

Ferramentas para trabalhar com o PostgreSQL

Aqui trago uma boa relação de ferramentas para trabalhar com o PostgreSQL, que estão organizadas por tipo: administração, modelagem, monitoramento, backup, importar e exportar, visualizar, geração de relatórios, engenharia reversa, etc.

As licenças são variadas: free, free e open, comerciais, sharewares, etc.

Agendamento

Um recurso muito utilizado para agendar backups, vacuums, etc.

No Windows temos o **Agendador de Tarefas**, que na linha de comando pode ser usado como schtasks.

Tutorial sobre o schtasks: <http://ribafs.wordpress.com/2008/03/29/agendando-tarefas-no-windows-com-o-schtasks/>

No Linux temos o **cron**, para agendar as tarefas. Alguns tutoriais sobre ele:

<http://www.vivaolinux.com.br/dicas/verDica.php?codigo=10282>

<http://www.vivaolinux.com.br/artigos/verArtigo.php?codigo=7965>

Administração

PGAdmin - <http://www.pgadmin.org>

Ferramenta de administração desenvolvida pela equipe de desenvolvimento do PostgreSQL. Ferramenta para uso com replicação via Slony e muitas outras funcionalidades importantes.

pgAdmin III is the most popular and feature rich Open Source administration and development platform for PostgreSQL, the most advanced Open Source database in the world. The application may be used on Linux, FreeBSD, OpenSUSE, Solaris, Mac OSX and Windows platforms to manage PostgreSQL 7.3 and above running on any platform, as well as commercial and derived versions of PostgreSQL such as EnterpriseDB, Mammoth PostgreSQL, Bizgres and Greenplum database.

pgAdmin III is designed to answer the needs of all users, from writing simple SQL queries to developing complex databases. The graphical interface supports all PostgreSQL features and makes administration easy. The application also includes a syntax highlighting SQL editor, a server-side code editor, an SQL/batch/shell job scheduling agent, support for the Slony-I replication engine and much more. Server connection may be made using TCP/IP or Unix Domain Sockets (on *nix platforms), and may be SSL encrypted for security. No additional drivers are required to communicate with the database server.

pgAdmin III is developed by a community of PostgreSQL experts around the world and is available in more than a dozen languages. It is Free Software released under the Artistic License.

psql - acompanha o PostgreSQL

Ferramenta de administração via console, com muitos recursos.

phpPgAdmin - <http://phppgadmin.sf.net>

phpPgAdmin is a web-based administration tool for PostgreSQL. It is perfect for PostgreSQL DBAs, newbies and hosting services.

Download latest version: 4.2 (5th April 2008)

Features

- * Administer multiple servers
- * Support for PostgreSQL 7.0.x, 7.1.x, 7.2.x, 7.3.x, 7.4.x, 8.0.x, 8.1.x, 8.2.x, 8.3.x
- * Manage all aspects of:
 - o Users & groups
 - o Databases
 - o Schemas
 - o Tables, indexes, constraints, triggers, rules & privileges
 - o Views, sequences & functions
 - o Advanced objects
 - o Reports
- * Easy data manipulation:
 - o Browse tables, views & reports
 - o Execute arbitrary SQL
 - o Select, insert, update and delete
- * Dump table data in a variety of formats: SQL, COPY, XML, XHTML, CSV, Tabbed, pg_dump
- * Import SQL scripts, COPY data, XML, CSV and Tabbed
- * Supports the Slony master-slave replication engine
- * Excellent language support:
 - o Available in 27 languages
 - o No encoding conflicts. Edit Russian data using a Japanese interface!
- * Easy to install and configure

Plugins para o Eclipse:

dbedit: http://www.geocities.com/uwe_ewald/dbedit.html

QuantumDb: <http://quantum.sourceforge.net/>

MicroOLAP Database Design - <http://microolap.com/products/database/postgresql-designer/download/>

Database structure modeling, generation and modification focused on PostgreSQL

Database Designer for PostgreSQL is an easy CASE tool with intuitive graphical interface allowing you to build a clear and effective database structure visually, see the complete picture (diagram) representing all the tables, references between them, views, stored procedures and other objects. Then you can easily generate a physical database on a server, modify it according to any changes you made to the diagram using fast ALTER statements.

Aqua Data Studio - <http://www.aquafold.com/>

Is a database developer's complete Integrated Development Environment (IDE). The IDE provides

three major areas of functionality: A) Database query and administration tool B) Suite of compare tools for databases, source control and filesystems, and C) a complete and integrated source control client for Subversion (SVN) and CVS.

