



The PHP Company

Die ideale PHP-Entwicklungsumgebung für IBM i Programmierer

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Agenda

- Zend Server 5.1 Update...
- Technische Übersicht von Zend Studio
- Remote Server Setup
- Remote Projects
- Code Tracing

Zend Studio

www.zend.com

Zend Server 5.1 Update

Zend Server 5.1 for IBM i

Key Features

- ▶ Wird geliefert mit IBM i 6.1 & 7.1
- ▶ Oracle Datenbank-Connector
- ▶ Neues Open Source Toolkit *****Beta*****
- ▶ Performance Verbesserungen
- ▶ PHP 5.3.6
- ▶ Zend Framework 1.11.3



Neues Open Source Toolkit Beta

PHP Demo Scripts

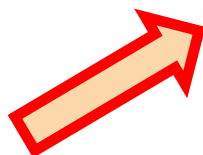
The following demo PHP scripts will help IBM i developers get started with PHP.

Clicking on the script name will run the code and clicking on the display code will display the PHP code

The scripts location is `/www/zendsvr/htdocs/Samples`.

- [Hello World Display Code](#)
- [SQL Access Display Code](#)
- [SQL Access using Zend Framework DB2 adapter Display Code](#)
- [SQL Access to MYSQL database Display Code](#)
- [Program Call Display Code](#)
- [LDAP connection Display Code](#)

- [New PHP Toolkit Demo Scripts](#)



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Neues Open Source Toolkit Beta

New PHP Toolkit Demo Scripts

The new Toolkit technology is based on an open source XML transport developed by IBM and Zend, which allows you to extend PHP code to access IBM i resources. The Toolkit XML service protocol is designed to work with "state full" RPG/CL programs (many open database files and other system resources), so a developer won't have to rewrite any programs just to get on the web. Clicking on the script name will run the code and clicking on the display code will display the PHP code. The scripts location is [/www/zendsvr/html/docs/NewToolkit/](#).

- [Run Display Library \(DSPLIBL\) command](#) [Display Code](#)
- [Program Call with two parameters](#) [Display Code](#)
- [Program Call with Data structure parameters](#) [Display Code](#)
- [Service Program call that returns function value](#) [Display Code](#)

Additional code samples

- Work with Spooled File entries [Display Code](#)
- Work with Data Queue (keyed) [Display Code](#)
- Work with User Space [Display Code](#)
- Work with Objects [Display Code](#)
- Work with Jobs [Display Code](#)

[Zend Navigator Demo Application \(based on XML Service\)](#) **The Zend Navigator Demo Application demonstrates the usage of New PHP Toolkit functions. The source code for this application can be found in [/usr/www/zendsvr/NewToolkit/Zend_Navigator_Demo](#). The main file is called [login.php](#).**

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Zend Studio

www.zend.com

Technische Übersicht von Zend Studio

Zend Studio 8.0.1 for IBM i

Key Features

- ▶ Schnelle Entwicklung und Verwaltung von Code
- ▶ Probleme schnell finden und lösen
- ▶ Verbesserte Team Kollaboration
- ▶ Einsatz der neusten Technologien
- **Frei in der IBM i Version inkl. 1 Jahr Updates**
 - ▶ Download, Installation und Loslegen...
 - ▶ Produkt lizensieren für
 - Lokale Entwicklung
 - How-To Support

Neue Features Zend Studio 8.x

Browser & Ajax Tools

- DOM
 - ▶ Inspector View
 - ▶ Source View
 - ▶ Watcher View
 - ▶ Compare View
- Browser Console View
- Request Monitor View
- CSS View

Java Script

- **Class Library Support**
- Integriertes JavaScript & PHP Debugging
- JavaScript Editoren/View

Remote Server Support

- Komplett neue Basis
- Remote Project
- FTP oder SSH Import/Export
- Folder Upload & Download support
- Remote Debugging Verbesserungen

Andere

- VM Ware Workstation Integration
- Support für PHP 5.3 und ZF
- Editieren von Source Code
 - Inspect Evaluated Expressions
 - Templatebasierter Content Assist
 - Anzeige von vererbten Eigenschaften
 - mehr...

Probleme schnell finden und lösen

- Debugger
- Code Tracing Integration
- Zend Server Integration
- JavaScript Debugger, etc.

Zend Studio

www.zend.com

Remote Server Setup

Beispiel zeigt Verwendung von SSH

- SSH ist sicher und mächtig
- Sehr stabil in Zend Studio bei Kommunikation mit IBM i
- Wenn i6.1 oder i7.1

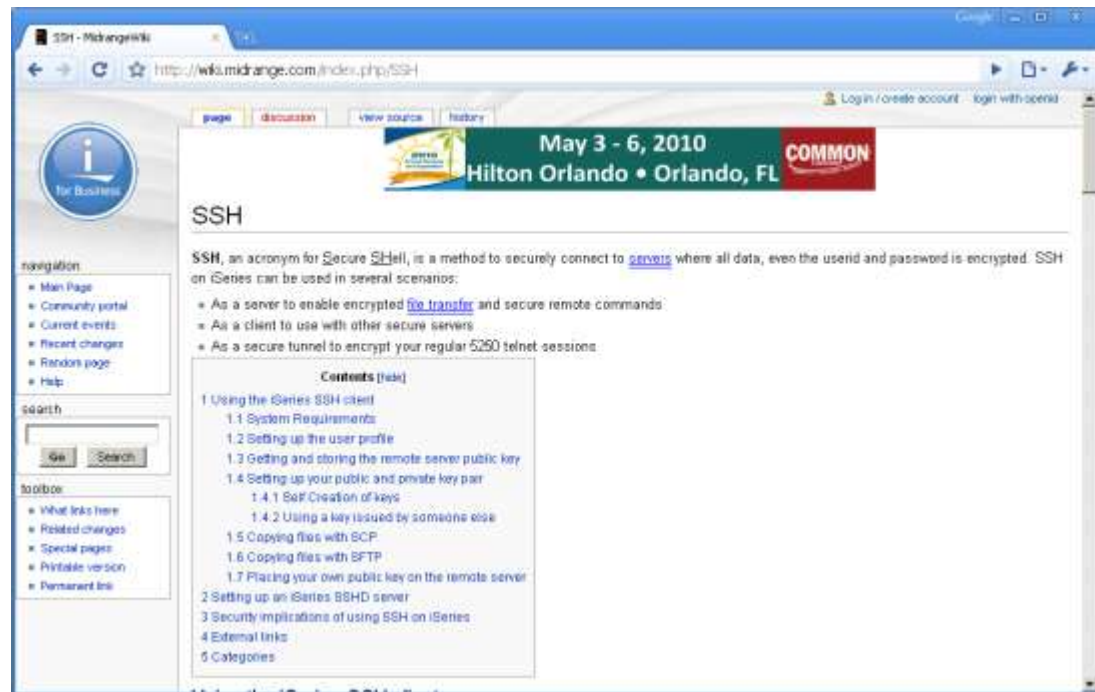
- ▶ STRTCPSVR

```
Selection or command  
==> STRTCPSVR SERVER(*SSHD)
```

