

# Table of Contents

## CHAPTER 1 Introducing Amazon Web Services

In The Beginning, There Was Affiliate Marketing .....	1
Enter Amazon Web Services .....	2
International Amazon Web Services .....	3
Other Amazon Web Services Offerings .....	5
Amazon Alexa Web Information Service .....	5
Amazon Simple Queue Service .....	5
AWS Management Service .....	6
Amazon Seller Services .....	6
Where Amazon Products Come From .....	7
Who's Selling And Where Are They Selling? .....	7
Individual Sellers .....	8
Pro Merchants .....	9
Merchants@ Sellers .....	10
Amazon, the merchant. ....	11
Amazon.com Features And Interfaces .....	11
Amazon Community Features .....	12
Amazon Buying and Selling Features .....	13
Amazon Fulfillment Features .....	13
An Overview Of Amazon's APIs .....	14
Amazon E-Commerce Service Operations .....	14
Amazon Seller Services Operations .....	15
Amazon Identifiers .....	16
Amazon Product Identifiers .....	16
The All-Powerful ASIN .....	17
Exchange And Offer Listing IDs .....	18
Parent And Child ASINs .....	19
Amazon Seller And Customer Identifiers .....	20
Amazon Purchasing Identifiers .....	20

Amazon Community Identifiers .....	21
<b>Amazon Search Architecture .....</b>	<b>21</b>
Root Categories And Search Indexes .....	22
Browse Nodes .....	23
Browse Node Structure .....	24
Ephemeral Nature Of Browse Nodes .....	26
<b>An Overview Of The Amazon E-Commerce Service Operations ...</b>	<b>27</b>
Help .....	27
CustomerContentLookup and CustomerContentSearch .....	27
ItemLookup and ItemSearch .....	27
BrowseNodeLookup .....	28
SimilarityLookup .....	28
ListLookup and ListSearch .....	28
CartAdd, CartClear, CartCreate, CartGet, and CartModify .....	28
SellerLookup .....	28
SellerListingLookup and SellerListingSearch .....	29
TransactionLookup .....	29
<b>Exercises For The Reader .....</b>	<b>29</b>

## CHAPTER 2

### Developing With Amazon E-Commerce Service

The SOAP Model For Accessing Amazon E-commerce Service .....	32
REST Model For Accessing Amazon E-commerce Service .....	32
The Amazon XSLT Service .....	33
SOAP Or REST? Making The Choice .....	34
The Case for REST .....	35
The Case for SOAP .....	36
<b>Getting Started With Amazon E-commerce Service .....</b>	<b>36</b>
Obtaining An Amazon Subscription ID .....	36
Obtaining An Associates ID .....	37
Download The Developer Kit .....	37
The Amazon Licensing Agreement .....	38
The One Request Per Second Rule .....	38
The 40k File Size Rule .....	39

Storing Amazon Data .....	39
Handling Price and Availability Data .....	40
Using Amazon Graphics .....	40
Licensing Agreement Enforcement .....	41
Conditions Of Use Agreement .....	41
Configuring PHP For Use With Amazon E-Commerce Service .....	42
PHP4 .....	42
PHP5 .....	42
Checking For PHP Compatibility .....	43
Tools for Developing with Amazon E-commerce Service .....	43
Amazon WSDL Files .....	44
<b>Developing With REST And PHP .....</b>	<b>45</b>
Making A REST Request .....	45
A REST Request Using PHP .....	46
Structure Of An Amazon Response .....	48
E-Commerce Service Error Handling .....	50
Errors in the syntax or logic of your request .....	50
Errors in the execution of your request .....	51
Errors Returned With Good Data .....	52
Amazon E-commerce Service Versioning For REST .....	54
A Better Read Routine .....	55
Parsing XML .....	57
Parsing With PHP4 .....	57
Parsing Using Regular Expressions .....	58
All At Once Parsing Using Expat .....	61
Parsing With PHP5 .....	67
<b>Developing With SOAP And PHP .....</b>	<b>67</b>
Installing the PHP5 SOAP Extension .....	68
Making A SOAP Request .....	68
Amazon E-commerce Service Versioning For SOAP .....	69
Making SOAP Requests .....	70
Error Checking With PHP5 SOAP .....	72
Outputting PHP5 SOAP Debug Information .....	73
PHP5 WSDL Caching .....	73
<b>Developing With XSLT .....</b>	<b>74</b>
XSLT Caching .....	76

Developing Stylesheets With A Web Browser .....	76
Configuring Internet Explorer 6 for XSLT development .....	77
Creating Sample data to work with .....	77
<b>Structure Of Amazon E-commerce Service Requests .....</b>	<b>78</b>
Common REST Parameters .....	79
REST Batch Requests .....	80
REST Multioperation Requests .....	82
SOAP Request Structure .....	83
SOAP Batch Requests .....	87
Multioperation Requests .....	88
<b>Response Groups .....</b>	<b>91</b>
Default Response Groups .....	91
Parent And Child Response Groups .....	92
<b>Some Common Amazon Units .....</b>	<b>92</b>
Amazon Sales Rank .....	92
Amazon StarRatings .....	93
Amazon Prices .....	93
Amazon Date Format .....	93
<b>Exercises For The Reader .....</b>	<b>95</b>