OS Support: Windows | Linux | OSX | Solaris | Java Platform

RDBMS Support: (Oracle - 10g/9i/8i) (DB2 UDB - 9/8/7) (MS SQL Server - 2005/2000/7/MSDE) (Sybase ASE - 15/12.x/11.x) (Sybase Anywhere - 10/9/8) (Sybase IQ - 12.x) (Informix IDS - 10/9.x/7.x) (PostgreSQL - 8.x/7.x) (MySQL - 5/4.x/3.x) (Generic JDBC Platform) (Generic ODBC)

Data Architect - <http://www.thekompany.com/products/dataarchitect/>

DbDeveloper - <http://www.dbdeveloper.prominentus.com/>

Are you working with many databases? You migrate data from MSSQL to Oracle, maybe another databases. Do you work with many different databases in the same time? Do you need an easy-to-use sql tool for each of them. It becomes hard when you have to use different tool for every database engine. Why not having all your databases management in one place and save hours while working with it?

dbDeveloper is a visual development tool for multiple databases. With the intuitive and powerful interface it allows you to explore, create and change structure of every database in an easy way. It offers variety of functions from development via tuning up to the deployment and data manipulation.

DbManager - <http://www.dbtools.com.br/PT/dbmanagerpro/>

O DBManager Professional é uma das mais avançadas ferramentas para gerenciamento de dados. Com suporte nativo para MySQL, PostgreSQL, Interbase/Firebird, SQLite, Xbase tables, MSAccess, MSSQL Server, Sybase, Oracle e ODBC, traz ainda recursos poderosos disponíveis apenas no DBManager. Disponível em duas edições distintas, você pode escolher aquela que melhor atenderá as suas necessidades: Freeware e Enterprise. A Freeware é totalmente gratuita e voltada para usuários de bancos de dados em geral, contém recursos não disponíveis em outros aplicativos existentes no mercado para gerenciamento de Bancos de Dados. A Edição Enterprise é um produto comercial, voltada para os usuários experientes que querem extrair o máximo em administração de banco de dados.

Navicat - <http://pgsql.navicat.com/>

EMS SQL Manager for PostgreSQL - <http://sqlmanager.net/products/postgresql/manager/>

EMS SQL Manager for PostgreSQL is a high performance tool for PostgreSQL Database Server administration and development. It works with any PostgreSQL versions up to the newest one and supports the latest PostgreSQL features including enumerated, text search, XML and UUID data types, PostgreSQL index key sorting order, arrays of composite types, and others. SQL Manager for PostgreSQL offers plenty of powerful database tools such as Visual Database Designer to create PostgreSQL database in few clicks, Visual Query Builder to build complicated PostgreSQL queries, powerful BLOB editor and many more useful features for efficient PostgreSQL administration. SQL Manager for PostgreSQL has a state-of-the-art graphical user interface with well-described wizard system, so clear in use that even a newbie will not be confused with it.

SQL Maestro for PostgreSQL - <http://sqlmaestro.com/products/postgresql/maestro/>

PostgreSQL Maestro is the premier PostgreSQL admin tool for database management, control and development.

PostgreSQL Maestro GUI allows you to create, edit, copy, extract and drop all the database objects, build queries visually, execute queries and SQL scripts, design your database as ER diagram, view and edit data including BLOBs, represent data as diagrams, export and import data to/from most popular file formats, debug PL/pgSQL code, analyze your data summarized into multidimensional views and hierarchies (OLAP cubes), manage PostgreSQL roles, users, groups and their privileges, and use a lot of other admin tools designed for the easiest and most efficient work with PostgreSQL database server.

Backup

Cobian Backup - <http://www.educ.umu.se/~cobian/cobianbackup.htm>

Não especificamente para o PostgreSQL.

Cobian Backup is a multi-threaded program that can be used to schedule and backup your files and directories from their original location to other directories/drives in the same computer or other computer in your network. FTP backup is also supported in both directions (download and upload).

Cobian Backup exists in two different versions: application and service. The program uses very few resources and can be running on the background on your system, checking your backup schedule and executing your backups when necessary. Cobian Backup is not an usual backup application: it only copies your files and folders in original or compressed mode to other destination, creating a security copy as a result. So Cobian Backup can be better described as a "Scheduler for security copies".

Cobian Backup supports several methods of compression and strong encryption.

AutoBackup - <http://pgfoundry.org/projects/autobackup/>

Really easy backup script for Postgres with email notifications.

BackupPC - <http://backuppc.sourceforge.net/>

BackupPC is a high-performance, enterprise-grade system for backing up Linux, WinXX and MacOSX PCs and laptops to a server's disk. BackupPC is highly configurable and easy to install and maintain.

Dirvish - <http://www.dirvish.org/>

Dirvish is a fast, disk based, rotating network backup system.

With dirvish you can maintain a set of complete images of your filesystems with unattended creation and expiration. A dirvish backup vault is like a time machine for your data.

PGBackup Agent - <http://sourceforge.net/projects/pgbackupagent>

PGBackup Agent is a Win32 backup service for PostgreSQL servers

Diversas Ferramentas para PostgreSQL e para outros SGBDs:

<http://www.sqlmanager.net/>

Bancos de Teste

Pagila - <http://www.postgresql.org/ftp/projects/pgFoundry/dbsamples/index.html>

Comparar

pgdiff - <http://pgdiff.sourceforge.net/>

Compares the structures of two PostgreSQL databases and returns the differences as a sequence of SQL commands which can be fed to psql to transform the structure of the first to be identical to the second (analogous to diff and patch). There is an advanced web interface that makes testing and exploration easy. Database schemas can come from live databases, SQL files, or direct input. Don't gamble on whether or not your databases have the same structure, including constraints, defaults and types. Make sure with pgdiff!