- ▶ Automatische Installation und Konfiguration wenn Vorbedingungen erfüllt sind

SSH auf V5R4

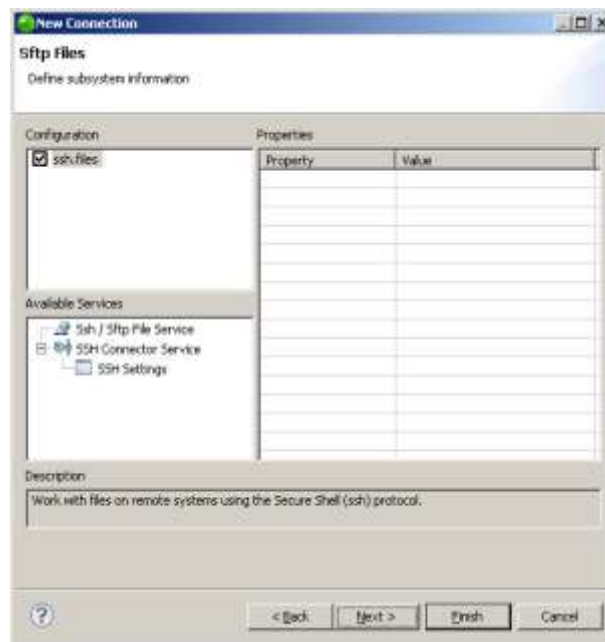
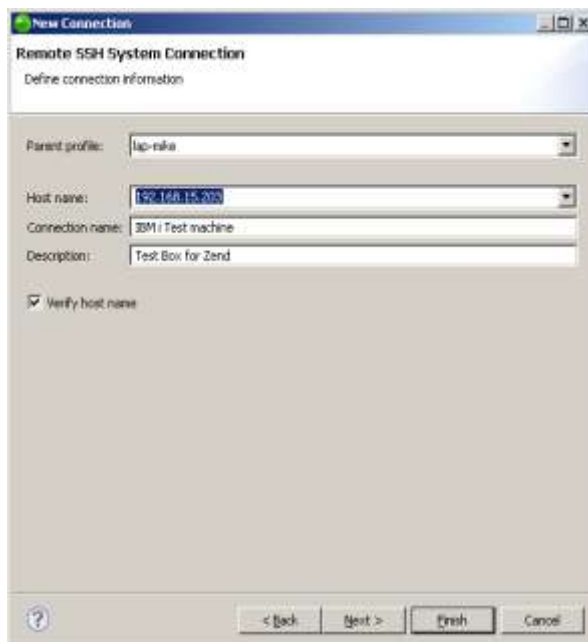
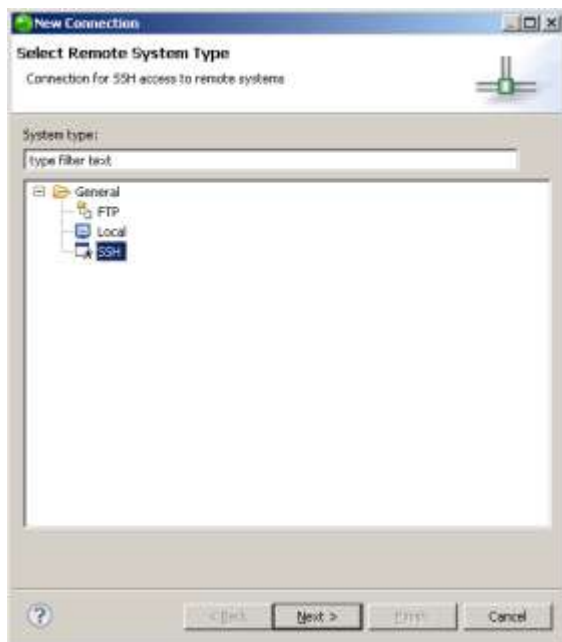
- QP2TERM
- Sehr gutes Tutorial auf Midrange.com
 - ▶ <http://wiki.midrange.com/index.php/SSH>
 - ▶ Schritt für Schritt
 - ▶ Nur wenige Minuten
 - ▶ Mit Netzwerk Admin sprechen



In Zend Studio

- Remote Server Window

- ▶ Rechtsklick-> new -> Connection ->SSH -> Next
- ▶ System Infos eingeben (SSH muss installiert sein und muss laufen)
- ▶ Next -> Finish



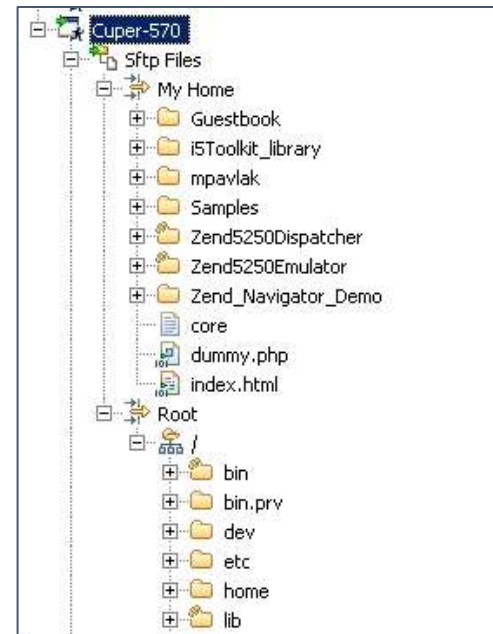
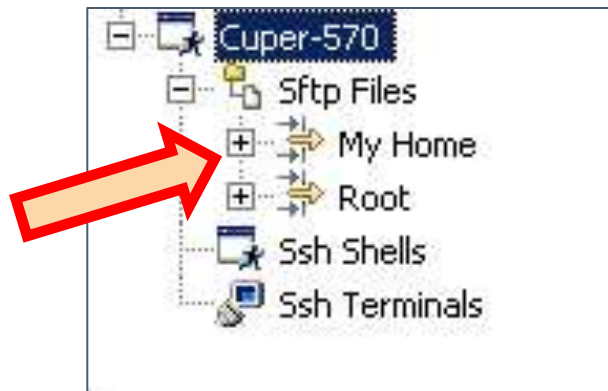
Login