## CHAPTER 3

### Working With Products: ItemSearch

<b>Searching With ItemSearch .....</b>	<b>98</b>
Using ItemSearch With Browse Nodes .....	99
Finding Usable Browse Nodes .....	100
Using ItemSearch With Keywords And Title .....	105
<b>Product Pricing, Condition, And Availability .....</b>	<b>106</b>
Using The ItemSearch Method To Find Products .....	106
Determining Product Availability .....	108
Recognizing Parent ASINs .....	108
Availability For Regular ASINs .....	109
Availability For Parent ASINs .....	112
Pricing .....	114
<b>Product Images .....</b>	<b>114</b>

Decoding Image URLs .....	116
Variations And Other Images .....	117
Empty Images .....	118
<b>Code Example: Amazon ProductSense .....</b>	<b>118</b>
Displaying A Box On A Web Page Using PHP .....	119
The HTML Page .....	119
Choosing Search Parameters .....	120
Building The Display Loop .....	122
Caching For ProductSense .....	124
Error Handling .....	126
Running ProductSense .....	126
ProductSense Using NuSOAP .....	131
A PHP5 Version Of ProductSense .....	132
ProductSense Using The PHP5 SOAP Extension .....	133
An XSLT Version Of ProductSense .....	134
<b>Exercises For The Reader .....</b>	<b>139</b>

## CHAPTER 4

# Pagination, Sorting, Product Details, And Variations

<b>Pagination .....</b>	<b>141</b>
Pagination Example .....	144
Fetching Two Pages At A Time .....	147
<b>Sorting .....</b>	<b>148</b>
Sorting Example .....	150
<b>Getting At Product Details .....</b>	<b>151</b>
Item Attributes For Variations .....	153
<b>Code Sample: WatchCompare .....</b>	<b>155</b>
<b>Working With Variations .....</b>	<b>166</b>
Variation Images .....	166
<b>Code Sample: Converse All Stars Store .....</b>	<b>168</b>
Adding Caching To The Converse All Stars Store .....	177
<b>Exercises For The Reader .....</b>	<b>178</b>

# CHAPTER 5

## Customers And Sellers

Finding Information About Sellers .....	181
The SellerLookup Operation .....	181
Finding Information About Customers .....	184
The CustomerContentLookup Operation .....	184
The CustomerContentSearch Operation .....	186
Code Sample: findseller .....	188
The Merchants Search Index .....	203
Wishlists And Other Lists .....	205
ListLookup And ListSearch .....	206
Using ListSearch .....	206
Using ListLookup .....	207
Code Sample: Wishlist Widget .....	208
Exercises For The Reader .....	215

# CHAPTER 6

## The Remote Cart

Remote Cart Overview .....	217
Remote Cart Lifecycle .....	219
Cart Creation .....	219
Cart Lifespan .....	220
Death Of A Cart .....	220
CartCreate: Creating A Remote Cart .....	220
Security Note .....	223
CartAdd: Adding Items To A Remote Cart .....	223
Items You Can't Add To A Remote Cart .....	225
CartModify: Changing Attributes Of A Remote Cart .....	225
Changing Item Quantities .....	225
Moving Items To "Save For Later" .....	226
Changing Merge Cart Status .....	227
When MergeCart Is False .....	228
When MergeCart Is True .....	229

CartGet: Fetching The Contents Of A Cart .....	229
CartClear: Emptying A Cart .....	231
A Remote Cart Class With Cookies .....	231
Remote Cart Details .....	231
Using AmazonCookieCart .....	236
Program Flow .....	237
Remote Cart Alternatives Using HTML .....	241
The Buy Now Box .....	242
The Add To Cart Form .....	243
Exercises For The Reader .....	244

## CHAPTER 7

# International Amazon E-Commerce Service

International Overview .....	245
Internationalization And Localization .....	246
International SOAP And REST URLs .....	246
Domain Names For XSLT Calls .....	247
Versioning For The International Amazon Sites .....	247
Shipping Restrictions .....	248
International Associates IDs .....	249
Getting Your Associates ID Using Babelfish .....	250
Getting Your Associates ID Using Page Comparison .....	251
Amazon Character Encodings .....	252
UTF-8 Or Not UTF-8? A Minor Debate .....	253
Developing With International Character Sets .....	254
Testing Your Web Browser .....	254
Configuring Other Development Tools .....	256
UTF-8 Encoding With AWS .....	257
SOAP And UTF-8 .....	257
REST And UTF-8 .....	257
XSLT And UTF-8 .....	258
Working with UTF-8 Data in PHP .....	259
Multi-Language HTML Pages .....	260
Multi-Language Web Pages Using A Switch Statement .....	261

