

PHP and SQLite

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SQLite

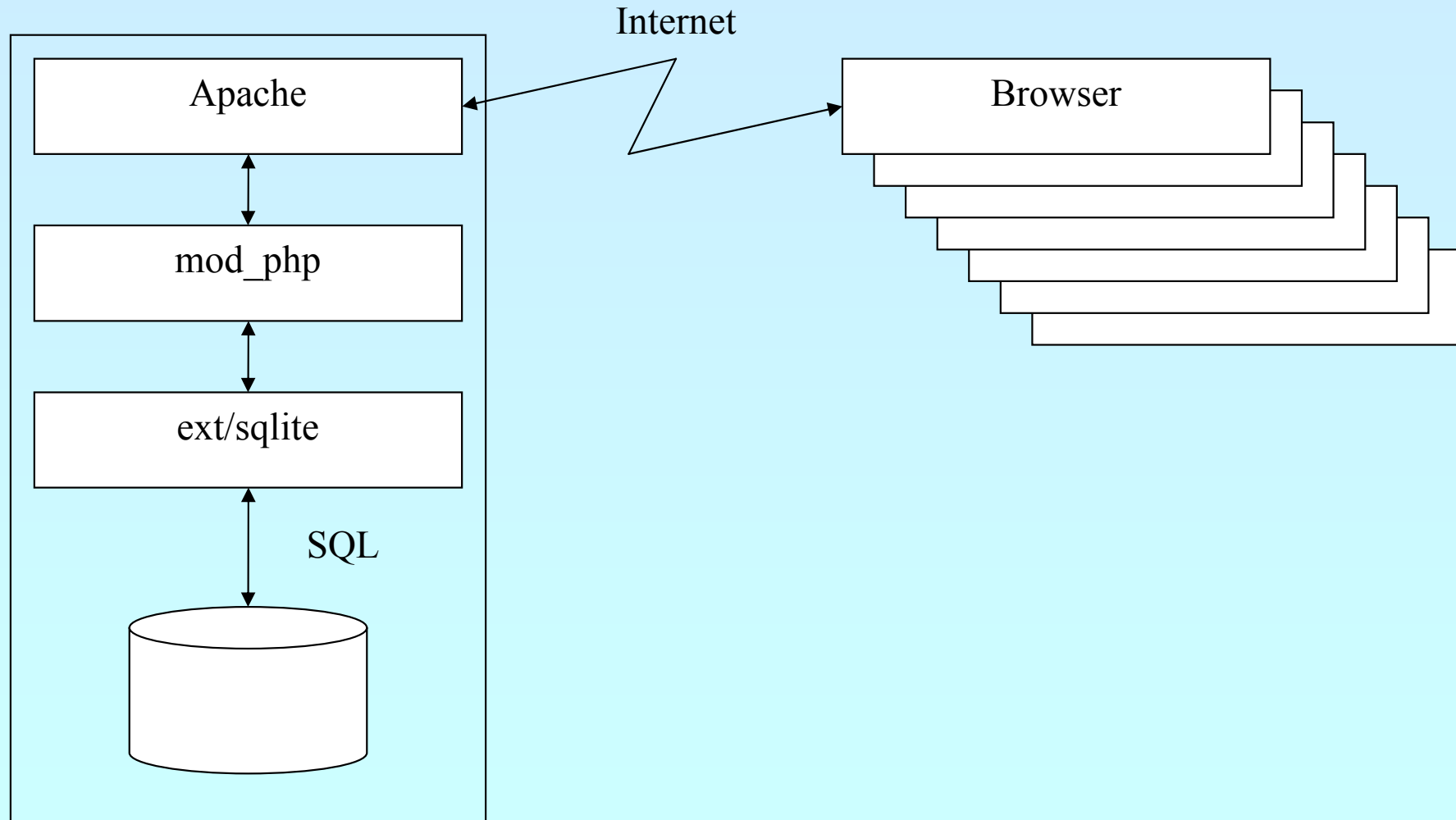
- ✓ Started in 2000 by D. Richard Hipp
- ✓ Single file database
- ✓ Subselects, Triggers, Transactions, Views
- ✓ Very fast, 2-3 times faster than MySQL, PostgreSQL for many common operations
- ✓ 2TB data storage limit