- IBM i Nutzer und Passwort eingeben



Schnellerer Zugriff auf Dateien

- Überlegung: User Profile Home Directory setzen
- Das sollte man selbst machen (können)
- Kein *SECOFR oder *SECADM Autorisierung erforderlich
- CHGPRF HOMEDIR('/www/zendsvr/htdocs')



Zend Studio

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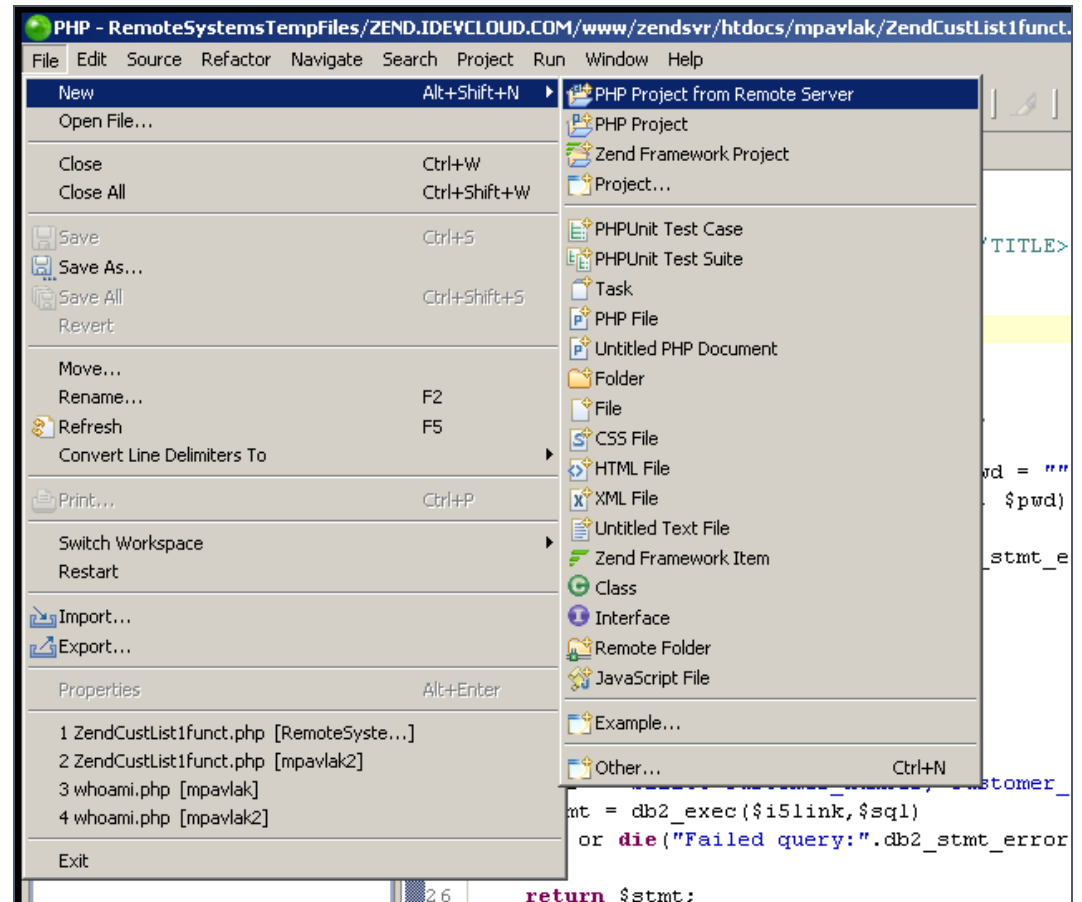
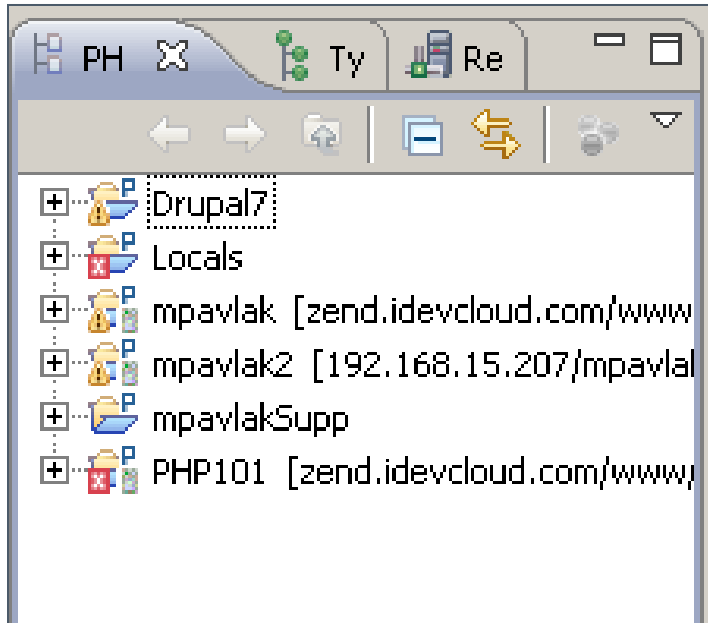
Remote Projects

PHP Explorer Window

- Zugriff auf Applikation durch Project
- Code organisieren
- Unterstützt SVN Repository

Project erstellen

- Öffnen der PHP Explorer View



Project von Remote Server erstellen

- Namen geben
- Wohin soll gespeichert werden
- Next...

New PHP Project with Remote Server Support

Create a PHP project with Remote Server Support
Create a PHP remote project in the workspace or in an external location.

