

Oracle® Secure Enterprise Search

Administration API Guide

11g Release 2 (11.2.2)

E23428-01

January 2012

Oracle Secure Enterprise Search Administration API Guide, 11g Release 2 (11.2.2)

E23428-01

Copyright © 2009, 2012, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle America, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Contents

Preface	xi
Audience	xi
Documentation Accessibility	xi
Related Documents	xii
Conventions	xii
What's New	xv
Release 11.2.2	xv
Release 11.2.1	xv
1 Using the Administration API	
Introduction to the Administration API	1-1
Command Interface	1-1
Opening an Interactive Session	1-2
Issuing Individual Commands	1-2
Issuing Commands to Multiple Oracle SES Instances	1-3
Using the Help Command	1-3
Command Syntax	1-4
Web Services Interface	1-5
Connecting to the Web Services Endpoint	1-5
Providing Credentials	1-5
Using the Web Services Java Client	1-5
Java Libraries	1-5
Creating a Stateful Web Services Client	1-6
Creating a Stateless Web Services Client	1-6
Creating an Administrative Object	1-7
Object Types	1-7
Universal Objects	1-7
Creatable Types	1-8
Object Properties	1-9
XML Documents	1-9
Sample XML Document of an Administration Object	1-9
Editing XML Files	1-9
State Properties	1-10
Operations	1-10

Command Syntax.....	1-10
Using the Message Logs.....	1-11
Managing Universal Objects	1-11
Managing Creatable Objects.....	1-11
Managing Object State.....	1-12
Status Codes for Bulk Operations.....	1-12

2 Administration Object Types

Alphabetic List of Administration Object Types.....	2-1
Document Support.....	2-2
Globalization Support.....	2-3
Product Languages	2-3
Crawlable Documents	2-4
Providing Translations of Object Names.....	2-6
Encryption.....	2-8
XML Description of State Properties.....	2-8
Partitioning for Parallel Query	2-10
altWord	2-12
crawlerSettings	2-14
docServiceInstance.....	2-18
docServiceManager.....	2-21
docServicePipeline.....	2-24
facetTree	2-27
globalBoundaryRules.....	2-29
globalDocumentTypes	2-32
identityPlugin	2-34
index.....	2-38
indexOptimizer.....	2-40
partitionConfig.....	2-44
proxyLogin.....	2-48
queryConfig.....	2-50
relevanceRanking.....	2-56
schedule.....	2-59
searchAttr	2-64
source	2-67
sourceGroup	2-92
sourceType	2-94
storageArea	2-98
suggLink.....	2-100
thesaurus	2-102

3 searchadmin Commands

Alphabetic List of searchadmin Commands.....	3-1
Entering Special Characters	3-3
activate identityPlugin	3-4
activate indexOptimizer.....	3-5
activate partitionConfig	3-6

activate schedule.....	3-7
create altWord.....	3-8
create docServiceInstance.....	3-9
create docServicePipeline.....	3-10
create facetTree.....	3-11
create proxyLogin.....	3-12
create schedule.....	3-13
create searchAttr.....	3-14
create source.....	3-15
create sourceGroup.....	3-16
create storageArea.....	3-17
create suggLink.....	3-18
create thesaurus.....	3-19
createAll altWord.....	3-20
createAll docServiceInstance.....	3-21
createAll docServicePipeline.....	3-22
createAll facetTree.....	3-23
createAll proxyLogin.....	3-24
createAll schedule.....	3-25
createAll searchAttr.....	3-26
createAll source.....	3-27
createAll sourceGroup.....	3-28
createAll storageArea.....	3-29
createAll suggLink.....	3-30
deactivate identityPlugin.....	3-31
deactivate indexOptimizer.....	3-32
deactivate schedule.....	3-33
delete <i>creatable_type</i>	3-34
deleteAll <i>creatable_type</i>	3-35
deleteList <i>creatable_type</i>	3-37
export <i>creatable_type</i>	3-39
export <i>universal_type</i>	3-41
exportAll <i>creatable_type</i>	3-43
exportList <i>creatable_type</i>	3-45
getAllObjectKeys.....	3-47
getAPIVersion.....	3-49
getAllStates identityPlugin.....	3-50
getAllStates schedule.....	3-52
getState identityPlugin.....	3-54
getState index.....	3-56
getState indexOptimizer.....	3-57
getState partitionConfig.....	3-59
getState schedule.....	3-60
getStateList identityPlugin.....	3-62
getStateList schedule.....	3-64
start indexOptimizer.....	3-66
start schedule.....	3-67

stop schedule	3-68
update altWord.....	3-69
update crawlerSettings.....	3-70
update docServiceInstance	3-71
update docServicePipeline	3-72
update globalBoundaryRules	3-73
update globalDocumentTypes.....	3-74
update index.....	3-75
update indexOptimizer	3-76
update partitionConfig.....	3-77
update proxyLogin	3-78
update queryConfig.....	3-79
update relevanceRanking	3-80
update schedule	3-81
update searchAttr	3-82
update source	3-83
update sourceGroup	3-84
update storageArea	3-85
update suggLink.....	3-86
update thesaurus	3-87
updateAll altWord.....	3-88
updateAll docServiceInstance	3-89
updateAll docServicePipeline	3-90
updateAll proxyLogin	3-91
updateAll schedule	3-92
updateAll searchAttr.....	3-93
updateAll source.....	3-94
updateAll sourceGroup.....	3-95
updateAll storageArea.....	3-96
updateAll suggLink	3-97

4 Web Service Operations

Alphabetic List of Web Service Operations	4-1
activate	4-2
create	4-5
createAll	4-8
deactivate	4-12
delete.....	4-14
deleteAll	4-16
deleteList.....	4-19
export	4-23
exportAll.....	4-26
exportList	4-29
getAllObjectKeys	4-33
getAPIVersion	4-35
getAllStates.....	4-37
getState	4-40

getStateList	4-43
start	4-46
stop	4-48
update	4-50
updateAll	4-53

A Java Example

Java Source Code Example	A-1
Shell Script Example	A-5

B Query Syntax

C Error Messages

Invalid Input Errors	C-1
Creatable Administration Object Errors	C-11
Invalid State Errors	C-12
Administration API Run-Time Errors	C-13
Dependent Object Errors	C-15