Data Comparer for PostgreSQL -

<http://www.sqlmanager.net/en/products/postgresql/datacomparer>

EMS Data Comparer for PostgreSQL is a powerful and easy-to-use tool for PostgreSQL data comparison and synchronization. Using this utility you can view all the differences in compared PostgreSQL tables and execute an automatically generated script to eliminate these differences. Data Comparer for PostgreSQL provides a wide range of configuration parameters for fast and effective data comparison and synchronization of PostgreSQL databases.

EMS DB Comparer for PostgreSQL -

<http://www.sqlmanager.net/en/products/postgresql/dbcomparer>

Is an excellent tool for database comparison and synchronization. It allows you to view all the differences in compared database objects and execute an automatically generated script to eliminate all or selected differences. Having EMS DB Comparer for PostgreSQL you can work with several projects at once, define comparison parameters, print difference reports, and alter modification scripts. Its user-friendly interface greatly simplifies discovering and eliminating differences in PostgreSQL database structure saving your time and therefore money. Ambos também para MySQL, SQL Server, Interbase/Firebird e Oracle

DB Data Diffective V1 - <http://www.datanamic.com/datadiff/index.html>

Compare and Synchronize Database Content

- * Compare contents of two databases.
- * Synchronize database content.
- * Quickly find data differences between two tables.
- * Cross database version comparison.

DB Data Diffective is a powerful and easy-to-use utility for data comparison and synchronization. Compare data for selected tables in two databases, view differences and publish changes quickly and safely. Flexible comparison and synchronization settings will enable you to set up a customized comparison key and to select tables and fields for comparison and for synchronization.

DB Schema Diffective V1 - <http://www.datanamic.com/schemadiff/index.html>

Compare and Synchronize Database Schemas

- * Compare database schemas.
- * Synchronize your databases.
- * Quickly find structure differences between two databases.
- * Cross database version comparison.

DB Schema Diffective is a tool for comparison and synchronization of database schemas. It allows you to compare and synchronize tables, views, functions, sequences (generators), stored procedures, triggers and constraints between two databases.

Conectividade

PSQLODBC - ODBC para PostgreSQL

<http://www.postgresql.org/ftp/odbc/versions/dll/index.html>

NPGSQL - Driver para .NET

<http://www.postgresql.org/ftp/projects/gborg/npgsql/devel/index.html>

PGOLEDB - Driver OLE

<http://www.postgresql.org/ftp/projects/gborg/oledb/stable/index.html>

SDBC - Driver para OpenOffice Base

<http://dba.openoffice.org/drivers/postgresql/index.html>

JDBC para PostgreSQL

<http://jdbc.postgresql.org/download.html>

ZeosLib - Acesso para Delphi

http://sourceforge.net/project/showfiles.php?group_id=35994

Converter/Importar/Exportar

Temos um recurso que é praticamente universal entre os SGBDs:

Exportar como texto puro/CSV e então importar no PostgreSQL através do comando copy com:

copy tabela from 'c:/path/do/arquivo.csv';

Advanced Data Export VCL - <http://www.sqlmanager.net/en/products/tools/advancedexport>

Is a component suite for Borland Delphi and C++ Builder that allows you to save your data in the most popular data formats for the future viewing, modification, printing or web publication. You can export data into MS Access, MS Excel, MS Word (RTF), Open XML Format, Open Document Format (ODF), HTML, XML, PDF, TXT, DBF, CSV and more! There will be no need to waste

your time on tiresome data conversion - Advanced Data Export will do the task quickly and will give the result in the desired format.

Advanced Data Import VCL - <http://www.sqlmanager.net/en/products/tools/advancedimport>

Is a component suite for Borland Delphi and C++ Builder that allows you to import data from files of the most popular data formats to the database. You can import data from MS Excel, MS Access, DBF, XML, TXT, CSV, ODF and HTML. There will be no need to waste your time on tiresome data conversion - Advanced Data Import will do the task quickly, irrespective of the source data format.

PostgreSQL Data Wizard - <http://sqlmaestro.com/products/postgresql/datawizard/>

Is a powerful Windows GUI utility for managing your data. It provides you with a number of easy-to-use tools for performing the required data manipulation easily and quickly.

- * ASP.NET Generator: create full set of ASP.NET scripts in a few mouse clicks
- * PHP Generator: get high-quality web applications without manual coding
- * Data Pump: transfer any ADO-compatible database to PostgreSQL
- * Data export to as many as 14 file formats including Excel, RTF and HTML
- * Data import from Excel, CSV, text files and more
- * Flexible Task Scheduler
- * The Agent application to execute tasks in background mode

PGDoc - <http://www.assembla.com/wiki/show/pgdoc>

Is a small Perl utility which automatically generates pretty HTML documentation for any PostgreSQL database. It runs through the system tables and collects information about database objects and relationships and creates an HTML page. The format of the HTML may be customized by altering the template and/or the css file.

Protopg - <http://pgfoundry.org/projects/protopg/>

Protopg is a parser/translator that helps to migrate Oracle(TM) SQL and PL/SQL statements to PostgreSQL syntax.

