

Universidade do Minho
Escola de Engenharia

KEEPSOLUTIONS
University of Minho SPIN-OFF

Database Preservation Toolkit

Ferramenta de conversão e
normalização de bases de dados

Encontro de Curadoria Digital 2016
Estratégias e experiências

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KEEP SOLUTIONS

29 de Junho, 2016

Bases de Dados

Usadas para persistência de informação digital

Essenciais para os sistemas digitais

Informação deverá continuar acessível

A sua recuperação poderá ser impossível ou dispendiosa

Preservação de Bases de Dados (relacionais)

Objetos digitais complexos

Dados heterogêneos e estruturados

Técnicas existentes podem levar a perdas de dados

Como preservar?

Usando um formato especializado

SIARD — Software Independent Archiving of Relational Databases

Formato criado pelos Arquivos Federais da Suíça para **preservação de bases de dados**

Norma suíça eCH-0165

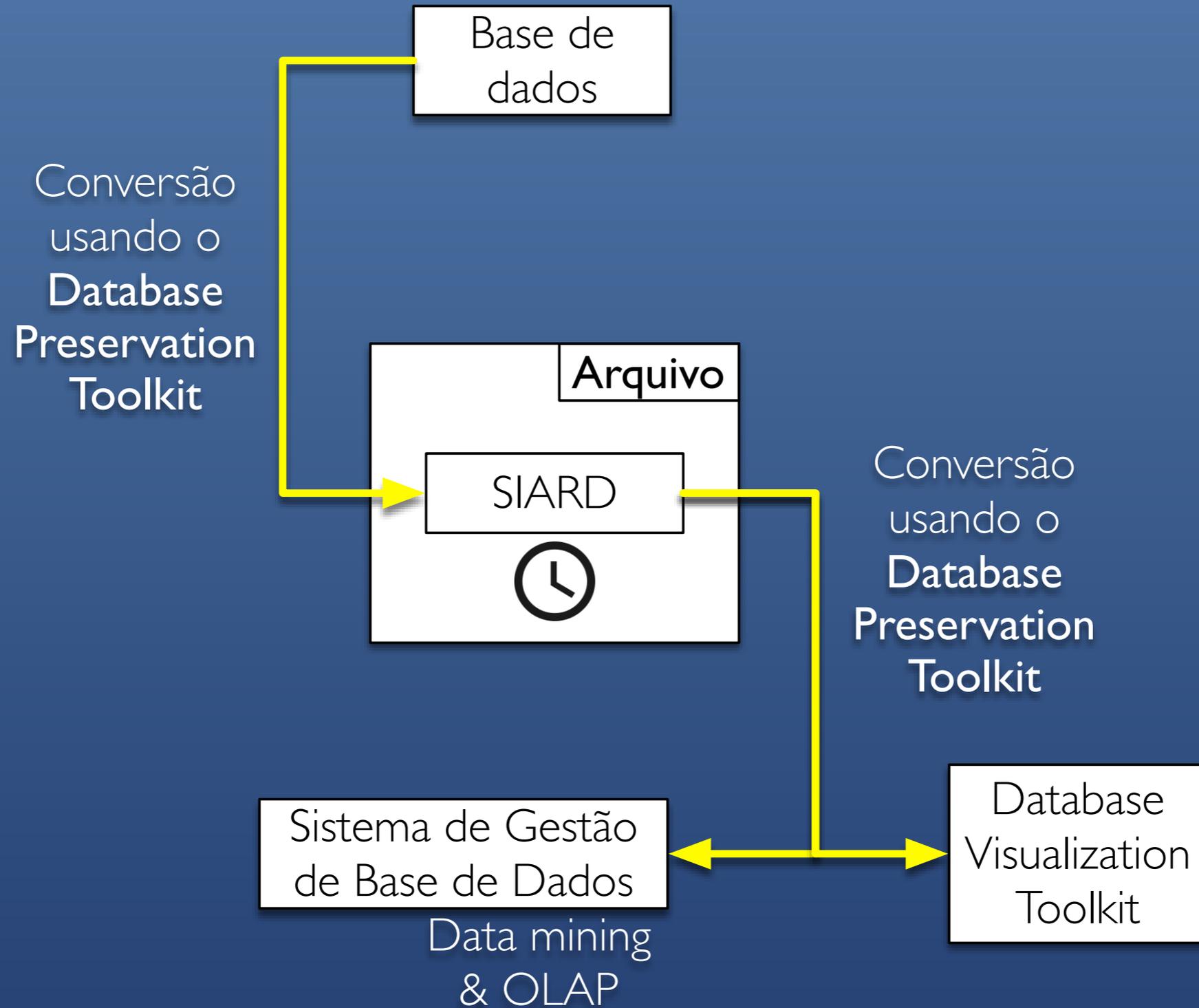
Versão 2 em desenvolvimento no contexto do projeto E-ARK

Inclui **sugestões e experiências de vários arquivos europeus**

(Arquivo Nacional da Torre do Tombo, Arquivos Federais da Suíça e Arquivos Nacionais da Dinamarca, Eslovénia, Estónia, Hungria e Noruega)