List of Examples

1-1	Issuing Commands at the SES Prompt	1-2
1-2	Issuing Commands at the Operating System Prompt	1-2
2-1	Federated Source Description	2-79
2-2	File Source Description	2-83
2-3	User-Defined Source Description	2-87
2-4	Web Source Description	2-98

List of Tables

1-1	Help Syntax.....	1-3
1-2	Universal Objects	1-10
1-3	Creatable Object Types.....	1-11
1-4	Administrative Objects With State Properties.....	1-13
1-5	Operations on Universal Objects	1-14
1-6	Operations on Creatable Objects	1-14
1-7	Operations on Objects With State Properties.....	1-14
1-8	Status Codes.....	1-15
2-1	Document Formats	2-2
2-2	Product Languages	2-3
2-3	Crawlable Languages	2-4
2-4	Crawlable Character Sets.....	2-5
2-5	Query Language Codes.....	2-7

Preface

The *Oracle Secure Enterprise Search Administration API Guide* documents two interfaces to the Administration API: a command-line interface and a Web services interface. It also introduces the Web services Java client. The Administration API supports the same features as the Oracle SES Administration GUI, and some new features that are currently not supported by the GUI.

This preface contains these topics:

- [Audience](#)
- [Documentation Accessibility](#)
- [Related Documents](#)
- [Conventions](#)

Audience

This document is intended for anyone using the Oracle SES Administration API:

- **Administrators** of Oracle Secure Enterprise Search may find a command-line interface to be easier for routine tasks than a graphical user interface. Administrators of large installations, who make the same changes across many instances of Oracle SES, may find the command-line interface to be particularly useful.
- **Web services developers** can create custom administrative tools using any technology that supports Simple Object Access Protocol (SOAP), such as Java and Microsoft ASP.NET.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Related Documents

For more information about Oracle Secure Enterprise Search, refer to the following resources:

- *Oracle Secure Enterprise Search Administrator's Guide*
Explains how to administer Oracle Secure Enterprise Search instances, including how to set up a variety of information sources, crawl and index those sources, and customize the search results.
- *Oracle Secure Enterprise Search Release Notes*
Provides version information and identifies known issues.
- *Oracle Secure Enterprise Search Installation Guides*
Discuss installation requirements and tips, and provides information on how to get started using Oracle Secure Enterprise Search.
- *Oracle Secure Enterprise Search Java API Reference*
Describes the classes and methods in the Oracle SES Java APIs.

Up-to-date Release Notes are posted on Oracle Technology Network (OTN). You must register online before using OTN. Registration is free and can be done at this location:

<http://www.oracle.com/technetwork/community/join/overview/index.htm>

If you have a user name and password for OTN, then you can go directly to the documentation section of OTN at this location:

<http://www.oracle.com/technetwork/indexes/documentation/index.html>

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

This reference presents syntax in a simple variant of Backus-Naur Form (BNF) that includes the following symbols and conventions.

Symbol or Convention	Meaning
[]	Brackets enclose optional items.
{ }	Braces enclose a choice of items of which only one is required.
	A vertical bar separates alternatives.
...	Ellipses indicate that the preceding syntactic element can be repeated.

Symbol or Convention	Meaning
/	A slash separates levels of a directory path. On Windows, use a backslash (\) instead of a slash (/).
delimiters	Delimiters other than brackets, braces, vertical bars, and ellipses must be entered as shown.
<i>italics</i>	Words appearing in italics are placeholders for which you must substitute a name or a value. Words that are not in italics are keywords and must be entered as shown.
<i>MW_HOME</i>	<i>MW_HOME</i> is the top-level directory for Oracle Fusion Middleware products. This directory is called Middleware home. The Middleware home for Fusion Applications is named <i>fusionapps</i> . Each application is installed in its own Oracle home under <i>MW_HOME</i> .
<i>ORACLE_HOME</i>	<i>ORACLE_HOME</i> for Oracle Secure Enterprise Search represents the path <i>MW_HOME/ses</i> by default; a different name can be specified during installation. It is the directory where Oracle SES is installed.

What's New

This chapter provides a brief description about the features available in the Administration API in Oracle Secure Enterprise Search (Oracle SES) 11g Release 2.

Release 11.2.2

Disabled features

The Oracle SES 10g Administration API is deprecated in this release (`searchadminctl` and the associated Web services). The Oracle SES 11g Administration API replaces it. The following public Web services are disabled in this release:

- `oracle.search.admin.ws.client.SearchAdminClient`

The following are the operations provided by this Web service:

- `getEstimatedIndexFragmentation`
- `getSchedules`
- `getScheduleStatus`
- `optimizeIndexNow`
- `startSchedule`
- `stopSchedule`
- `login`
- `logout`
- `oracle.search.admin.ws.client.Schedule`
- `oracle.search.admin.ws.client.ScheduleStatus`

Release 11.2.1

New administrative objects

- [docServiceInstance](#): Describes a document service instance.
- [docServiceManager](#): Describes a document service manager.
- [docServicePipeline](#): Describes a document service pipeline.
- [facetTree](#): Describes a facet tree for faceted navigation.
- [globalBoundaryRules](#): Describes the default rules limiting the scope of the crawler on each new source.

- [globalDocumentTypes](#): Describes the default document types that are defined for each new source.
- [relevanceRanking](#): Describes the rules for ranking the importance of various document attributes when ordering the search results.

Modified administrative objects:

- [crawlerSettings](#): Parameters from crawler.dat are now managed by elements in this object. Other new elements configure the crawlers on Oracle RAC installations.
- [partitionConfig](#): Partitioning now has state and can be activated.
- [queryConfig](#): Parameters from search.properties and ranking.xml are now managed by elements in this object.
- [source](#): The <search:urlRewriter> and <search:authorizationPlugin> elements are disabled in Web sources.
- [storageArea](#): Storage areas cannot be created in Oracle SES. Instead, you must first create the tablespace using a database tool, then register it as a storageArea with a create operation.