Iconv - <http://www.gnu.org/software/libiconv/>

Converte arquivos de uma codificação em outra.

Versão for Windows - <http://gnuwin32.sourceforge.net/packages/libiconv.htm>

Editores para Linguagens

DreamCoder for PostgreSQL - <http://www.sqldeveloper.net/postgresql-manager-developer/dreamcoder-for-postgresql.html>

is a powerful Integrated Development Environment (IDE) for PostgreSQL Databases. With the intuitive DreamCoder's GUI you will increase your code quality and reduce the development process time.

DreamCoder for PostgreSQL works with all PostgreSQL Server versions from 8.0 to 8.1.4.

DreamCoder for PostgreSQL enables you to easily build and execute queries, build and execute scripts, compile PL/pgSQL code, create and modify database objects, import and export data, enable user session and database monitor and more.

DreamCoder for PostgreSQL offers powerful visual tools for increase your productivity like a SQL editor, PL/pgSQL editor, master detail table browser, database structure synchronization parameter manager, SQL formatter, query builder, SQL history, session monitor and more.
Versões Free e Professional

PL/pgSQL Debugger - <http://www.amsoftwaredesign.com/>

Lightning Admin for PostgreSQL and MySQL (LA) is a GUI administration program that is designed for use on the Microsoft Windows® family of operating systems.

LA implements a tabbed workspace that is similar to a modern programming IDE such as Visual Studio® or Borland Delphi®.

Lightning Admin can be used to connect to databases running on any Platform PostgreSQL or MySQL run on.

Veja também este site:

http://www.pgsql.cz/index.php/Write_a_PL/pgSQL_debugger_alias_advanced_techniques_of_programming_in_PostgreSQL

edb-debugger - <http://pgfoundry.org/projects/edb-debugger/>

PL/pgSQL Debugger. Currently requires PostgreSQL 8.2 or higher (or EnterpriseDB 8.1.4 or higher). The PL/pgSQL debugger lets you step through PL/pgSQL code, set and clear breakpoints, view and modify variables, and walk through the call stack. Windows NT/2000/XP/2003, Linux

Engenharia Reversa - Visualização

DbVisualizer is the leading platform independent and cross database tool aimed to simplify database development and management for database administrators and developers.

DbVisualizer - <http://dbvis.com/>

Exibe diagramas de grande quantidade de tabelas e bancos, formando grandes imagens de vários metros, apropriada para plotagem.

Plugin para o Eclipse:

Azzurri Clay - <http://www.esnips.com/nsdoc/5e7e0e72-a935-4a45-a23d-cc38a9b1c139>

Geográficos

Uma das diferenças e forças do PostgreSQL são seus recursos para trabalhar com informações geográficas.

gnuplot - um software para trabalhar com recursos gráficos na linha de comando e que pode ser integrado ao PostgreSQL.

Instale com:

sudo apt-get install gnuplot

Existem versões para outros SOs, inclusive para Windows:

http://sourceforge.net/project/showfiles.php?group_id=2055

Veja um capítulo de livro sobre a integração com o PostgreSQL:

<http://pg.ribafs.net/down/prog//Using%20PostgreSQL%20and%20gnuplot.pdf>

phpPgGIS - <http://www.geolivre.org.br/?q=node/2> e <http://sourceforge.net/projects/phppggis/>

O phpPgGIS é um sistema que foi criado a partir do phpPgAdmin e inclui a capacidade de interpretar dados espaciais armazenados com o PostGIS. Este sistema torna muito fácil a gerência de um banco de dados geográfico baseado no PostgreSQL/PostGIS.

PostGIS - <http://postgis.refrations.net/>

PostGIS adds support for geographic objects to the PostgreSQL object-relational database. In effect, PostGIS "spatially enables" the PostgreSQL server, allowing it to be used as a backend spatial database for geographic information systems (GIS), much like ESRI's SDE or Oracle's Spatial extension. PostGIS follows the OpenGIS "Simple Features Specification for SQL" and has been certified as compliant with the "Types and Functions" profile.

PostGIS has been developed by Refrations Research as a project in open source spatial database technology. PostGIS is released under the GNU General Public License. We continue to develop PostGIS, and have added user interface tools, basic topology support, data validation, coordinate transformation, programming APIs and much more. Our list of future projects includes full topology support, raster support, networks and routing, three dimensional surfaces, curves and splines and other features. Ask us about consulting services and implementing new features.

PostGeoOLAP - <http://pgfoundry.org/projects/postgeoolap/>

A tool for creating Spatial OLAP solutions on top of PostgreSQL + PostGIS (although working with solely conventional data is also possible). Results are presented in a spreadsheet frame (for conventional data) and in maps (for geographic data).

Geradores de Código

PHP Code Generator - <http://phpcg.sf.net>

phpCodeGenerator is a free database driven website code generator. It reads the database and generates a website with the ability to Create, List, Edit, Update, Delete and Search Records.

Trabalha com PostgreSQL, MySQL, Access, Oracle, etc.

