

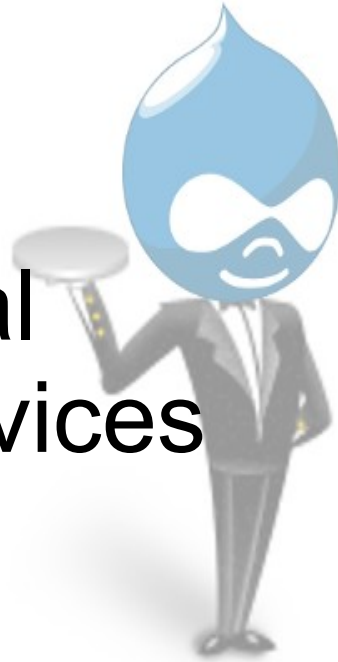
The Drupal mascot, a blue teardrop-shaped character with a white mask and a small smile, is positioned behind the title text. It is holding a silver microphone in its right hand.

Drupal as a Web Service

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Drupal Camp Chicago
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This Presentation

- Web Services
- Services Module
- Accessing Drupal
- Adding New Services
- Q&R



Web 2.0: The Need

Old Days: Proprietary Hardware
Solution: Cheap, standardized components

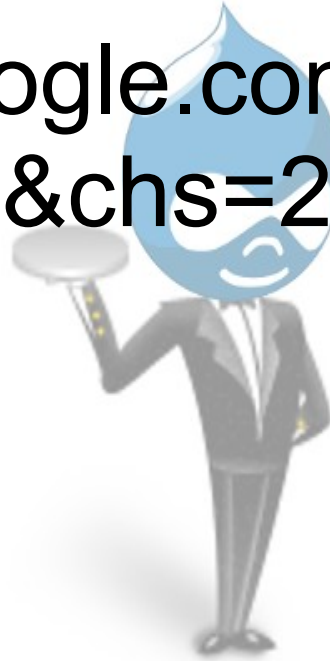
Microsoft Days: Proprietary Software
Solution: Open Source

Nowadays: Proprietary Data
Solution: Web Services



Use Their Hardware

[http://chart.apis.google.com/chart?
cht=gom&chd=t:25&chs=250x100&chl=Sharp](http://chart.apis.google.com/chart?cht=gom&chd=t:25&chs=250x100&chl=Sharp)



Use Their Data

[http://data.alexam.com/data?
cli=10&dat=snbamz&url=google.com](http://data.alexam.com/data?cli=10&dat=snbamz&url=google.com)



Drupal Services Module

- XMLRPC, JSON, REST, SOAP, AMF, & more
- API Keys
- Pre-loaded
- Documentation
- Services Group



Provided Modules

- Services API
- Servers
 - XMLRPC
- Services
 - Node
 - System
 - User
 - File, Menu, Search, Taxonomy, Views



Permissions and Users

- Services Will Act As a Drupal User
- Permission Preview
- Common Problem: Rebuilding Permissions (Admin > Content Management > Post Settings)
- Two Models of Service User:
 - Current Logins
 - One User Per Role (Preferred)



Web UI

- Admin > Site Building > Services
- API Key Generation
- API Documentation
- Check Web Server Config (service.method)



Accessing Drupal

`system.connect`

returns session ID

<anonymous access>

`user.login`

requires Hash (based on API key)

returns new session ID

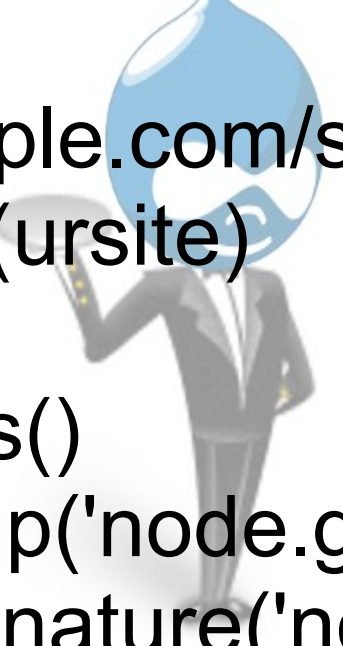
<authenticated access>

`node.save` (and other "write" operations)

uses Hash (which includes API key)




Python: Ride the Snake



```
> import xmlrpclib  
> ursite = "http://example.com/services/xmlrpc"  
> c = xmlrpclib.Server(ursite)  
  
> c.system.listMethods()  
> c.system.methodHelp('node.get')  
> c.system.methodSignature('node.get')
```

RPCs in Python



```
> print c.system.methodSignature('node.get')
sessid, nid, fields
> print c.system.connect()
> print c.node.get(sessid, nid)
> print c.node.get(sessid, nid, [])
> print c.node.get(sessid, nid, [])
```

PHP: Adding Some Structure

<Demo'd>



New Services


- Concerns
 - Security!
 - Security!
 - Structure
- Possible Applications
 - Share Data Between Your Sites
 - Desktop, Smartphone Apps
 - Published APIs - Web 2.0 Ready



Matching Service

<Demo'd>





Q&R & Book Give-Away