Project name: MySamples

Contents

- Create new project in workspace
- Create project at existing location (from existing source)

Directory: C:\Users\mike.p\Zend\workspaces\DefaultWorkspace7\MySamples [Browse...](#)

- Create project on a local server

Directory: C:\Program Files\Zend\Apache2\htdocs\MySamples

PHP Version

- Use default PHP settings
- Use project specific settings: PHP Version: PHP 5.3

Project Layout

- Use project as source folder
- Create separate folders for source files and public resources [Configure default...](#)

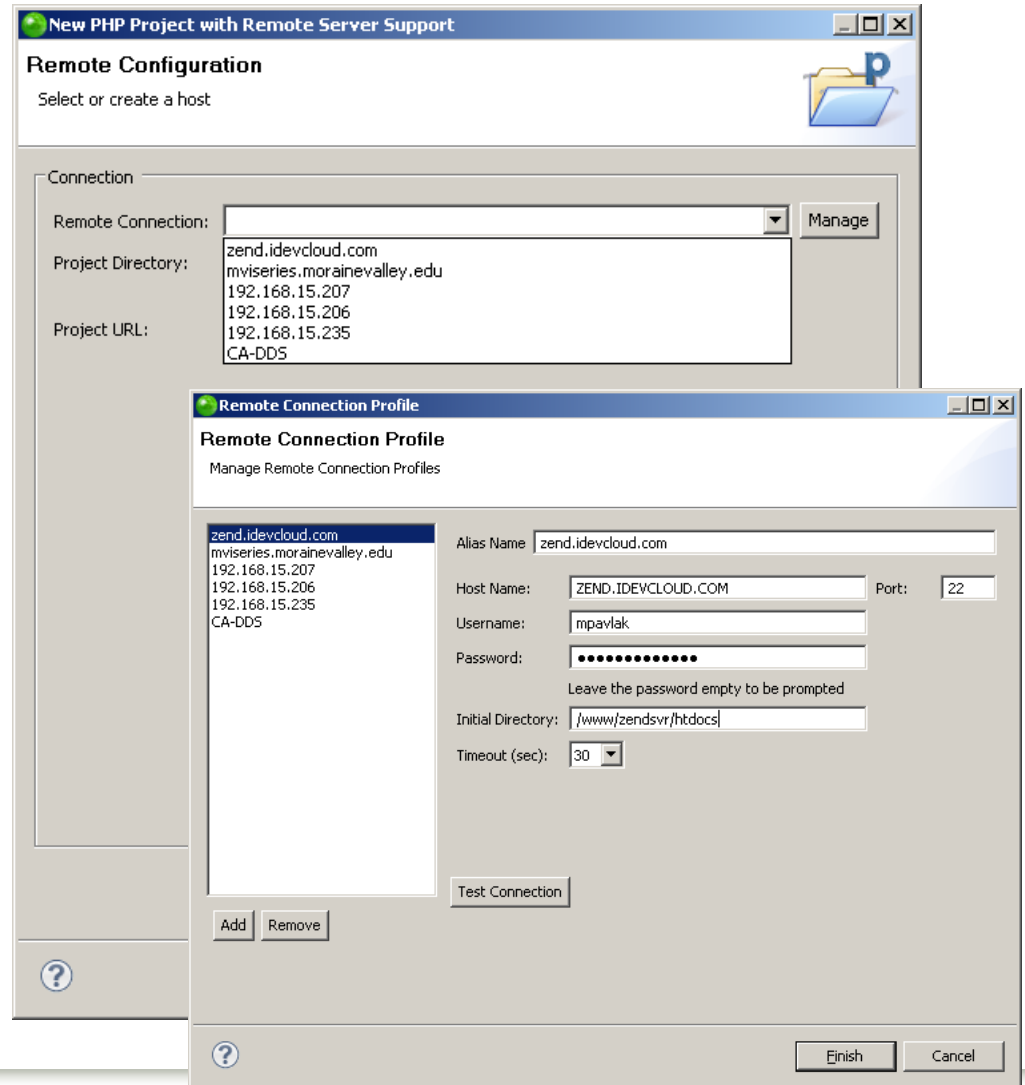
JavaScript Support

- Enable JavaScript support for this project

[?](#) < Back Next > Finish Cancel

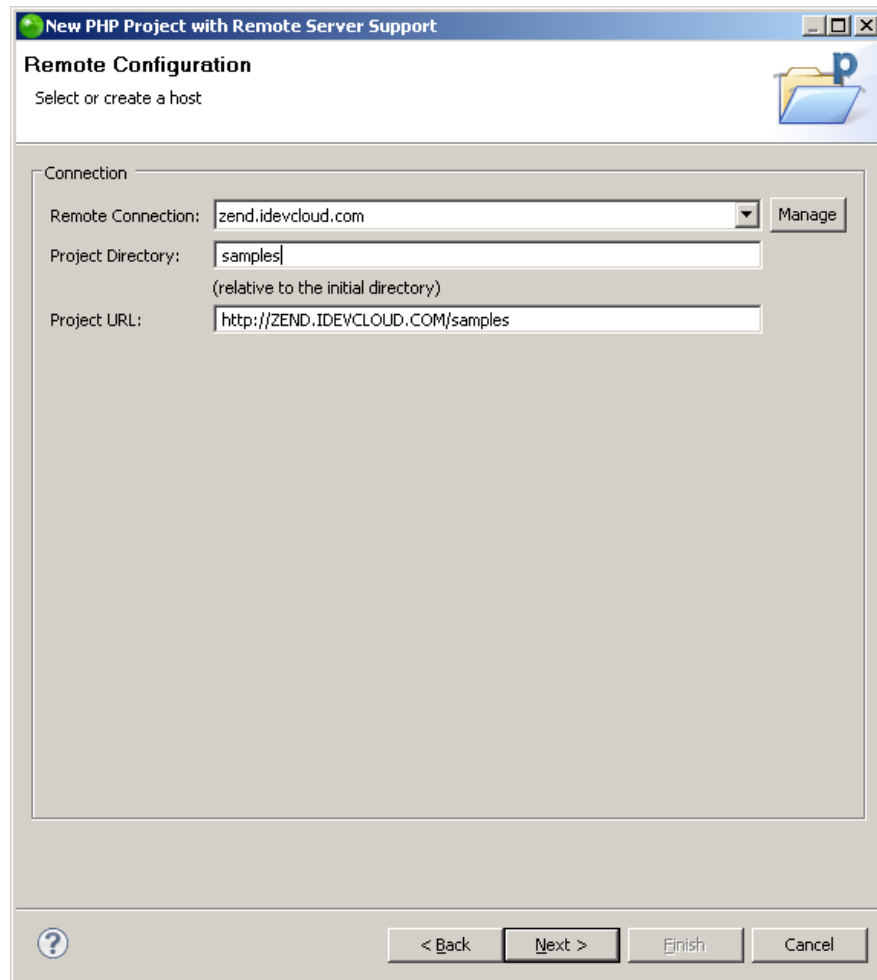
Project von Remote Server erstellen

- Remote Connection von DropDown Liste auswählen
- Konfiguration über Manage



Project von Remote Server erstellen

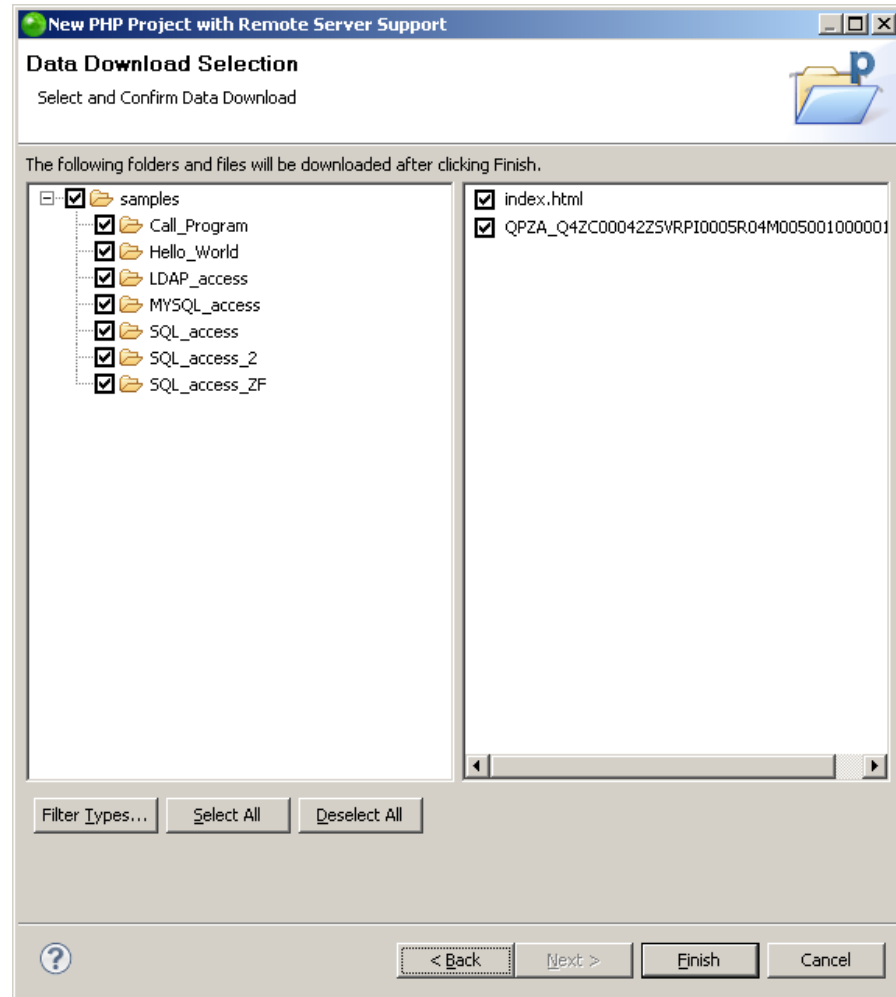
- Applikationsverzeichnis setzen...



The screenshot shows a dialog box titled "New PHP Project with Remote Server Support" with a sub-header "Remote Configuration". Below the sub-header is the instruction "Select or create a host". The dialog contains a "Connection" section with three input fields: "Remote Connection" (a dropdown menu showing "zend.idevcloud.com" and a "Manage" button), "Project Directory" (a text box containing "samples" with a note "(relative to the initial directory)"), and "Project URL" (a text box containing "http://ZEND.IDEVCLOUD.COM/samples"). At the bottom of the dialog are navigation buttons: "< Back", "Next >", "Finish", and "Cancel". A help icon (?) is also present in the bottom left corner.

Project von Remote Server erstellen

- Abwahl von Unterverzeichnissen wenn gewünscht...
- 'Finish' klicken und alle PHP Quelldateien werden vom Server in den Workspace (lokal) kopiert



Zend Studio

www.zend.com

Code Tracing