PostgreSQL PHP Generator - <http://sqlmaestro.com/products/postgresql/phpgenerator/>

Is a FREeware but powerful PostgreSQL GUI frontend that allows you to generate high-quality PostgreSQL PHP scripts for the selected tables, views and queries for the further working with these objects through the web.

- * Data management: adding, editing and deleting records
- * Customization of the HTML appearance
- * Filtering and sorting abilities
- * Data protection with a lot of security settings
- * Lookup options for master-detail relations
- * Integrated script navigation
- * Ability to create multilingual web apps

Modelagem

DDT - Database Design Tool - <http://www.visi.com/~jjanssens/>

Free e open, simples e eficiente.

Pequeno tutorial em: http://pg.ribafs.net/down/ferramentas//ddt_tutorial.pdf

DeZign for Databases V5 - <http://www.datanamic.com/dezign/index.html>

DeZign for Databases is an intuitive database design tool for developers and DBA's that can help you model, create and maintain databases. DeZign for Databases uses entity relationship diagrams (ERDs) to graphically design databases and automatically generates the most popular SQL and desktop databases.

DbDesigner - <http://www.fabforce.net/dbdesigner4/>

DBDesigner 4 is a visual database design system that integrates database design, modeling, creation and maintenance into a single, seamless environment.

DbDesigner Fork - <http://sourceforge.net/projects/dbdesigner-fork>

DB Designer Fork is a fork of the fabFORCE DBDesigner 4. DBDesigner is a visual database design system that integrates entity relationship design and database creation. DB Designer Fork generates SQL scripts for Oracle, SQL Server, MySQL and FireBird.

FlowChart - <http://www.patton-patton.com/news.htm>

Desenha gráficos em geral.

Power*Architect Data Modeling Tool - <http://www.sqlpower.ca/page/architect>

Data Architects, DBA's, Analysts and Designers rely on Data Modeling tools to facilitate and simplify their data Modeling efforts, while maximizing the use of their resources. The Power*Architect allows these busy highly technical resources to perform this most intricate part of their job in a fraction of the time.

The Power*Architect is a user-friendly data modeling tool created by data warehouse designers, and has many unique features geared specifically for the data warehouse architect. It allows users to reverse-engineer existing databases, perform data profiling on source databases, and auto-generate ETL metadata.

Plus, the Power*Architect has the ability to take snapshots of database structures, allowing users to design DW data models while working offline.

Whether you are building a Data Warehouse or using data models to communicate business rules, the Power*Architect will facilitate and automate your data modeling efforts.

Br-Modelo - <http://www.sis4.com/brModelo/download.aspx>

brModelo: Ferramenta freeware voltada para ensino de modelagem em banco de dados relacional com base na metodologia defendida por Carlos A. Heuser no livro "Projeto de Banco de Dados" (capa a baixo).

Esta ferramenta foi desenvolvida por Carlos Henrique Cândido sob a orientação do Prof. Dr. Ronaldo dos Santos Mello (UFSC), como trabalho de conclusão do curso de pós-graduação em banco de dados (UNVAG - MT e UFSC).

Monografia sobre a ferramenta - <http://www.sis4.com/brModelo/monografia/monografia.htm>

Database Architect - <http://www.gurudevelopers.com/da/index.html>

Database Architect is designed for developers working on the database-enabled software projects. When working with Database Architect, software architect defines database tables, fields, references and indexes, drawing them directly in the program's main window and invokes the program to generate the database directly from the program window:

Database Architect is compatible to any kind of relational databases that support SQL, including, but not limited to Oracle, Microsoft SQL Server, Microsoft Access, flat file databases, such as DBF or Paradox tables and any other ODBC-compatible databases.

With Database Architect you'll never have to develop the database structure on the paper!

Database Designer for PostgreSQL - <http://www.microolap.com/products/database/postgresql-designer/>

Database structure modeling, generation and modification focused on PostgreSQL

Database Designer for PostgreSQL is an easy CASE tool with intuitive graphical interface allowing you to build a clear and effective database structure visually, see the complete picture (diagram) representing all the tables, references between them, views, stored procedures and other objects. Then you can easily generate a physical database on a server, modify it according to any changes you made to the diagram using fast ALTER statements.

Toad® Data Modeler - <http://www.quest.com/Toad-Data-Modeler/> ou http://www.toadsoft.com/toaddm/toad_data_modeler.htm

Powerful and Cost-effective Data Modeling and Design

Quest Software's Toad® Data Modeler is a cost-effective, yet powerful data modeling and design tool that is built for the individual developer, DBA and data architect.

Toad Data Modeler makes it easier for you to: Toad for Oracle for enhanced efficiency.

Build complex entity relationship models (both logical and physical)

Synchronize models

Generate complex SQL/DDL

Create "ALTER" scripts (Oracle only)

Reverse engineer legacy databases

Toad Data Modeler also integrates with

Toad Data Modeler supports Oracle, SQL Server, Sybase ASE, MySQL, PostgreSQL, and DB2 LUW versions 8 and 9.

