

This Means That:

Drawing similarities between System-i and
PHP Programming

by Aaron Saray

Why trust this guy?



- Programming for more than 2 decades
- WROX Author
- MKE PUG Founder
- Zend Webinar Presenter
- Loves PHP
- Knows a free beer powers knowledge dumps from RPG programmers

Quick Note

- Unbiased Comparison
- I like both
 - I am a PHP Programmer though...
- From what I've seen, we wouldn't be here without System-i

Overview

- Covering a brief overview of PHP
- The Many Names of PHP
- Components and experimentation
- Accessing the system
- Programming / Debugging
- Database / File

What is PHP

- Scripting language hybrid
 - compiles on run-time
 - does logic
 - connects to data/services
 - is part of the puzzle *more on this later*
- Open Source
 - PHP is open source
 - Licences on the source code
 - mainly open source
 - community / sharing

The Many Names of PHP

- PHP is just part of the puzzle
- LAMP
- WAMP
- ZendServer
- PHP on the Command Line
- ... as a apache module
- ... fastcgi
- Even PHP/TK

The components

When we say PHP, we generally mean...

Open Source Web Site Programming

- PHP is just part of the stack

The Components (con't)

PHP World	System-i World
Linux/Windows	IBM-i (i5/OS, OS/400)
PHP	RPG, CL
Bash scripting, batch files (win)	CL
HTML	DDS
CSS	DDS
MySQL, Postgres, MsSQL	File, DB2

How to Experiment

- How to learn more...
- System-i
 - Partitions for large things
 - Libraries for smaller things
- PHP
 - Local servers
 - Hosting Packages
 - And of course, "partitions," "databases," and different source trees

General Access to Program Code

- System-i
 - 5250
 - green screen
 - IDE
- PHP
 - FTP
 - SSH
 - Source Control deployment
 - System-i can do this too

Programming Comparisons

- PHP is similar to RPGFree
 - has syntax
 - columns? What columns...
 - Format whatever you want
 - coding standards

Programming Comparisons (con't)

- Variables / Methods
 - similar when it comes to methods
 - PHP supports OO
 - classes, interfaces, abstracts
 - Nearly unlimited variable length in PHP
 - 8, 10? naww...
 - `$calculatedDistanceFromEarthGeometry`
 - probably don't do that - but you could...

Debugging

- System-i takes the cake
 - break points
 - debugging environment
- PHP
 - Takes the programmer a bit longer to recognize value of debugging
 - Requires plugins (not built in) and IDE
 - single transaction scripts make it easier to dump information to the screen
 - But after that... very similar

Database

Focus is on MySQL

- Files are like MySQL "tables"
- System-i programming has direct access to files
 - PHP *requires* SQL adapter
 - like putting a DDS on your file
 - Not to be confused with flat text/binary files

Database (con't)

- Logical files / Index
 - in MySQL these are part of the table description
 - cannot edit separate from the table

MySQL World	System-i World
Table	File
Column	File field
Row	Record
Field (cell)	Field

* generalities - others may use different terms

Bonus***

Doing limit SQL in ANSI - :(

Challenge: Get rows 51-75 for pagination

- MySQL
 - `select * from mytable limit 50, 25;`
- DB2
 - `select * from mytablename where primarykeyfield > 50 fetch first 25 rows only`
 - requires a numeric auto incrementing key
 - or any other logic...

The End

Any questions?



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