Application Monitoring

Zend Server Monitor überwacht die Applikation

- ▶ PHP Errors (auch Warnings, Notices, Uncaught Exceptions...)
- ▶ Fehlerhafte Funktionen (User-Defined oder intern)
- ▶ Fehlerhafte DB Queries
- ▶ Langsame Funktionen (User-Defined oder intern) oder DB Queries
- ▶ Langsame Request Ausführung
- ▶ Hoher Speicherverbrauch
- ▶ Fehler, die durch Zend Server Komponenten berichtet werden

Zend Server berichtet Event, wenn ein Problem entdeckt wird

Monitoring Events

Zend Server - Mozilla Firefox 3.5 Beta 4

File Edit View History Bookmarks Tools Help

http://localhost:10081/ZendServer/Index/Index#1256708440780

Most Visited Release Notes Fedora Project Red Hat Free Content

Zend Studio Debug Profile Extra Stuff Search for PHP information: on Zend.com Go

Zend Server

zend server Help | About | Logout

Monitor Rule Management Server Setup Administration

Dashboard Events Jobs Queue Statistics Code Tracing Server Info PHP Info Logs

Filter: All Open Events Show Filter Details Go to event by Id: Go

Total: 24 Last refresh time: 27-Oct-2009 22:40

ID	Rule Name	Severity	Count	Status	First Occ.	Last Occ.	Occurred at...
000006	Custom Event	Warning	15	Open	15-Oct 16:36	27-Oct 19:58	
000007	Severe Slow Request Execution (Absolute)	Critical	5	Open	15-Oct 16:39	27-Oct 19:58	http://localhost/magento/index.php/
000023	PHP Error	Warning	1	Open	27-Oct 17:43	27-Oct 17:43	/var/www/html/phpExcelReader/Excel
000024	Fatal PHP Error	Critical	1	Open	27-Oct 17:43	27-Oct 17:43	/var/www/html/phpExcelReader/Excel
000022	Severe Slow Request Execution (Absolute)	Critical	1	Open	16-Oct 02:27	16-Oct 02:27	http://localhost/magento/
000017	Severe Slow Request Execution (Absolute)	Critical	2	Open	16-Oct 01:51	16-Oct 02:13	http://localhost/magento/index.php/cat
000021	High Memory Usage (Absolute)	Warning	1	Open	16-Oct 02:13	16-Oct 02:13	http://localhost/magento/index.php/cat