- ✗ Views are read-only
- ✗ No foreign keys
- ✗ Locks whole file for writing

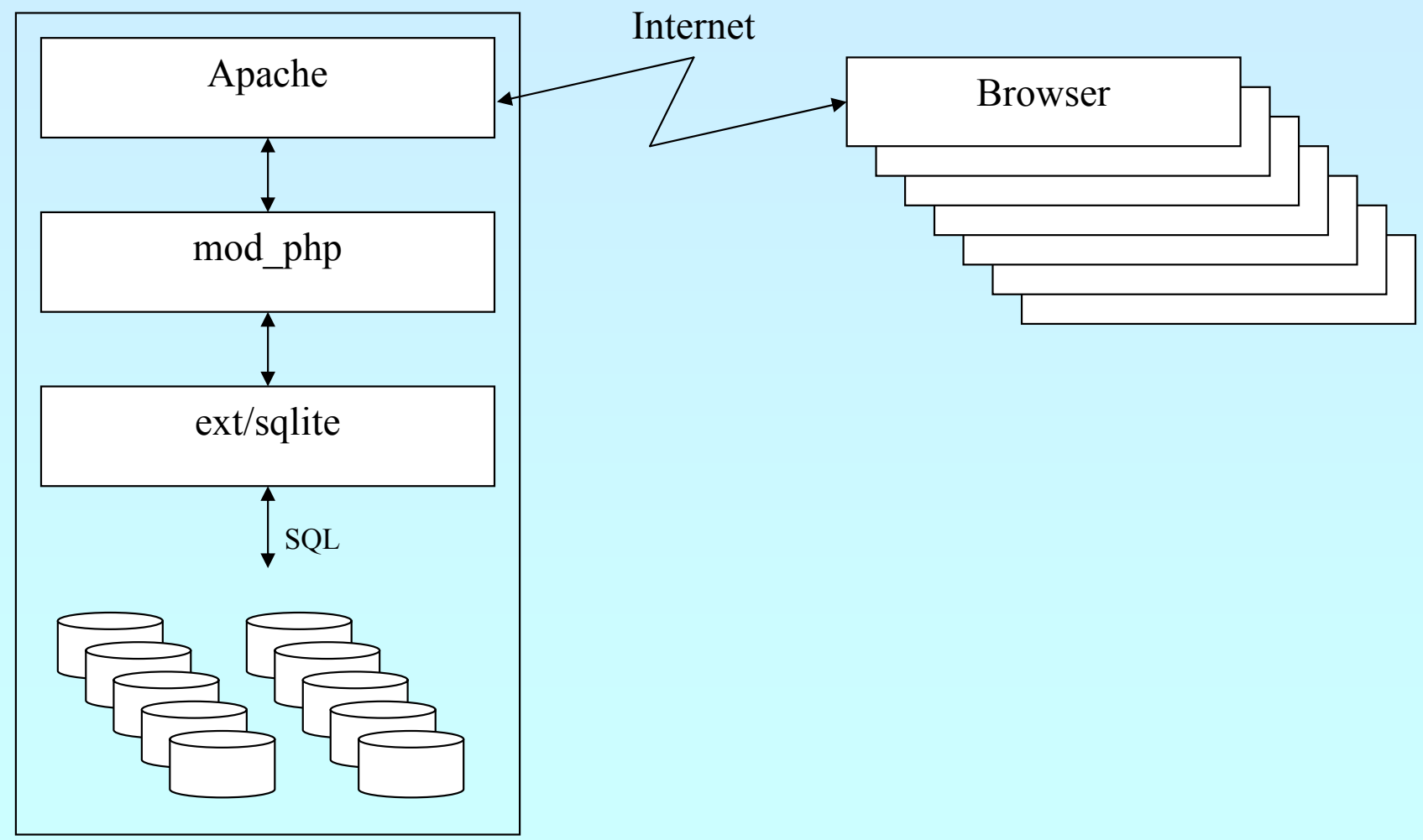
PHP with SQLite

- ☑ SQLite library integrated with PHP extension
- ☑ PHP extension available via PECL for PHP 4.3
- ☑ Bundled with PHP 5
- ☑ API designed to be logical, easy to use
- ☑ High performance
- ☑ Convenient migration from other PHP database extensions
- ☑ Call PHP code from within SQL

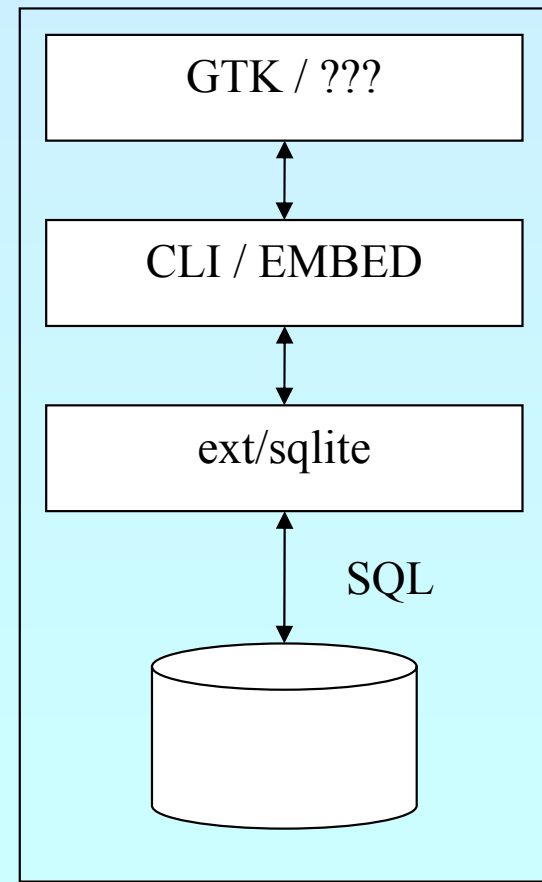
Dedicated Host



ISP/Shared Host



Embedded



Array Interface

array **sqlite_fetch_array** (resource result [,
int result_type [, bool decode_binary]])

- ☑ Flexible
- ☒ Slow for large result sets

array **sqlite_fetch_all** (resource result [,
int result_type [, bool decode_binary]])

- ☑ Flexible
- ☒ Slow for large result sets; better use
sqlite_array_query ()

Single Column Interface

mixed **sqlite_single_query** (resource db, string sql [,
 bool first_row_only [, bool decode_binary]])

- Fast
- Only returns the first column

string **sqlite_fetch_single** (resource result [,
 bool decode_binary])

- Fast
- Slower than `sqlite_single_query`

mixed **sqlite_fetch_column** (resource result,
 mixed index_or_name [, bool decode_binary])

- Flexible, Faster than array functions
- Slower than other single functions

Iterator Interface

```
<?php
```

```
    $db = sqlite_open("...");
```

```
    for ($res = sqlite_query("SELECT...", $db);
```

```
        sqlite_has_more($res);
```

```
        sqlite_next($res))
```

```
    {
```

```
        print_r (sqlite_current($res));
```

```
    }
```

```
?>
```

Calling PHP from SQL

```
<?php
function md5_and_reverse($string) {
    return strrev(md5($string));
}

sqlite_create_function($db,
    'md5rev', 'md5_and_reverse');

$rows = sqlite_array_query($db,
    'SELECT md5rev(filename) from files');

?>
```

Resources

- ☑ This Slides
<http://marcus-boerger.de/talks>

- ☑ Documentation at
<http://docs.php.net/?q=ref.sqlite>

- ☑ SQLite Webpage
<http://sqlite.org>