Disabled administrative objects:

- alert
- clustering
- clusterTree
- resultList
- skinBundle
- source: These source types are disabled
 - FileNet Content Engine
 - FileNet Image Services
 - Hummingbird
 - IBM DB2
 - Open Text Livelink
- spaceCalculator
- task

Disabled operations:

- [docServiceManager](#): create, createAll, delete, deleteAll, deleteList
- [identityPlugin](#): create, createAll, delete, deleteAll, deleteList
- [sourceType](#): create, createAll, delete, deleteAll, deleteList

Using the Administration API

This chapter explains basic concepts and use of the Administration API. It contains the following topics:

- [Introduction to the Administration API](#)
- [Command Interface](#)
- [Web Services Interface](#)
- [Object Types](#)
- [Object Properties](#)
- [Operations](#)

Introduction to the Administration API

The Oracle SES Administration API supports management of large-scale deployments. It provides a command-line interface and a Web services interface to the same administrative tasks performed using the Oracle SES Administration GUI.

The following are the building blocks of the Administration API:

- **Administrative Objects:** An administrative object (or simply an object) models a feature in Oracle SES that can be managed directly through the API.

An object is either creatable or universal. You can create multiple instances of a creatable object, such as a source or a schedule. You can configure, but not create, a universal object, such as the crawler settings. The administrative objects are described in [Chapter 2, "Administration Object Types."](#)

- **Operations:** Operations perform an action on one or more objects, such as creating, deleting, starting, or stopping them. If an operation fails, then all changes are rolled back. The command-line operations are described in [Chapter 3, "searchadmin Commands,"](#) and the Web services operations are described in [Chapter 4, "Web Service Operations."](#)

Command Interface

The `searchadmin` command provides a command-line interface to the Administration API. You can open an interactive session, or you can issue individual commands to the operating system.

You must supply the administrator password each time you issue the `searchadmin` command. You can include the password in the command or wait for the prompt to enter it.

Opening an Interactive Session

To open an interactive session, enter the `searchadmin` command at the operating system prompt. You can connect to a single instance or multiple instances.

To connect to a single instance, use the `--CONNECTION` option with an HTTP connection string, like the one shown here.

```
$ searchadmin --CONNECTION=http://myhost:7777/search/api/admin/AdminService
```

After providing the administrator password, you get the SES prompt. You can start entering commands to the Oracle SES Administration API. This type of connection is called **session mode**.

[Example 1-1](#) shows a brief interactive session, which ends with a `quit` command.

Example 1-1 Issuing Commands at the SES Prompt

```
$ searchadmin --CONNECTION=http://myhost:7777/search/api/admin/AdminService
```

```
Search Admin Command Line - Release 11.2.1.0.0
```

```
Copyright (c) 2006, 2010, Oracle and/or its affiliates. All rights reserved.
```

```
Password:
```

```
SES>getAPIVersion
```

```
11.2.1.0.0
```

```
SES>export index
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:index>
    <search:indexingBatchSize>250</search:indexingBatchSize>
    <search:indexingMemorySize>275</search:indexingMemorySize>
  </search:index>
</search:config>
```

```
SES>quit
```

```
$
```

Issuing Individual Commands

You can issue commands individually at the operating system prompt. You can also use this command format to create scripts and batch files, thus simplifying routine tasks. This type of connection is called **single job mode**.

[Example 1-2](#) shows two commands entered at the operating system prompt. One includes the password in the command, and the other responds to the Password prompt. In a script or batch file, you must provide a password for each command.

Example 1-2 Issuing Commands at the Operating System Prompt

```
$ searchadmin --CONNECTION=http://myhost:7777/search/api/admin/AdminService
```

```
getAPIVersion
```

```
Search Admin Command Line - Release 11.2.1.0.0
```

Copyright (c) 2006, 2010, Oracle and/or its affiliates. All rights reserved.

Password:

11.2.1.0.0

```
$ searchadmin --CONNECTION=http://myhost:7777/search/api/admin/AdminService
--PASSWORD=password export index
```

Search Admin Command Line - Release 11.2.1.0.0

Copyright (c) 2006, 2010, Oracle and/or its affiliates. All rights reserved.

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:index>
    <search:indexingBatchSize>250</search:indexingBatchSize>
    <search:indexingMemorySize>275</search:indexingMemorySize>
  </search:index>
</search:config>
```

\$

Issuing Commands to Multiple Oracle SES Instances

The `searchadmin` command connects to the search instance defined by the `CONNECTION` parameter. However, you can issue commands to multiple Oracle SES instances by supplying the connection information in a text file. Then reference the file using the `--CONNECTION_LIST` option. Each command is executed across all instances.

This command opens connections using a file named `remotehosts.lst`:

```
$ searchadmin --CONNECTION_LIST=remotehosts.lst
```

Using the Help Command

The `Help` command provides the basic command syntax and descriptions of administrative objects. You can enter the help command in an interactive session or as an individual command, as shown here:

```
$ searchadmin help
```

Search Admin Command Line - Release 11.2.1.0.0

Copyright (c) 2006, 2010, Oracle and/or its affiliates. All rights reserved.

```
Usage: searchadmin [<connectionArgs>] [<operation>] [<operationArgs>]
```

```
.
.
.
```

[Table 1-1](#) describes the `searchadmin` help commands.

Table 1–1 Help Syntax

Command	Description
help	Provides the <code>searchadmin</code> command syntax, and lists the administrative operations.
help <i>object_type</i>	Describes <i>object_type</i> .
help <i>operation</i>	Provides the command syntax for <i>operation</i> .
help statusCodes	Describes the status codes that are displayed after an operation is performed on multiple objects by <code>createAll</code> , <code>deleteAll</code> , <code>deleteList</code> , or <code>updateAll</code> .
help duplicateMethod	Describes the settings of the <code>--DUPE_METHOD</code> parameter in the <code>createAll</code> command.
help updateMethod	Describes the settings of the <code>--UPDATE_METHOD</code> parameter in the <code>update</code> and <code>updateAll</code> commands.
help notFoundMethod	Describes the settings of the <code>--NOT_FOUND_METHOD</code> parameter in the <code>updateAll</code> command.

Command Syntax

The following is a summary of the `searchadmin` command syntax.

