdventureWorks2008R2
 - ↳ HumanResources
 - ↳ Department
- Mapped in MySQL as either
 - AdventureWorks2008R2
 - ↳ HumanResource_De...
- or as
 - AdventureWorks2008R2
 - ↳ Department

MySQL Workbench

Migration x

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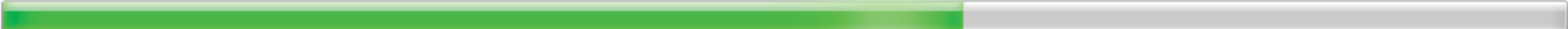
- Migration Report

Reverse Engineer Source

Selected schema metadata will now be fetched from the source RDBMS and reverse engineered so that its structure can be determined.

- Connect to source DBMS
- Reverse engineer selected schemata
- Post-processing of reverse engineered schemata

Retrieving table dbo.Region...



Show Logs

< Back Next > Cancel

Source DBMS connection is OK

MySQL Workbench

Migration x

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Source Objects

You may select the objects to be migrated in the lists below.
All tables will be migrated by default.

Migrate Table objects
13 total, 13 selected Show Selection

Migrate View objects
18 total, 0 selected Show Selection

< Back Next > Cancel

Source DBMS connection is OK

MySQL Workbench

Migration ×

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Source Objects

You may select the objects to be migrated in the lists below.
All tables will be migrated by default.

Migrate Table objects
13 total, 13 selected

Hide Selection

.C

Available Objects

Objects to Migrate

- Northwind.Categories
- Northwind.CustomerCustomerDemo
- Northwind.CustomerDemographics
- Northwind.Customers

Migrate View objects
18 total, 0 selected

Show Selection

< Back Next > Cancel

Source DBMS connection is OK

MySQL Workbench

Migration ×

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Migration Task List

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Manual Editing

Review and edit migrated objects. You can manually edit the generated SQL before applying them to the target database.

Migrated Objects

View: Migration Problem

No mapping problems found.
Use the View pulldown menu to review all objects.

You can rename target schemas and tables and change column definitions by selecting the item and pressing F2.

Show Code and Messages

< Back Next > Cancel

Source DBMS connection is OK

MySQL Workbench

Migration x

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Migration Task List

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Manual Editing

Review and edit migrated objects. You can manually edit the generated SQL before applying them to the target database.

Migrated Objects View: All Objects

Source Object	Target Object	Migration Message
n/a	Preamble	
Northwind	Northwind	
Tables	Tables	
Categories	Categories	
CustomerCustomerDe...	CustomerCustomerDemo	
CustomerDemographics	CustomerDemographics	
Customers	Customers	
Employees	Employees	
EmployeeTerritories	EmployeeTerritories	
Order Details	Order Details	
Orders	Orders	
Products	Products	

You can rename target schemas and tables and change column definitions by selecting the item and pressing F2.

SQL CREATE Script for Selected Object

```

1 CREATE TABLE IF NOT EXISTS `Northwind`.`Categories` (
2   `CategoryID` INT(10) NOT NULL AUTO_INCREMENT ,
3   `CategoryName` VARCHAR(15) NOT NULL ,
4   `Description` LONGTEXT NULL ,
5   `Picture` LONGBLOB NULL ,
6   PRIMARY KEY (`CategoryID`),
7   INDEX `CategoryName` (`CategoryName` ASC) )
8 COLLATE = utf8_general_ci

```

Lock edited SQL

Comment out

Apply Changes

Discard Changes

Hide Code and Messages

< Back Next > Cancel

Source DBMS connection is OK

MySQL Workbench Migration x

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Migration Task List

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Manual Editing

Review and edit migrated objects. You can manually edit the generated SQL before applying them to the target database.

Migrated Objects View: Column Mappings

Source Schema	Source Table	Source Column	Source Type	Source Flags	N.	Source Default ...	Source Collation	Target Schema
Northwind	Categories	CategoryID	INT		<input checked="" type="checkbox"/>			Northwind
Northwind	Categories	CategoryName	NVARCHAR(15)		<input checked="" type="checkbox"/>		SQL_Latin1_Gen...	Northwind
Northwind	Categories	Description	NTEXT		<input type="checkbox"/>		SQL_Latin1_Gen...	Northwind
Northwind	Categories	Picture	IMAGE		<input type="checkbox"/>			Northwind
Northwind	CustomerCu...	CustomerID	NCHAR(5)		<input checked="" type="checkbox"/>		SQL_Latin1_Gen...	Northwind
Northwind	CustomerCu...	CustomerTy...	NCHAR(10)		<input checked="" type="checkbox"/>		SQL_Latin1_Gen...	Northwind
Northwind	CustomerDe...	CustomerTy...	NCHAR(10)		<input checked="" type="checkbox"/>		SQL_Latin1_Gen...	Northwind
Northwind	CustomerDe...	CustomerDesc	NTEXT		<input type="checkbox"/>		SQL_Latin1_Gen...	Northwind
Northwind	Customers	CustomerID	NCHAR(5)		<input checked="" type="checkbox"/>		SQL_Latin1_Gen...	Northwind
Northwind	Customers	CompanyNa...	NVARCHAR(40)		<input checked="" type="checkbox"/>		SQL_Latin1_Gen...	Northwind
Northwind	Customers	CreatedName	NVARCHAR(20)		<input type="checkbox"/>		SQL_Latin1_Gen...	Northwind

You can rename target schemas and tables and change column definitions by selecting the item and pressing F2.