Preserva as **propriedades significativas** das bases de dados

Utilização em contexto de arquivo





Database Preservation Toolkit

Converte bases de dados para SIARD

Converte SIARD para base de dados

Suporta os **cinco principais** Sistemas de Gestão de Bases de Dados:
Oracle, Microsoft SQL Server, MySQL, PostgreSQL, MS Access, e mais...

www.databasepreservation.com





[View on GitHub](#)

[Download v2-beta3.2.5](#)

Database Preservation Toolkit

The Database Preservation Toolkit allows conversion between Database formats, including connection to live systems, for purposes of digitally preserving databases. The toolkit allows conversion of live or backed-up databases into preservation formats such as **SIARD**, a XML-based format created for the purpose of database preservation. The toolkit also allows conversion of the preservation formats back into live systems to allow the full functionality of databases. For example, it supports a specialized export into MySQL, optimized for PhpMyAdmin, so the database can be fully experimented using a web interface.



Database Visualization Toolkit

Plataforma Web

Acesso a bases de dados arquivadas

Permite explorar e pesquisar a base de dados

Não requer conhecimentos técnicos

Exportar resultados da pesquisa (formatos CSV, Excel, PDF)

Database Visualization Toolkit

Search in all tables

Databases / sakila

- Database
 - Information
 - Users & Roles
- Schema sakila
 - Structure
 - Routines
 - Triggers
 - Check constraints
 - Views
 - Data
 - actor
 - address
 - category
 - city
 - country
 - customer
 - film
 - film_actor
 - film_category
 - film_text
 - inventory
 - language
 - payment

Database information

Database Name
sakila

Archival Date
2016-06-17T01:00:00.000+0100

Archivist
Bruno Ferreira

Archivist contact
email: bferreira@keep.pt, phone: 912345678

Client machine
Brunos-MacBook-Pro.local (fetched automatically)

Database product
MySQL 5.5.42

Data origin time span
Early 2005 to March 2006

Data owner
MySQL team

Description
The Sakila sample database was initially developed by Mike Hillyer, a former member of the MySQL AB documentation team, and is intended to provide a standard schema that can be used for examples in books, tutorials, articles, samples, and so forth. Sakila sample database also serves

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Table: film

Search...

film_id	title	description	release_year	language_id	original_language_id
1	ACADEMY DINOSAUR	A Epic Drama of a Fe	2006	1	
2	ACE GOLDFINGER	A Astounding Epistle	2006	1	
3	ADAPTATION HOLES	A Astounding Reflect	2006	1	
4	AFFAIR PREJUDICE	A Fanciful Document	2006	1	
5	AFRICAN EGG	A Fast-Paced Docum	2006	1	
6	AGENT TRUMAN	A Intrepid Panorama	2006	1	
7	AIRPLANE SIERRA	A Touching Saga of a	2006	1	
8	AIRPORT POLLOCK	A Epic Tale of a Moos	2006	1	
9	ALABAMA DEVIL	A Thoughtful Panora	2006	1	
10	ALADDIN CALENDAR	A Action-Packed Tale	2006	1	
11	ALAMO VIDEOTAPE	A Boring Epistle of a	2006	1	
12	ALASKA PHANTOM	A Fanciful Saga of a	2006	1	
13	ALI FOREVER	A Action-Packed Dram	2006	1	
14	ALICE FANTASIA	A Emotional Drama c	2006	1	
15	ALIEN CENTER	A Brilliant Drama of	2006	1	

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 - film
 - film_actor
 - film_category
 - film_text
 - inventory

Table: film

dinosaur

film_id	title	description	release_year	language_id	original_language_id
1	ACADEMY DINOSAUR	A Epic Drama of a Fe	2006	1	
131	CENTER DINOSAUR	A Beautiful Characte	2006	1	
231	DINOSAUR SECRETA	A Action-Packed Dra	2006	1	

1-3 of 3

Database Visualization Toolkit

Search in all tables

Databases / sakila / sakila / actor

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Table: actor

Search...

<input type="checkbox"/>	actor_id		x
<input checked="" type="checkbox"/>	first_name	Jo*	x
<input checked="" type="checkbox"/>	last_name		x
<input type="checkbox"/>	last_update		x

ADD SEARCH FIELD

SEARCH

first_name	last_name
JOHNNY	LOLLOBRIGIDA
JOE	SWANK
JOHNNY	CAGE
JODIE	DEGENERES
JON	CHASE
JOHN	SUVARI

Database Visualization Toolkit

Search in all tables

Databases / sakila / sakila / film / Record

- Database
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 - Structure
 - Routines
 - Triggers
 - Check constraints
 - Views
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 - address
 - category
 - city
 - country
 - customer
 - film
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 - film_category
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Record details

film_id
15 [Explore related records](#)

title
ALIEN CENTER

description
A Brilliant Drama of a Cat And a Mad Scientist who must Battle a Feminist in A MySQL Convention

release_year
2006

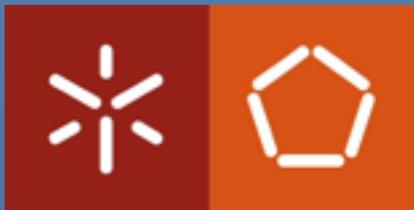
language_id
1 [Explore related records](#)

original_language_id
NULL

rental_duration
5

rental_rate
2.99

length
46



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