```
searchadmin [--USERNAME=admin] [--PASSWORD=password] [--CONNECTION=connection] |
--CONNECTION_LIST=filename}] [operation]
```

or

```
searchadmin [-u admin] [-p password] [{"-c connection | -m filename}]] [operation]
```

admin

Administrator user name, which is `searchsys` by default.

password

Password for the administrator. You are prompted for the password if you omit it from the command. If you are connecting to multiple instances, the password is used for authentication on all of them; omit this argument if they do not use the same password.

connection

Connection to an Oracle SES instance using HTTP:

```
http://host:port/search/api/admin/AdminService
```

The port number is the same as connecting to the Administration GUI.

filename

The name of the connection file. The path can be absolute or relative to the current directory.

operation

An administrative operation, as described in [Chapter 3, "searchadmin Commands."](#) Omit this argument to open an interactive session. Like the `searchadmin` command, the operations have a short form and a long form for many arguments.

Web Services Interface

The Oracle SES Web services interface enables you to create client applications easily in a variety of technologies that support Simple Object Access Protocol (SOAP), such as Java and Microsoft ASP.NET. Moreover, two Web services clients are available out-of-the-box:

- A Java client enables you to develop Java programs that use the Administration API.
- A WebLogic test client enables you to test individual SOAP requests to the Administration API, thus facilitating development of new client applications.

Connecting to the Web Services Endpoint

The endpoint for the Web service has the following URL:

```
http://host:port/search/api/admin/AdminService
```

The host name and port number are the same ones that you use to connect to the Administration GUI.

The endpoint page provides this information:

- **Service Name:** {http://search.oracle.com/Admin}AdminService
- **Port Name:** {http://search.oracle.com/Admin}Admin
- **Address:** http://host:port/search/api/admin/AdminService
- **WSDL:** http://host:port/search/api/admin/AdminService?wsdl
- **Implementation class:**
oracle.search.admin.api.ws.OracleSearchAdminImpl

Providing Credentials

Like the command-line interface, the Web services interface has two modes of operation:

- **Stateful:** The administrative user name and password are provided at the beginning and retained for all subsequent operations, while the client maintains the HTTP session. Use this mode when executing a sequence of operations, and thus achieve the best performance. You can provide credentials in any operation. Your application does not have to retain the password.
- **Stateless:** The administrative user name and password are provided for each operation. Use this mode to avoid maintaining open HTTP connections when, for example, use of the application is sporadic.

Using the Web Services Java Client

Using the Java client, you can develop your own programs for managing Oracle SES instances. The *Oracle Secure Enterprise Search Java API Reference* describes the classes and methods.

See Also: [Appendix A, "Java Example"](#)

Java Libraries

You need to include the following JAR files in the CLASSPATH for using the Oracle SES Web services Java client:

- `MW_HOME/oracle_common/modules/oracle.webservices_11.1.1/oracle.webservices.standalone.client.jar`
- `ORACLE_HOME/search/lib/search_adminapi_wsclient.jar`
- For the IBM-AIX platform, you also require the JAR file:
`MW_HOME/oracle_common/modules/glassfish.jaxb.xjc.jar`

Creating a Stateful Web Services Client

The following Java code fragment creates a stateful client:

```
//Initialize and return a stateful admin web service client

private static AdminPortType getStatefulWebServiceClient(
    String webServiceURL,
    String userName,
    String password) throws Exception
{
    AdminService adminService = new AdminService(
        new URL( webServiceURL ),
        new QName(
            "http://search.oracle.com/Admin",
            "AdminService"
        )
    );

    AdminPortType adminPort = adminService.getAdmin();

    // Tell client proxy to maintain HTTP session for stateful behavior
    ((BindingProvider)adminPort).getRequestContext().put(
        BindingProvider.SESSION_MAINTAIN_PROPERTY, true
    );

    // Create credentials argument
    Credentials credentials = new Credentials();
    credentials.setUserName( userName );
    credentials.setPassword( password );

    adminPort.login( credentials, "en" );

    return adminPort;
}
```

Creating a Stateless Web Services Client

This Java code fragment creates a stateless client. It does not provide credentials.

```
// Initialize and return a stateless admin web service client
private static AdminPortType getStatelessWebServiceClient(
    String webServiceURL) throws Exception
{
    AdminService adminService = new AdminService(
        new URL( webServiceURL ),
        new QName(
            "http://search.oracle.com/Admin",
            "AdminService"
        )
    );
    return adminService.getAdmin()
}
}
```

You can use the stateless client by providing credentials for each operation.

```
// Get stateless web service client
adminPort = getStatelessWebServiceClient( webServiceURL );

// Create Credentials object for operation
Credentials credentials = new Credentials();
credentials.setUsername( userName );
credentials.setPassword( password );
```

Creating an Administrative Object

This Java code fragment creates a Web source named `example`.

```
String webSourceURL = "http://www.example.com";

String webSourceXML =
"<?xml version=\"1.0\" encoding=\"UTF-8\"?>" +
"<search:config productVersion=\"11.2.1.0.0\" " +
xmlns:search=\"http://xmlns.oracle.com/search\">" +
"  <search:sources>" +
"    <search:webSource>" +
"      <search:name>example</search:name>" +
"      <search:startingUrls>" +
"        <search:startingUrl>" +
"          <search:url>" + webSourceURL + "</search:url>" +
"        </search:startingUrl>" +
"      </search:startingUrls>" +
"    </search:webSource>" +
"  </search:sources>" +
"</search:config>";

adminPort.createAll(
    "source",
    webSourceXML,
    "password",
    credentials,
    null,
    null,
    "en"
);
```

Object Types

The Administration API enables you to perform a variety of operations on the administrative objects. These objects fall into two basic categories: universal and creatable.

Universal Objects

Oracle SES has one instance of each universal object out of the box. You can change the default settings, but you cannot create a new instance or delete the existing one. In the Administration GUI, you can edit the settings of universal objects on the Global Settings pages.

[Table 1–2](#) describes the universal object types.

Table 1–2 Universal Objects

Object Type	Description
<code>crawlerSettings</code>	Global crawler configuration
<code>globalBoundaryRules</code>	Global crawler boundary rules
<code>globalDocumentTypes</code>	Global crawler document types
<code>index</code>	Indexing parameters
<code>indexOptimizer</code>	Index optimization
<code>partitionConfig</code>	Partition configuration
<code>queryConfig</code>	Query configuration
<code>relevanceRanking</code>	Attribute relevance ranking

Creatable Types

Oracle SES may have multiple instances of a creatable type out of the box, or it may have none. You can create new instances and, for most types, modify existing ones. In the Administration GUI, you can create and edit most of these objects on the Home and Search pages.

An object key uniquely identifies a particular instance of a creatable type. The key can be a single value, such as the name of a source, or a composite value, such as the jar file name and class of an identity plug-in. If an object key contains spaces, then all references must be enclosed in quotes in the command-line interface:

```
--NAME=this_DataSource
--NAME="This Data Source"
```

Table 1–3 describes the creatable objects.

Table 1–3 Creatable Object Types

Object Type	Description
<code>altWord</code>	Alternate words
<code>docServiceInstance</code>	Document service instance
<code>docServiceManager</code> ¹	Document service manager
<code>docServicePipeline</code>	Document service pipeline
<code>facetTree</code>	Facet tree
<code>identityPlugin</code> ¹	Identity plug-ins
<code>proxyLogin</code>	Proxy log-ins
<code>schedule</code>	Schedules
<code>searchAttr</code>	Search attributes
<code>source</code>	Sources
<code>sourceGroup</code>	Source groups
<code>sourceType</code> ¹	Source types
<code>suggLink</code>	Suggested links
<code>thesaurus</code>	Thesaurus

¹ These objects cannot be created or modified in Oracle Fusion Applications.

Object Properties

All object types have properties that configure the object to operate in a particular way. An XML document describes these properties. When you create or modify an object, you submit an XML document to Oracle SES that describes the object and sets the values of its properties. When you query Oracle SES for a description of an object, it returns the information as an XML document.

XML Documents

Although you can develop XML descriptions of administration objects from the start, an easier method is to let Oracle SES do the work for you. For universal objects, you can export the description to a file for editing. For creatable objects, you can use the Administration GUI to develop an object and then export the description to a file. You can then edit the file or copy it to create similar objects. This method is particularly useful when creating or updating complex object types, such as sources.

Sample XML Document of an Administration Object

The following is a very simple example of an XML document generated by Oracle SES. It describes the universal index object:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:index>
    <search:indexingBatchSize>250</search:indexingBatchSize>
    <search:indexingMemorySize>275</search:indexingMemorySize>
  </search:index>
</search:config>
```

<?xml version="1.0" encoding="UTF-8"?>

Identifies the file as an XML document. The encoding of exported XML is set to UTF-8, but imported documents can have other encoding.

<search:config>

Contains all Oracle SES object configuration elements. This is the root element of the XML document.

<search:index>

Contains the configuration settings for the universal index element. You can describe administration objects in individual XML files or all objects in one XML file.

[Chapter 2, "Administration Object Types,"](#) discusses the XML description of each object type.

Editing XML Files

The XML complies with the standard conventions for XML documents. You should have a working knowledge of XML before using the administration APIs.

XML is a text-based markup language, so you can use any text editor to create and edit XML files. However, an ordinary text editor cannot detect when the document is correctly formed and, more importantly, when it contains syntax errors. For that, you should use an XML editor. You can choose from professional and freeware versions that are available for download on the Web.

An XML editor can also check an XML document against the XML Schema Definition (XSD). Oracle SES has two files for the XSD:

- **Config.xsd:** Contains the object definitions.
- **State.xsd:** Contains the schema for the `getState`, `getStateList`, and `getAllStates` operations.

Both files are in `ORACLE_HOME/search/xsd/admin/api`.

State Properties

Some object types have state properties that provide information about the current state of the object. For example, a cluster tree has a `status` property that reports whether it is enabled or disabled. Both universal and creatable object types can have state properties. [Chapter 2, "Administration Object Types,"](#) lists the state properties for each object type.

Oracle SES returns the current state of an object in the form of an XML document. See ["XML Description of State Properties"](#) on page 2-8.

Table 1–4 Administrative Objects With State Properties

Object Type	State Properties
<code>identityPlugin</code>	<code>status</code>
<code>index</code>	<code>estimatedFragmentation</code>
<code>indexOptimizer</code>	<code>endTime</code> , <code>startTime</code> , <code>status</code>
<code>partitionConfig</code>	<code>status</code>
<code>schedule</code>	<code>lastCrawled</code> , <code>logFilePath</code> , <code>nextCrawl</code> , <code>scheduleError</code> , <code>status</code>

Operations

You execute various operations to manage the administration objects. [Chapter 3, "searchadmin Commands,"](#) provides the syntax of these operations and command examples. The same operations are available as XML documents in the Web services interface, described in [Chapter 4, "Web Service Operations."](#)

Command Syntax

The commands have this general syntax for universal object types:

```
operation object_type [parameters] [options]
```

The syntax for creatable types includes the object key for operations performed on a single object:

```
operation object_type [object_key] [parameters] [options]
```

Note: The clustering object used in the following examples is disabled in Oracle Fusion Applications.

For example, the following command activates clustering. The clustering object is a universal object type, and the command consists only of the required `operation` and `object_type`:

```
activate clustering
```

The next command updates the clustering configuration. This command requires the path to the input XML file with the new configuration settings and an update method:

```
update clustering --INPUT_FILE=clustering.xml --UPDATE_METHOD=overwrite
```

Most parameters and some common options have a shortcut notation. The previous update command can also be expressed with this syntax:

```
update clustering -i clustering.xml -a overwrite
```

Sources are creatable, so the command to change the configuration of a source requires the object key. For sources, the object key is the name. The following command also includes the `INPUT_FILE` parameter.

```
update source --NAME="Doc Library" --UPDATE_METHOD=overwrite --INPUT_
FILE=sources.xml
```

The shortcut notation looks like this:

```
update source -n "Doc Library" -a overwrite -i sources.xml
```

Using the Message Logs

The message logs can help you debug problems executing an operation. All messages are written to the WebLogic Server logs, which you can view in the WebLogic console.