Multi-Language Web Pages Using Gettext .....	263
Locales .....	263
PO And MO Files .....	264
Foreign Characters Using HTML Entities .....	267
<b>Code Sample: Song Title Search .....</b>	<b>268</b>
Making Translations .....	268
Displaying Tooltips In Other Languages .....	273
International Currency and Dates .....	274
<b>Feature Support On International Sites .....</b>	<b>274</b>
Identifier Uniqueness .....	275
Working With Offers .....	275
International Images .....	276
Sorting, Search Indexes, And ItemSearch .....	277
<b>Exercises For The Reader .....</b>	<b>277</b>

## CHAPTER 8

### Miscellaneous Operations

Navigation Using BrowseNodeLookup .....	279
<b>Code Sample: Navigation And Items .....</b>	<b>282</b>
More Choices With SimilarityLookup .....	286
<b>Code Sample: Adding Similarities To Apparel.php .....</b>	<b>288</b>
Getting Help With The Help Operation .....	291
TransactionLookup .....	293
<b>Exercises For The Reader .....</b>	<b>295</b>

## CHAPTER 9

### Amazon Seller Services

<b>The Amazon Seller APIs .....</b>	<b>297</b>
<b>Types of Amazon sellers .....</b>	<b>298</b>
Individual Sellers .....	298
Marketplace Pro Merchants .....	300
Merchants@ Pro Merchants .....	301

Merchants@ Sellers .....	301
Amazon Advantage .....	302
<b>The Amazon Inventory Management System API .....</b>	<b>302</b>
Accessing The Amazon Inventory Management System .....	303
Inventory Spreadsheets .....	305
Accessing AIMS On International Amazon Sites .....	305
AIMS Choreography .....	306
An AIMS API PHP Class .....	307
Sending and Receiving With AmazonPost .....	308
InventoryUpload .....	309
AIMS Reports .....	311
Batch Refunds .....	312
Parsing Responses .....	313
Managing Inventory Using AIMS .....	315
Issuing Refunds .....	320
<b>The Merchants@ API .....</b>	<b>322</b>
Accessing The Merchants@ API .....	323
The Merchants@ WSDL .....	324
Secure Requests .....	325
Merchants@ Operations .....	326
Using The Merchants Integration Platform (MIP) .....	327
Merchants@ Feeds .....	327
Merchants@ Reports .....	328
Merchants@ Choreography .....	329
A Merchants@ API PHP Class .....	330
Methods For Posting Feeds .....	332
Methods For Fetching Documents .....	333
A Method For Report Queries .....	334
Establishing Your Inventory .....	335
Checking For Reports .....	337
<b>Exercises For The Reader .....</b>	<b>338</b>
<b>A. Help Resources For Amazon Developers .....</b>	<b>341</b>
Amazon Forums And Blogs .....	341

How To Find Amazon IDs .....	342
Finding Your Wishlist, Listmania, Baby Registry, and Wedding Registry IDs .....	342
Finding Amazon Customer IDs .....	343
Finding Other Seller IDs .....	344
Detail Pages For Small Handset Browsers .....	345
<b>B. Amazon E-Commerce Service 4.0 Reference Manual</b> <b>349</b>	
Amazon E-Commerce Service 4.0 Operations .....	349
Common Request Parameters .....	350
Reference Manual .....	352
<b>C. Using NuSOAP And PEAR SOAP With E-Commerce Ser-     vice 4.0</b> <b>387</b>	
Using NuSOAP .....	387
Downloading and Installing the Latest version of Nusoap .....	387
Making SOAP Requests With NuSOAP .....	387
Error Checking With NuSOAP .....	390
Outputting NuSOAP Debug Information .....	391
WSDL Caching .....	391
Using PEAR SOAP .....	392
Downloading and Installing the latest version of Pear SOAP .....	392
Making SOAP Requests With PEAR SOAP .....	393
Error Checking With PEAR SOAP .....	393
Outputting PEAR SOAP Debug Information .....	394
<b>D. E-Commerce Service 4.0 Error Messages</b> .....	395
<b>E. E-Commerce Service 4.0 Availability Strings</b> .....	403
<b>F. E-Commerce Service 4.0 Response Groups</b> .....	405

<b>G. E-Commerce Service 4.0 Sort Values .....</b>	<b>413</b>
Sort Thesaurus .....	413
Sort Values .....	414
<b>H. E-Commerce Service 4.0 Search Indexes .....</b>	<b>427</b>
<b>I. E-Commerce Service 4.0 ItemSearch Parameter Combinations .....</b>	<b>429</b>
<b>J. Amazon Inventory Management System API Reference Manual .....</b>	<b>447</b>
Amazon Information Management System (AIMS) API Operations .....	447
Common Request Parameters .....	447
Basic Authentication .....	447
Content Type .....	448
Reference Manual .....	448
<b>K. Merchants@ API Reference Manual .....</b>	<b>459</b>
Amazon Merchants@ Operations .....	459
Common Request Parameters .....	459
Basic Authentication .....	459
Reference Manual .....	460
<b>Index .....</b>	<b>469</b>