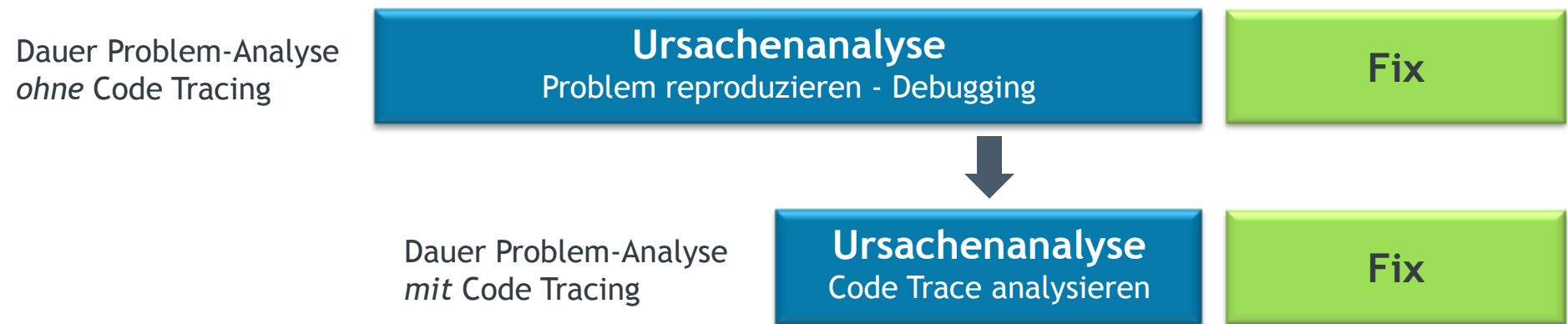
Change status to Closed Change

Restart PHP

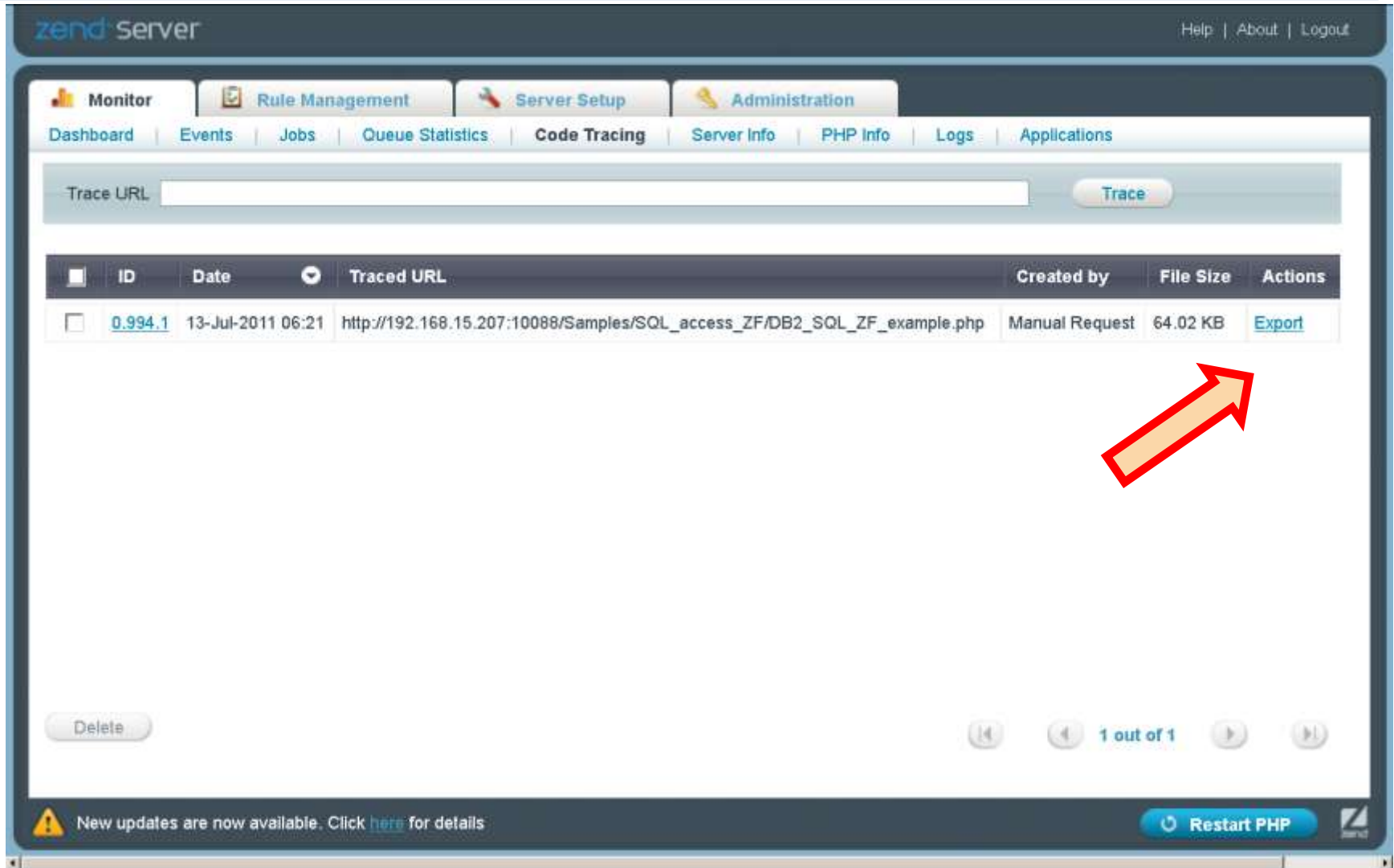
Done

Code Tracing

- Eliminiert die Notwendigkeit Fehler zu reproduzieren
- Zeichnet Live App.-Ausführung auf, wenn Fehler auftritt
- Aktiviert durch Zend Server Monitoring-Regeln oder manuell
- Für Test oder Produktivbetrieb
- Kann Dauer für Ursachenanalyse halbieren