Managing Universal Objects

Use these operations to manage universal administration objects:

Table 1–5 Operations on Universal Objects

Operation	Description
export	Returns the XML description of an object.
update	Sets the parameters of an object from an XML file.

Managing Creatable Objects

Use these operations to manage creatable administration objects:

Table 1–6 Operations on Creatable Objects

Operation	Description
create	Creates an object from an XML file.
createAll	Creates all the objects of a particular type from an XML file.
delete	Deletes a single object.
deleteAll	Deletes all objects of a particular type.
deleteList	Deletes a list of objects of a particular type.
export	Returns the XML description of an object.
exportAll	Returns the XML descriptions of all objects of a particular type.
exportList	Returns the XML descriptions of a list of objects of a particular type.
update	Sets the parameters of an object from an XML file.
updateAll	Sets the parameters of all objects of a particular type from an XML file.

Managing Object State

Use these operations to manage both universal and creatable administration objects with state properties.

Table 1–7 Operations on Objects With State Properties

Operation	Description
activate	Enables an object. Objects that can be enabled have a <code>status</code> state property.
deactivate	Disables an object. Objects that can be disabled have a <code>status</code> state property.
getAllStates	Returns the current state of all objects of a particular type as an XML document.
getState	Returns the state of an object as an XML document.
getStateList	Returns the state of a list of objects of a particular type as an XML document.
start	Initiates the starting process of an object.
stop	Initiates the stopping process of an object.

Status Codes for Bulk Operations

Operations that involve multiple objects, such as `createAll`, `deleteAll` and `deleteList`, return status codes for each processed object, as described in [Table 1–8](#).

Table 1–8 Status Codes

Status Code	Description
CREATE_NOT_SUPPORTED	The object cannot be created.
CREATE_SUCCEEDED	The object was successfully created.
DELETE_NOT_SUPPORTED	The object cannot be deleted.
DELETE_SUCCEEDED	The object was successfully deleted.
DUPLICATE_IGNORED	The object already existed. The operation ignored the pre-existing object.
DUPLICATE_OVERWRITTEN	The object already existed. The operation overwrote the pre-existing object.
INVALID_STATE_IGNORED	The object was ignored because it was in an invalid state.
NOT_FOUND_CREATED	The object did not exist. The operation created the object.
NOT_FOUND_IGNORED	The object did not exist. The operation ignored the object.
UPDATE_NOT_SUPPORTED	The object cannot be updated.
UPDATE_SUCCEEDED	The object was successfully updated.

Administration Object Types

This chapter describes the object types in the Oracle SES Administration API. It contains these topics:

- [Alphabetic List of Administration Object Types](#)
- [Document Support](#)
- [Globalization Support](#)
- [Encryption](#)
- [XML Description of State Properties](#)
- [Partitioning for Parallel Query](#)

Alphabetic List of Administration Object Types

A C D F G I P Q R S T

A

[altWord](#)

C

[crawlerSettings](#)

D

[docServiceInstance](#)

[docServiceManager](#)

[docServicePipeline](#)

F

[facetTree](#)

G

[globalBoundaryRules](#)

[globalDocumentTypes](#)

I

[identityPlugin](#)

[index](#)

[indexOptimizer](#)

P

[partitionConfig](#)
[proxyLogin](#)

Q

[queryConfig](#)

R

[relevanceRanking](#)

S

[schedule](#)
[searchAttr](#)
[source](#)
[sourceGroup](#)
[sourceType](#)
[storageArea](#)
[suggLink](#)

T

[thesaurus](#)

Document Support

Table 2–1 identifies the document formats supported by Oracle SES.

Table 2–1 Document Formats

Document Format	MIME Type
Adobe Framemaker Document	application/x-frameset
Adobe Framemaker Interchange Format (MIF) Document	application/vnd.mif
Corel Presentations Document	application/vnd.corel-presentations
DICOM Image	application/dicom
DocuShare Ichitaro Document	application/x-js-taro
GIF Image	image/gif
GNU ZIP Archive	application/x-gzip
Haansoft HWP Document	application/x-hwp
HTML	text/html
JPEG 2000 Image	image/jp2
JPEG Image	image/jpeg
Lotus 1-2-3 Document	application/x-lotus123 (also represents application/vnd.lotus-1-2-3)
Lotus AMI Pro Document	application/x-ami
Lotus Freelance Document	application/x-freelance (also represents application/vnd.lotus-freelance)
Lotus Word Pro Document	application/vnd.lotus-wordpro
LZH Archive	application/x-lzh-compressed

Table 2–1 (Cont.) Document Formats

Document Format	MIME Type
Microsoft Excel Document	application/x-msexcel (also represents application/vnd.ms-excel and application/ms-excel)
Microsoft Office Project	application/vnd.ms-project
Microsoft PowerPoint Document	application/x-mspowerpoint (also represents application/vnd.ms-powerpoint)
Microsoft Visio	application/vnd.visio
Microsoft Word Document	application/msword
Microsoft Works Word Processor Document	application/x-msworks-wp
MS Write	application/x-mswrite
PDF Document	application/pdf
Plain Text	text/plain
Quattro Pro for Windows Document	application/x-quattro-win
Rich Text Format (RTF) Document	application/rtf
StarOffice Calc Document	application/vnd.stardivision.calc
StarOffice Impress Document	application/vnd.stardivision.impress
Sun XML Writer Document	application/vnd.sun.xml.writer
TIF Image	image/tiff
WordPerfect 5.1 Document	application/wordperfect5.1
WordPerfect 6 Document	application/x-wordperfect6
XML	text/xml
XyWrite Document	application/x-xywrite
ZIP Archive	application/zip

Globalization Support

Oracle SES provides localization support for source documents, metadata translation, and user queries. You can specify this information in the configuration of administration objects.

Product Languages

Oracle SES user interface components are translated into the languages listed in [Table 2–2](#). The locale of the Oracle SES host system sets the default language for error messages, the Administration GUI, and the Search Application. In the Web services interface, you can set the language for error messages in individual operations.