Visual Case - <http://www.visualcase.com/>

Visual Case - UML & E/R Database Design Tool
analysis, modeling, and design DNP

Outras

DBI-Link - <http://pgfoundry.org/projects/dbi-link/>

Is a partial implementation of the SQL/MED (Management of External Data) portion of the SQL:2003 specification. You can add speed and accuracy to your ETL processes by treating any data source you can reach with DBI as a PostgreSQL table.

Efetua conexões para bancos de outros SGBDs.

Documentação - http://pgfoundry.org/docman/?group_id=1000045

DBLink - <http://www.postgresql.org/docs/8.3/static/contrib-dblink.html>

Efetua consultas em outros bancos, inclusive remotos (mas somente do PostgreSQL).

Veja o tópico sobre ele no material em:

http://pg.ribafs.net/down/admin/Modulo2Aula13_Contribs.pdf

PgBouncer - <http://pgfoundry.org/projects/pgbouncer>

Lightweight connection pooler for PostgreSQL.

PGLoader - <http://pgfoundry.org/projects/pgloader/>

The PostgreSQL Loader project is a fast data loader for PostgreSQL, with the ability to generate files of rejected rows. It currently requires Python and Psycopg

PGPool - <http://pgpool.projects.postgresql.org/>

pgpool-II is a middleware that works between PostgreSQL servers and a PostgreSQL database client. It provides the following features.

- * Limiting Exceeding Connections

There is a limit on the maximum number of concurrent connections with PostgreSQL, and connections are rejected after this many connections. Setting the maximum number of connections, however, increases resource consumption and affect system performance. pgpool-II also has a limit on the maximum number of connections, but extra connections will be queued instead of returning an error immediately.

- * Connection Pooling

pgpool-II saves connections to the PostgreSQL servers, and reuse them whenever a new connection with the same properties (i.e. username, database, protocol version) comes in. It reduces connection overhead, and improves system's overall throughput.

- * Replication

pgpool-II can manage multiple PostgreSQL servers. Using the replication function enables creating a realtime backup on 2 or more physical disks, so that the service can continue without stopping servers in case of a disk failure.

- * Load Balance

If a database is replicated, executing a SELECT query on any server will return the same result.

pgpool-II takes an advantage of the replication feature to reduce the load on each PostgreSQL server by distributing SELECT queries among multiple servers, improving system's overall throughput. At best, performance improves proportionally to the number of PostgreSQL servers.

Load balance works best in a situation where there are a lot of users executing many queries at the same time.

- * Parallel Query

Using the parallel query function, data can be divided among the multiple servers, so that a query can be executed on all the servers concurrently to reduce the overall execution time. Parallel query works the best when searching large-scale data.

pgpool-II talks PostgreSQL's backend and frontend protocol, and relays a connection between them. Therefore, a database application (frontend) thinks that pgpool-II is the actual PostgreSQL server, and the server (backend) sees pgpool-II as one of its clients. Because pgpool-II is transparent to both the server and the client, an existing database application can be used with pgpool-II almost without a change to its sources.

PgWorksheet - <http://pgworksheet.projects.postgresql.org/>

Is a simple GUI frontend to PostgreSQL for executing SQL queries and psql commands.

PLJava - <http://pgfoundry.org/projects/pljava/>

PL/Java is a free add-on module that brings Java tm Stored Procedures, Triggers, and Functions to the PostgreSQL tm backend via the standard JDBC interface.

PLProxy - <http://pgfoundry.org/projects/plproxy/>

PL/Proxy is database partitioning system implemented as PL language.

OpenFTS - <http://openfts.sourceforge.net/>

OpenFTS (Open Source Full Text Search engine) is an advanced PostgreSQL-based search engine that provides online indexing of data and relevance ranking for database searching. Close integration with database allows use of metadata to restrict search results.

Mondrian - <http://mondrian.sourceforge.net/>

Mondrian is an OLAP server written in Java. It enables you to interactively analyze very large datasets stored in SQL databases without writing SQL.

Sequoia - <http://sequoia.continuent.org/HomePage>

Sequoia is a transparent middleware solution offering clustering, load balancing and failover services for any database. The database is distributed and replicated over multiple nodes and Sequoia balances the queries between them. Sequoia handles node and network failures transparently. It also provides support for hot recovery, online maintenance operations and online upgrades.

check_postgres - http://bucardo.org/check_postgres/

check_postgres.pl is a script for checking the state of one or more Postgres databases and reporting back in a Nagios-friendly manner. It was developed by Greg Sabino Mullane of End Point Corporation and is BSD-licensed.

VirtualBox - <http://www.virtualbox.org>

Virtualização fácil de instalar e de usar para vários SOs.

VirtualBox is a family of powerful x86 virtualization products for enterprise as well as home use. Not only is VirtualBox an extremely feature rich, high performance product for enterprise customers, it is also the only professional solution that is freely available as Open Source Software under the terms of the GNU General Public License (GPL). See "About VirtualBox" for an introduction.

AndLinux - <http://www.andlinux.org>

Rodar o Linux (Ubuntu) nativamente dentro do Windows. O terminal, o gerenciador de arquivos, o synaptic e outros rodam no windows, como se fossem aplicativos do próprio Windows.