Code Trace in Zend Server exportieren

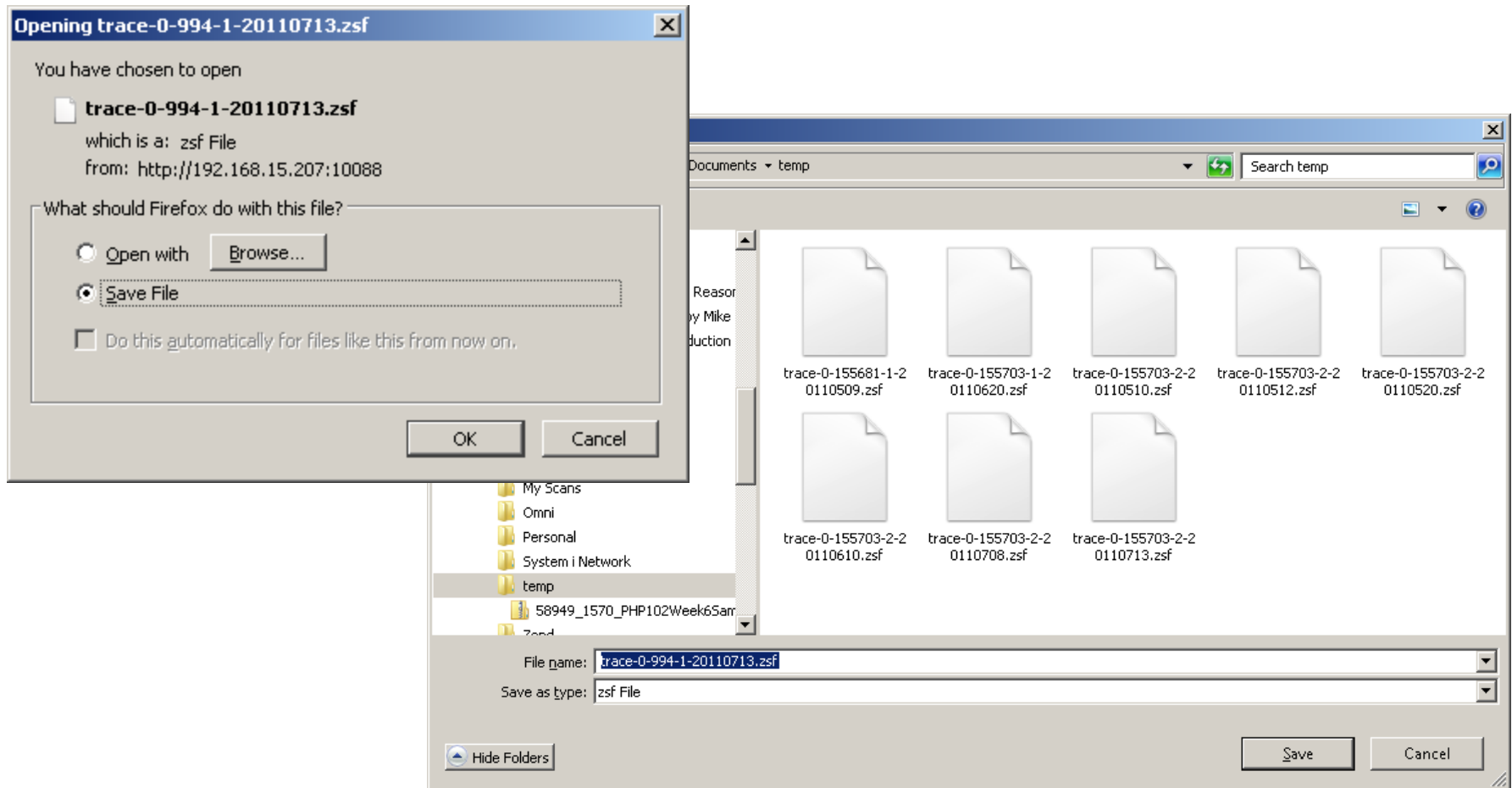


The screenshot shows the Zend Server web interface. At the top, there are navigation tabs for Monitor, Rule Management, Server Setup, and Administration. Below these are sub-tabs for Dashboard, Events, Jobs, Queue Statistics, Code Tracing (which is active), Server Info, PHP Info, Logs, and Applications. A 'Trace URL' input field and a 'Trace' button are visible. Below this is a table with the following data:

ID	Date	Traced URL	Created by	File Size	Actions
<input type="checkbox"/> 0.994.1	13-Jul-2011 06:21	http://192.168.15.207:10088/Samples/SQL_access_ZF/DB2_SQL_ZF_example.php	Manual Request	64.02 KB	Export

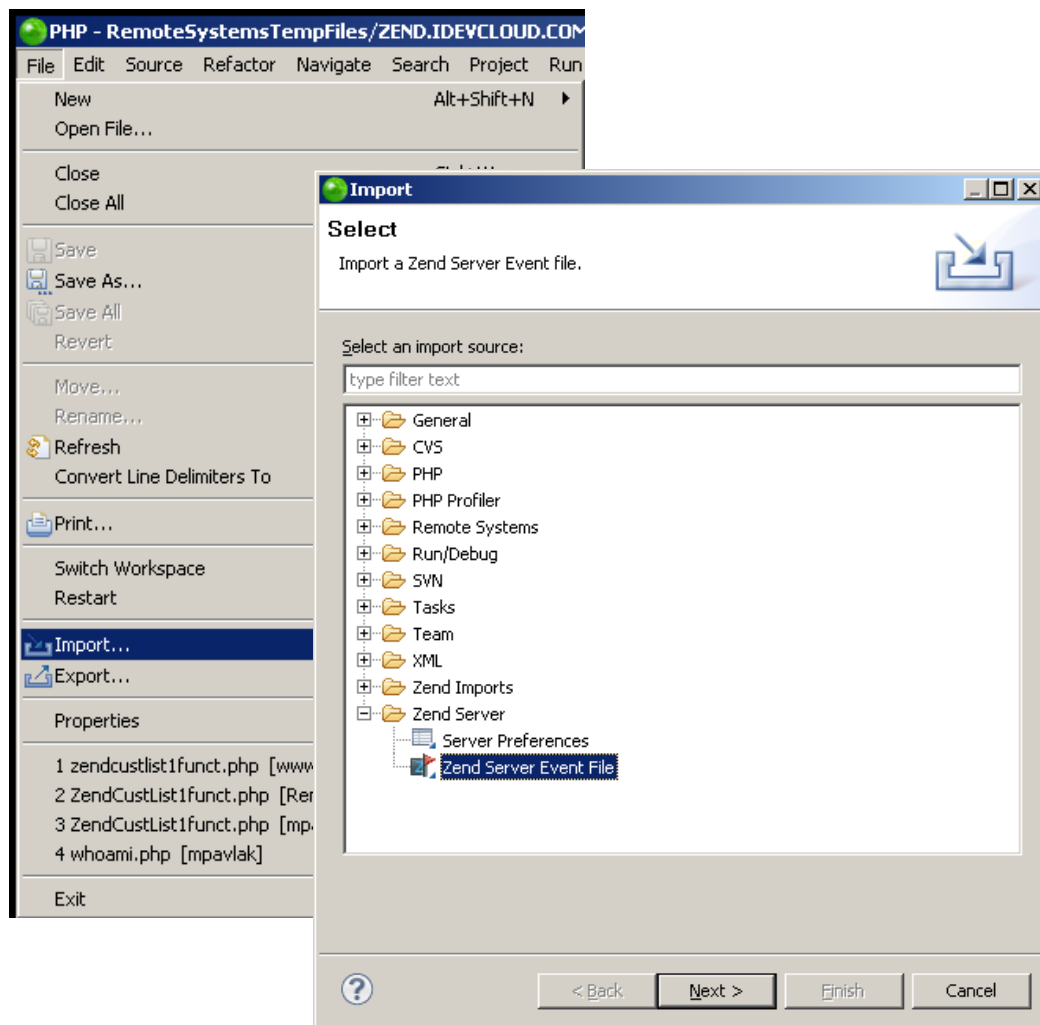
A red arrow points to the 'Export' link in the 'Actions' column of the table. At the bottom of the interface, there is a 'Delete' button, a notification about updates, and a 'Restart PHP' button.