SQL CREATE Script for Selected Object

```

1 CREATE TABLE IF NOT EXISTS `Northwind`.`CustomerDemographics` (
2   `CustomerTypeID` CHAR(10) NOT NULL ,
3   `CustomerDesc` LONGTEXT NULL ,
4   PRIMARY KEY (`CustomerTypeID` )
5   COLLATE = utf8_general_ci

```

Lock edited SQL

Comment out

Apply Changes

Discard Changes

Hide Code and Messages

< Back Next > Cancel

Source DBMS connection is OK

MySQL Workbench

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Target Creation Options

Select options for the creation of the migrated schema in the target MySQL server and click [Next >] to execute.

Schema Creation

- Create schema in target RDBMS
- Create a SQL script file

Script File:

Options

- Keep schemata if they already exist. Objects that already exist will not be recreated or updated.

< Back Next > Cancel

Migration Wizard was started

MySQL Workbench

Migration ×

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Create Schemata

The SQL scripts generated for the migrated schema objects will now be executed in the target database. You can monitor execution in the logs and if there are errors you may correct them in the next step. Table data will be migrated at a later step.

- Create Script File
- Connect to Target Database
- Perform Checks in Target
- Create Schemata and Objects

Finished performing tasks.
Click [Next >] to continue.

Show Logs

< Back Next > Cancel

Source DBMS connection is OK

MySQL Workbench Migration x

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- Migration Report

Create Target Results

Scripts to create the target schema were executed. No data has been migrated yet. Review the creation report below for errors or warnings. If there are any errors, you can manually fix the scripts and click [Recreate Objects] to retry the schema creation or return to the Manual Editing page to correct them there and retry the target creation.

Object	Result
Preamble	Script executed successfully
Northwind.Northwind	Script executed successfully
Northwind.Categories	Script executed successfully
Northwind.CustomerCustomerD...	Script executed successfully
Northwind.CustomerDemograp...	Script executed successfully
Northwind.Customers	Script executed successfully
Northwind.Employees	Script executed successfully
Northwind.EmployeeTerritories	Script executed successfully
Northwind.OrderDetails	Script executed successfully
Northwind.Orders	Script executed successfully
Northwind.Products	Script executed successfully

SQL CREATE Script for Selected Object

```

1 CREATE TABLE IF NOT EXISTS `Northwind`.`Categories`
2   (`CategoryID` INT(10) NOT NULL AUTO_INCREMENT
3   `CategoryName` VARCHAR(15) NOT NULL ,
4   `Description` LONGTEXT NULL ,
5   `Picture` LONGBLOB NULL ,
6   PRIMARY KEY (`CategoryID`),
7   INDEX `CategoryName` (`CategoryName` ASC) )
8 COLLATE = utf8_general_ci

```

Comment out Apply Discard

Output Messages

Recreate Objects < Back Next > Cancel

Source DBMS connection is OK

MySQL Workbench Migration x

File Edit View Database Plugins Scripting Help ORACLE

Migration Task List

OVERVIEW

- Overview

SOURCE & TARGET

- Source Selection
- Target Selection
- Fetch Schemata List
- Schemata Selection
- Reverse Engineer Source

OBJECT MIGRATION

- Source Objects
- Migration
- Manual Editing
- Target Creation Options
- Create Schemata
- Create Target Results

DATA MIGRATION

- Data Transfer Setup**
- Bulk Data Transfer

REPORT

- Migration Report

Data Transfer Setup

Select options for the copy of the migrated schema tables in the target MySQL server and click [Next >] to execute.

Data Copy

- Online copy of table data to target RDBMS
- Create a batch file to copy the data at another time

Batch File:

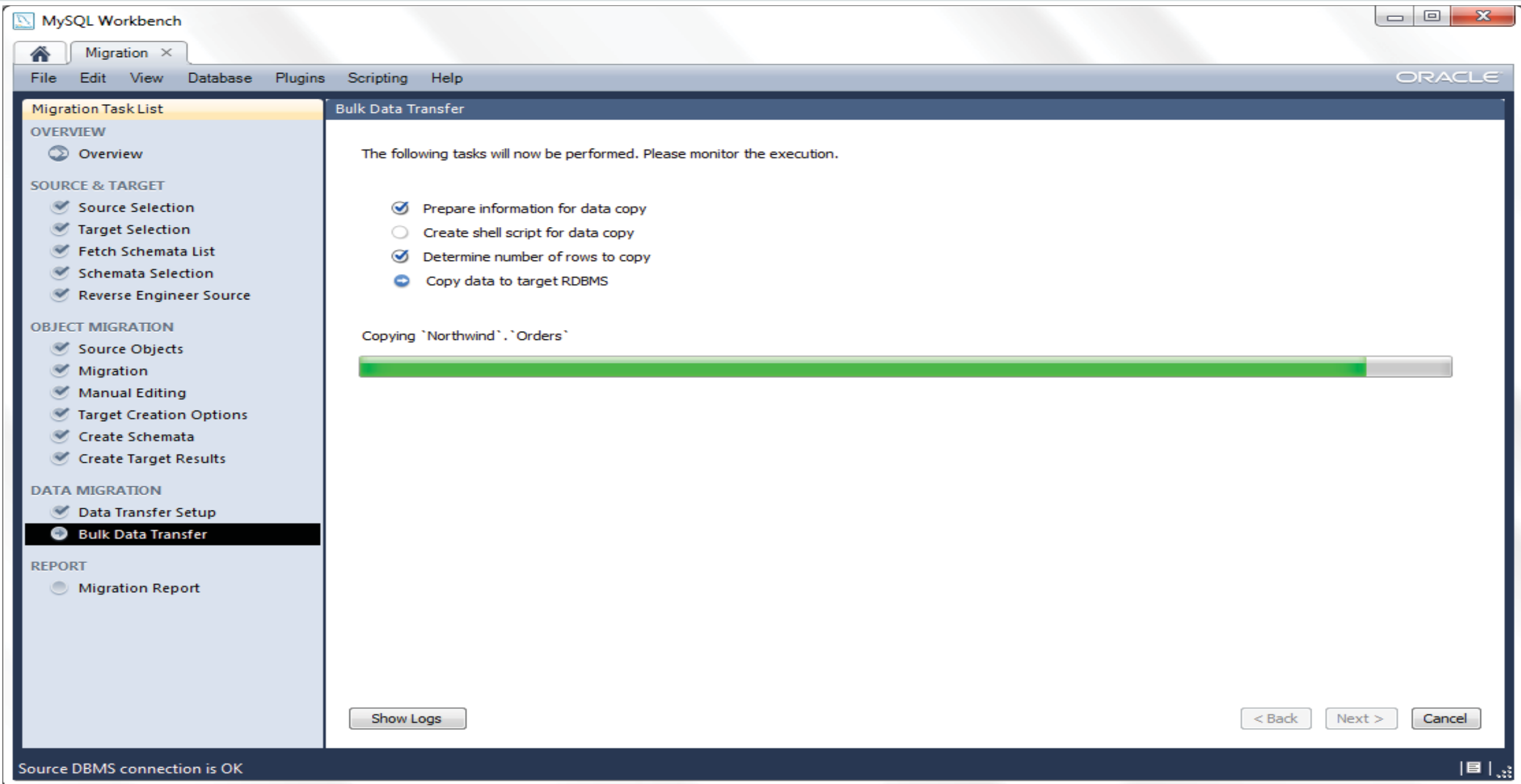
Options

- Truncate target tables (ie. delete contents) before copying data

Worker tasks Number of tasks to use for data transfer. Each task will open a connection to both source and target RDBMSs to copy table rows. Default value 2.

- Enable debug output for table copy

SQL Editor closed



MySQL Workbench Migration x

File Edit View Database Plugins Scripting Help ORACLE

Migration Task List

OVERVIEW Hide

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OBJECT MIGRATION

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REPORT

- Migration Report

Migration Report

MySQL Workbench Migration Wizard Report

Date: Tue Jul 24 21:34:43 2012
Source: Microsoft SQL Server 8.0.194
Target: MySQL 5.5.15

I. Migration

1. Summary

Number of migrated schemata: 1

1. Northwind
Source Schema: Northwind

- Tables: 13
- Triggers: 0
- Views: 18
- Stored Procedures: 0
- Functions: 0

2. Migration Issues

- CategoryName
note Collation SQL_Latin1_General_CP1_CI_AS migrated to utf8_general_ci
- Description
note Collation SQL_Latin1_General_CP1_CI_AS migrated to utf8_general_ci
- CustomerID
note Collation SQL_Latin1_General_CP1_CI_AS migrated to utf8_general_ci
- CustomerTypeID
note Collation SQL_Latin1_General_CP1_CI_AS migrated to utf8_general_ci
- CustomerTypeID
note Collation SQL_Latin1_General_CP1_CI_AS migrated to utf8_general_ci

< Back Finish Cancel

Source DBMS connection is OK

Getting Started

MySQL Workbench

- <http://www.mysql.com/products/workbench/migrate/>
- <http://www.mysql.com/why-mysql/white-papers/guide-to-migrating-from-sql-server-to-mysql/>

MySQL Migrations

- <http://www.mysql.com/news-and-events/web-seminars/mysql-on-windows-new-migration-wizard/>
- <http://www.ispirer.com/products/mysql-migration>

MySQL Case Studies

- <http://www.mysql.com/customers/view/?id=684>
- <http://www.mysql.com/customers/view/?id=1143>

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MySQL Central
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Sept. 28–Oct. 2, 2014
San Francisco

Thank You!

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