InstMSiA - <http://www.microsoft.com/downloads/details.aspx?familyid=cebbacd8-c094-4255->

b702-de3bb768148f&displaylang=en

Permite executar arquivos .msi sem tem o Windows Installer.

Criar novo Serviços no Windows - <http://support.microsoft.com/kb/137890>

Pentaho - <http://www.pentaho.com/>

Comercial Opensource alternative to BI

pg_live - <http://205.237.195.102/>

Live CD com XUbuntu e PostgreSQL préinstalado, juntamente com diversas ferramentas: pgadmin, phppgadmin, apache e php, várias linguagens de procedimentos, slony, documentação, etc.

Documentação: <http://205.237.195.102/docs/>

Portable GIS - <http://www.archaeogeek.com/blog/portable-gis/>

Que tal o PostgreSQL num pendrive, juntamente com diversas ferramentas para trabalhar com GIS? Este é o propósito dessa ferramenta. São 452MB e aqui uma pequena explanação:

http://www.osgeo.org/files/journal/v3/en-us/final_pdfs/cook.pdf

Process Explorer - <http://technet.microsoft.com/en-us/sysinternals/bb896653.aspx>

Ever wondered which program has a particular file or directory open? Now you can find out.

Process Explorer shows you information about which handles and DLLs processes have opened or loaded.

The Process Explorer display consists of two sub-windows. The top window always shows a list of the currently active processes, including the names of their owning accounts, whereas the information displayed in the bottom window depends on the mode that Process Explorer is in: if it is in handle mode you'll see the handles that the process selected in the top window has opened; if Process Explorer is in DLL mode you'll see the DLLs and memory-mapped files that the process has loaded. Process Explorer also has a powerful search capability that will quickly show you which processes have particular handles opened or DLLs loaded.

Xampp - <http://xampp.sf.net>

Pacote contendo instaladores para ambiente do PHP com MySQL e várias ferramentas.

For Windows, Linux, Mac e Solaris.

XAMPP is an easy to install Apache distribution containing MySQL, PHP and Perl. XAMPP is really very easy to install and to use - just download, extract and start.

Win32Pad - <http://www.gena01.com/win32pad/>

Pequeno editor de textos for windows com boas funcionalidades:

numera linhas, lê bem arquivos do Linux, sobrescreve o notepad com vantagens.

Monitoração

ptop - <http://pgfoundry.org/projects/ptop/>

'top' for PostgreSQL processes. See running queries, query plans, issued locks, and table and index statistics.

Table Log - <http://pgfoundry.org/projects/tablelog/>

PostgreSQL Table Log uses a trigger to log any INSERTs, UPDATEs and DELETEs on a specific table into another table. The second part of tablelog is able to restore the state of the original table or of a specific row for any time in the past.

pgFouine - <http://pgfoundry.org/projects/pgfouine/>

Is a PostgreSQL log analyzer written in PHP. It is based on PQA, the Practical Query Analyzer written in Ruby. pgFouine aims to be able to parse huge logs and to have a nice and useful HTML output.

PgAnalyzer - <http://ostatic.com/103858-software-opensource/pganalyzer>

PgAnalyzer is a perl script and library used to analyze the server logs files of the excellent PostgreSQL RDBMS. It reports practical statistics information on number of database connections, users and hosts. It can also provide SQL query and error statistics.

Playr - <https://area51.myyearbook.com/trac.cgi/wiki/Playr>

Playr attempts to answer the question "How much headroom will our new server give us?"

It's a PostgreSQL log file replay application. It works by taking your PostgreSQL logs and running them through a conversion application which turns them into a binary format. The replay application then reads in the binary format and attempts to replay the logs in the same timing with the same backend assignments. By attempting to do this, Playr is stressing a PostgreSQL box with the same query frequency distributed across the same quantity of backends, in an attempt to truly stress PostgreSQL in the same way as it was originally stressed when the logs were taken. Theoretically, using Playr in conjunction with sysstat and a graphing application like Staplr, one can analyze other hardware against production load.

Playr is not designed to work with lesser hardware than the machine where the log files were originally taken from. It is not designed to be a benchmark application in the traditional sense. If the new hardware can not keep up with the timing, Playr will give up its stress test and let you know that it fell behind.

pgtray - <http://pgfoundry.org/projects/pgtray>

This is a simple Windows application, which stays in tray and allows to monitor (active/stopped) and manipulate (start/stop/restart) PostgreSQL servers, installed as NT Services in the system.

pgmonitor - <http://pgfoundry.org/projects/pgmonitor/>

This is a Tcl/Tk script that displays current database connections, and allows you to view the currently executing query, cancel the query, or terminate the session. You can also start/stop the postmaster.

pgTAP - <http://pgfoundry.org/projects/pgtap/>

Write TAP-based unit tests for your database! pgTAP is a suite of database functions that make it easy to write unit tests in psql scripts suitable for harvesting, analysis, and reporting by a TAP harness, such as those used in Perl and PHP applications.