Table 2–2 Product Languages

Language	Code
Chinese, Simplified	zh_CN
Chinese, Traditional	zh_TW

Table 2–2 (Cont.) Product Languages

Language	Code
English	en
French	fr
German	de
Italian	it
Japanese	ja
Korean	ko
Portuguese, Brazilian	pt_BR
Spanish	es

Crawlable Documents

For Oracle SES to crawl and index source documents, they must be stored in a supported language and character set.

[Table 2–3](#) lists the codes for languages supported by the crawler.

Table 2–3 Crawlable Languages

Language	Code
Arabic	ar
Chinese	zh
Czech	cs
Danish	da
Dutch	nl
English	en
Finnish	fi
French	fr
German	de
Greek	el
Hebrew	he
Hungarian	hu
Italian	it
Japanese	ja
Korean	ko
Norwegian	no
Polish	pl
Portuguese	pt
Romanian	ro
Russian	ru
Slovak	sk
Spanish	es

Table 2–3 (Cont.) Crawlable Languages

Language	Code
Swedish	sv
Turkish	tr

[Table 2–4](#) lists the codes for character sets supported by the crawler.

Table 2–4 Crawlable Character Sets

Character Set	Code
Standard UTF-8	UTF8
16-Bit UCS Transformation Format	UTF-16
Big 5 Traditional Chinese	Big5
CNS 11643 Traditional Chinese	CNS11643
GB 18030 Simplified Chinese	GB18030
GB2312-80 Simplified Chinese	GB2312
GBK Simplified Chinese	GBK
ISO Latin/Arabic	8859-6
ISO Latin/Cyrillic	8859-5
ISO Latin/Greek	8859-7
ISO Latin/Hebrew	8859-8
ISO Latin-1	8859-1
ISO Latin-2	8859-2
ISO Latin-3	8859-3
ISO Latin-4	8859-4
ISO Latin-5	8859-9
Japanese (Auto-Detect)	JISAutoDetect
Japanese (EUC)	EUC_JP
Japanese (JIS)	JIS
Japanese (Shift-JIS)	SJIS
KSC5601 Korean	KSC5601
Macintosh Arabic	MacArabic
Macintosh Croatian	MacCroatian
Macintosh Cyrillic	MacCyrillic
Macintosh Dingbat	MacDingbat
Macintosh Greek	MacGreek
Macintosh Hebrew	MacHebrew
Macintosh Iceland	MacIceland
Macintosh Latin-2	MacCentralEurope
Macintosh Roman	MacRoman
Macintosh Romania	MacRomania

Table 2–4 (Cont.) Crawlable Character Sets

Character Set	Code
Macintosh Symbol	MacSymbol
Macintosh Thai	MacThai
Macintosh Turkish	MacTurkish
Macintosh Ukraine	MacUkraine
PC Arabic	Cp864
PC Baltic	Cp775
PC Canadian French	Cp863
PC Cyrillic	Cp855
PC Greek	Cp737
PC Hebrew	Cp862
PC Icelandic	Cp861
PC Latin-1	Cp850
PC Latin-2	Cp852
PC Modern Greek	Cp869
PC Nordic	Cp865
PC Original	Cp437
PC Portuguese	Cp860
PC Russian	Cp866
PC Turkish	Cp857
Windows Arabic	Cp1256
Windows Baltic	Cp1257
Windows Cyrillic	Cp1251
Windows Eastern Europe/Latin-2	Cp1250
Windows Greek	Cp1253
Windows Hebrew	Cp1255
Windows Japanese	MS932
Windows Thai	Cp874
Windows Turkish	Cp1254
Windows Vietnamese	Cp1258
Windows Western Europe/Latin-1	Cp1252

Providing Translations of Object Names

The names of some administration objects are displayed to users in the Search interface, such as `source` and `sourceGroup`. You can provide a display name in one or more languages by using the `<search:translations>` element, as shown here:

```
<search:name>
  <search:translations>
    <search:translation>
      <search:translatedValue>
```

Element Descriptions

<search:name>

Name of the administration object.

<search:translations>

Contains one or more <search:translation> elements.

<search:translation>

Contains a <search:translatedValue> element.

Attribute	Value
language	A code identifying the language of the translated value. The codes are not case sensitive. See Table 2-5, "Query Language Codes" .

<search:translatedValue>

Contains a description of the object in the translation language. This value is displayed in the Search Application.

Table 2-5 Query Language Codes

Language	Code
Arabic	ar
Catalan	ca
Chinese, Simplified	zh_CN
Chinese, Traditional	zh_TW
Czech	cs
Danish	da
Dutch	nl
English	en
Finnish	fi
French	fr
German	de
Greek	el
Hebrew	iw
Hungarian	hu
Italian	it
Japanese	ja
Korean	ko
Norwegian	no
Polish	pl
Portuguese	pt
Portuguese, Brazilian	pt_BR
Romanian	ro
Russian	ru

Table 2–5 (Cont.) Query Language Codes

Language	Code
Slovak	sk
Spanish	es
Swedish	sv
Thai	th
Turkish	tr

Encryption

The Administration API provides an encryption system to safeguard sensitive information, such as passwords, contained in the XML description of an object.

When you import an XML document using an operation such as create or update, you can indicate in the XML whether a value is encrypted. In this example, the password is in plain text, which either sets it for the first time or changes it to a new value:

```
<search:password encrypted="false">password</search:password>
```

Oracle SES stores the password in an encrypted form. The next example shows an encrypted password, which was exported in an XML document from Oracle SES:

```
<search:password encrypted="true">
128b6b43091659ffa1ff068666b8eb6445dabd361871b6a5b97941f00ee8c842e76bcc1eb3c0806fd0
f6ee2e3ab371febcb053255ffd4e46888909cdd553914bfabe99eda51861d7
</search:password>
```

When exporting an XML document containing a password, Oracle SES requires you to provide an encryption key. If you use this document as input to an operation (`encrypted="true"`), then you must use the same encryption key as the `export` operation so that Oracle SES can decrypt the password.

XML Description of State Properties

Both universal and creatable objects can have state properties. The `getState`, `getStateList`, and `getAllStates` commands return an XML document describing the current state of one or more objects.