Lokal speichern: E-Mail schicken, Ticket, ...



In Studio, Code Trace importieren...

- File→Import...
- Zend Server→
Zend Server Event File



Code Trace in Studio öffnen

- Zur Datei browsen
- Datei auswählen
- Finish klicken
- Perspective ändern, und...

Code Trace in Studio...

The screenshot shows the Zend Studio interface with a code trace active. The top window, titled 'Tracer', displays a 'Tracing Tree' and a table of 'Traced Functions'. The table columns are 'Running Time', '% of total', '(ms)', and 'Called from: (line)'. The bottom window shows the source code of 'ZendCustListFunc.php' with a yellow highlight on the PHP opening tag.

Traced Functions	Running Time	% of total	(ms)	Called from: (line)
REQUEST /Samples/SQL_access_ZF/DB2_SQL_ZF_example.php Host: zend.idevcloud.com:10089 URL: /Samples/SQL_access_ZF/DB2_...		100.00%	07.470 ms	
HEADER X-Zend-Code-Tracing: 0.155703.2				
HEADER REPLACE Set-Cookie: ZDEBuggerPresent.php,html,"CUT"				
INCLUDE /www/zendcloud.com/Samples/SQL_access_ZF/DB2_SQL_ZF_example.php		85.00%	57.346 ms	
INCLUDE /usr/local/zend/share/ZendFramework/library/Zend/Db/Adapter/Db2.php		4.00%	2.681 ms	DB2_SQL_ZF_example.php (8)
Zend_Db_Adapter_Abstract::__construct()		2.00%	1.190 ms	DB2_SQL_ZF_example.php (21)
Zend_Db_Adapter_Abstract::query()		62.00%	41.803 ms	DB2_SQL_ZF_example.php (28)
Zend_Db_Statement_Db2::fetch()		<1.00%	0.325 ms	DB2_SQL_ZF_example.php (33)
ShowTableHeaders()		<1.00%	0.033 ms	DB2_SQL_ZF_example.php (35)
ShowTableRow()		<1.00%	0.070 ms	DB2_SQL_ZF_example.php (38)
Zend_Db_Statement_Db2::fetch()		<1.00%	0.075 ms	DB2_SQL_ZF_example.php (33)
ShowTableRow()		<1.00%	0.047 ms	DB2_SQL_ZF_example.php (38)
Zend_Db_Statement_Db2::fetch()		<1.00%	0.053 ms	DB2_SQL_ZF_example.php (33)
ShowTableRow()		<1.00%	0.047 ms	DB2_SQL_ZF_example.php (38)
Zend_Db_Statement_Db2::fetch()		<1.00%	0.052 ms	DB2_SQL_ZF_example.php (33)

```
1 <html>
2 <head>
3 <TITLE>A function based record lookup</TITLE></head><body BGCOLOR=SILVER></body>
4 <h1>Short List of Anti-Beros:</h1>
5
6 <?php
7
8 function Connect() {
9     // Standard DB connection to DB2...
10
```

Zend Studio

www.zend.com

Abschließend...

Tipps

- Netzwerk kennen (oder Netzwerk-Administrator)
- Nicht aufgeben! Support Ticket öffnen
 - ▶ <http://www.zend.com/en/support-center/>
 - ▶ Ein Jahr Silber-Support
 - ▶ Weiterführender oder höherwertiger Support!
 - Gold - Telefonsupport zu Geschäftszeiten
 - Platinum - 24x7 2 Stunden Response Zeit (Level 1)
- Forum - <http://forums.zend.com/viewforum.php?f=77>
- Knowledgebase Artikel
 - ▶ <http://kb.zend.com/index.php?View=entry&EntryID=334>
 - ▶ Üben, üben, üben...

Weitere Webinare

- **August**

- ▶ A Tale of Two Toolkits

- **September:**

- ▶ 13.9.: Gemeinschaftliches Open Source PHP auf IBM i

- **Oktober**

- ▶ 5.10.: Wie stelle ich Internet Webseiten in PHP sicher auf meinem IBM i bereit?

- <http://www.zend.com/de/company/events/>



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October 17-20, 2011 – Santa Clara, CA

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The premier PHP conference!

October 17-19, 2011 – Santa Clara, CA



Conference Themes

Cloud Computing

Learn about the latest developments in PHP Cloud infrastructure, management and application services

Mobile and User Experience

Learn how to build engaging mobile apps with the latest PHP technologies and tools

Enterprise and Professional PHP

Explore PHP best practices, new technologies and practical tips with industry experts

Conference Highlights

- Sessions focused on how to best develop and deploy PHP
- Sessions designed for all knowledge levels
- Intensive tutorials for accelerated learning
- PHP Certification crash courses and testing
- Exhibit hall showcasing the latest products
- Special networking opportunities during meals and events

www.zendcon.com

Danke schön!

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