Apresentação sobre o uso do pgTAP - <http://justatheory.com/computers/databases/postgresql/pgtap-yapc.pdf>

Performance

pgsnap - <http://pgfoundry.org/projects/pgsnap/>

Is a PostgreSQL tool that mimics orasnap performance report tool for Oracle.

pgbench - <http://www.postgresql.org/docs/8.3/static/pgbench.html>

pgbench is a simple program for running benchmark tests on PostgreSQL. It runs the same sequence of SQL commands over and over, possibly in multiple concurrent database sessions, and then calculates the average transaction rate (transactions per second). By default, pgbench tests a scenario that is loosely based on TPC-B, involving five SELECT, UPDATE, and INSERT commands per transaction. However, it is easy to test other cases by writing your own transaction script files.

Relatórios (Geradores)

BIRT - <http://www.eclipse.org/birt/phoenix/>

Gera relatórios do PostgreSQL e de todos os SGBDs que tenham suporte a JDBC.

Fácil de usar e tem um visualizador web (Tomcat) para que seus relatórios possam ser acessados por qualquer aplicação web.

iReport - <http://www.jasperforge.org/sf/projects/ireport>

Semelhante ao BIRT, sendo que seus relatórios para serem exibidos via Web dão um pouco mais de trabalho, já que a grande compatibilidade é com aplicativos Java.

Crystal Report - <http://www.businessobjects.com/product/catalog/crystalreports/default.asp>

Gerador de relatórios com muitos recursos.

Tutorial: http://wiki.postgresql.org/wiki/PostgreSQL_and_Crystal_Reports

OpenRPT - <http://www.openmfg.com/openrpt>

OpenRPT: xTuple's open source SQL report writer

As part of all three xTuple ERP Editions, built with the PostgreSQL database and the Qt GUI client framework, we built our own SQL report writer from scratch. Like the ERP, it runs equally well on Windows, Linux, and Mac OS X. We call it OpenRPT.

OpenRPT is released under the GNU Lesser General Public License. You are free to use it as you wish; if you would like to purchase commercial support or embedded licenses, please see below.

Pentaho Report Design - <http://reporting.pentaho.org/>

Pentaho Reporting is a collection of open source projects primarily focused on the creation, generation and distribution of rich and sophisticated report content from all sources of information.

Replicação

Slony - <http://slony.info/>

Slony-I is a "master to multiple slaves" replication system supporting cascading (e.g. - a node can

feed another node which feeds another node...) and failover.

The big picture for the development of Slony-I is that it is a master-slave replication system that includes all features and capabilities needed to replicate large databases to a reasonably limited number of slave systems.

Slony-I is a system designed for use at data centers and backup sites, where the normal mode of operation is that all nodes are available.

A fairly extensive "admin guide" comprising material in the CVS tree may be found here. There is also a local copy.

The original design document is available here.

Tutorial: <http://ribafs.wordpress.com/2008/04/23/replicacao-com-slony-no-windows-e-no-linux/>

Bucardo - <http://bucardo.org/>

Bucardo is an asynchronous PostgreSQL replication system, allowing for both multi-master and multi-slave operations. It was developed at Backcountry.com primarily by Greg Sabino Mullane of End Point Corporation.

PGCluster - <http://www.pgcluster.org/>

PGCluster is a multi master, synchronous replication system based on PostgreSQL Database Server.

* "Synchronous Replication System" - No delay occurs for data duplication between the Cluster DBs.

* "Multi-master Cluster DB System" - There is no Cluster DBs preference for queries. A user can use any node for any type of query

Segurança

Backtrack - <http://www.remote-exploit.org/backtrack.html>

Live CD do Linux voltado para segurança de sistemas.

BackTrack is the most Top rated linux live distribution focused on penetration testing. With no installation whatsoever, the analysis platform is started directly from the CD-Rom and is fully accessible within minutes.

Artigo em português: <http://planeta.ubuntu.org/post/3081>

XML/DocBook

Alchemist XML IDE - <http://cleansofts.org/alchemist-xml-ide-professional-free-edition.html>

Is an advanced XML Integrated Development Environment.

Alchemist XML IDE, is a free advanced XML Integrated Development Environment (XML IDE).

Alchemist adds powerful new features, again pushing the innovation envelope that helped establish Alchemist in the market. Alchemist's best-in-class features for working with XML, XSL, XSLT, XPath, SQL/XML, code generation, database to XML mapping and many other XML technologies.

Free XML Editor - EditiX Lite Version - <http://free.editix.com/>

- XSLT Debugger

- Visual Schema Editor

- UniCode

- *XPath* 1.0, 2.0
 - XSL-FO
 - DocBook
 - OASIS Catalog
 - Refactoring
 - Project management
- Free e comercial, for Windows e Linux

Catálogo de Ferramentas no site oficial do PostgreSQL:

<http://www.postgresql.org/download/product-categories>

Lista de Ferramentas no site do PostgreSQL Brasil:

http://www.postgresql.org.br/Ferramentas_para_o_PostgreSQL

Boa lista de ferramentas, não somente para PostgreSQL:

http://imasters.uol.com.br/artigo/4177/sql_server/softwares_livres_relacionados_a_banco_de_dados

Algumas Ferramentas e Tutoriais

<http://pg.ribafs.net/down/ferramentas>