The `<search:state>` element describes the current state of an object.

```
<search:state>
  <search:objectStates>
    <search:objectState>
      <search:objectState>
        <search:objectType>

<!-- For creatable objects -->
        <search:objectKey>
          <search:keyPairs>
            <search:keyPair>
              <search:name>
              <search:value>

<!-- For all objects -->
        <search:stateProperties>
          <search:stateProperty>
            <search:propertyName>
```

```

<search:propertyValues>
  <search:propertyValue>
    <search:propertyValue>

```

Element Descriptions

<search:state>

Contains a <search:objectStates> element.

Attribute	Value
productVersion	Oracle SES product version
xmlns:search	Namespace for the Oracle SES Administration API

<search:objectStates>

Contains one or more <search:objectState> elements.

<search:objectState>

Describes the state properties of a particular object, using these child elements:

```

<search:objectType>
<search:objectKey>
<search:stateProperties>

```

<search:objectType>

Contains an object type with one or more state properties:

```

identityPlugin
index
indexOptimizer
schedule

```

<search:objectKey>

Contains the object key that identifies a specific instance of a creatable object type. It contains a <search:keyPairs> element.

<search:keyPairs>

Contains one or more <search:keyPair> elements.

<search:keyPair>

Contains these child elements:

```

<search:name>
<search:value>

```

<search:name>

Contains a key name for this object type.

<search:value>

Contains the key value for this object.

<search:stateProperties>

Contains one or more <search:stateProperty> elements.

<search:stateProperty>

Contains a <search:propertyName> element.

<search:propertyName>

Contains the name of a property.

<search:propertyValues>

Contains one or more <search:propertyValue> elements.

<search:propertyValue>

Contains a <search:value> element.

Attribute	Value
key	Provides additional context, such as the name of the data source associated with the property for a schedule that crawls multiple sources.

<search:value>

Contains the current value of the property.

Partitioning for Parallel Query

Parallel querying is automatically implemented on Oracle SES when the partitioning option is enabled. You can specify partitioning only during installation.

You can optimize query performance of large document sources by storing the crawler index in partitions distributed across several independent disks. Oracle SES then executes parallel subqueries automatically against the partitions. Both I/O and CPU resources are used in parallel.

The default tablespaces for Oracle SES are SEARCH_DATA, SEARCH_INDEX, and SEARCH_TEMP.

Note: You must register additional tablespaces before crawling any sources.

To enable partitioning:

1. Acquire a license for the Oracle Partitioning option.
2. During installation, answer Yes when the Repository Creation Utility (RCU) asks if you have a partitioning license. Then Oracle Database is installed with partitioning, and Oracle SES automatically supports parallel query.

These administrative objects support parallel query:

- [storageArea](#)
- [partitionConfig](#)

To add partitioned tablespaces for use by Oracle SES:

1. Create one or more ASSM (Automatic Segment Space Management) tablespaces using a tool such as Enterprise Manager.
2. Open a `searchadmin` interactive session as described in "[Opening an Interactive Session](#)" on page 1-2.
3. Update the `storageArea` object to register the new tablespaces for use by Oracle SES.
4. Update the `partitionConfig` object to have appropriate rules and to use the new `storageArea` objects.
5. Create document sources and schedule them for crawling.

See Also: *Oracle Secure Enterprise Search Administrator's Guide*

Example: Adding a Tablespace and Using It in a Partition Rule

This example registers a new tablespace for use by Oracle SES:

1. Create a new ASSM tablespace. This example uses SQL to create a tablespace named NEW_ONE:

```
CREATE TABLESPACE new_one DATAFILE '/ses_storage/new_one.dbf'
    SIZE 8G REUSE AUTOEXTEND ON NEXT 2G MAXSIZE UNLIMITED
    EXTENT MANAGEMENT LOCAL SEGMENT SPACE MANAGEMENT AUTO;
```

2. Using searchadmin, activate the partitionConfig object:

```
activate partitionConfig
```

3. Export the XML description of the partition configuration to a file named part.xml:

```
export partitionConfig --OUTPUT_FILE=part.xml
```

4. Create an XML file named search_data.xml and describe the NEW_ONE tablespace as an Oracle SES storage area, as shown here:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config xmlns:search="http://xmlns.oracle.com/search"
productVersion="11.2.1.0.0">
  <search:storageAreas>
    <search:storageArea>
      <search:name>NEW_ONE</search:name>
      <search:description>Additional storage area</search:description>
      <search:usage>PARTITION</search:usage>
    </search:storageArea>
  </search:storageAreas>
</search:config>
```

5. Open part.xml in a text editor and edit the <search:ruleType> and <search:storageArea> elements as shown here. This example hashes all documents into two partitions: one partition in the SEARCH_DATA tablespace, and the other partition in the NEW_ONE tablespace.

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config xmlns:search="http://xmlns.oracle.com/search"
productVersion="11.2.1.0.0">
  <search:partitionConfig>
    <search:partitionRules>
      <search:partitionRule>
        <search:partitionValue>EQ_DEFAULT</search:partitionValue>
        <search:valueType>META</search:valueType>
        <search:ruleType>HASH</search:ruleType>
        <search:storageArea>SEARCH_DATA,NEW_ONE</search:storageArea>
      </search:partitionRule>
    </search:partitionRules>
  </search:partitionConfig>
</search:config>
```

6. Using searchadmin, register the new storage area:

```
create storageArea --NAME=new_one --INPUT_FILE=search_data.xml
```

7. Update the partition configuration:

```
update partitionConfig --INPUT_FILE=part.xml --UPDATE_METHOD=overwrite
```

altWord

Oracle SES uses alternate words to provide suggestions to users or to expand the search results. Alternate words are useful for correcting common typing errors and for including synonyms in a search. You can create up to four alternates for the same word.

Object Type

Creatable

Object Key

keyword altKeyword

Object Key Command Syntax

```
--KEYWORD=keyword --ALT_KEYWORD=altKeyword
```

State Properties

None

Supported Operations

```
create  
createAll  
delete  
deleteAll  
deleteList  
export  
exportAll  
exportList  
getAllObjectKeys  
update  
updateAll
```

Administration GUI Page

Search - Alternate Words

XML Description

The `<search:altWords>` element describes alternate word pairs:

```
<search:altWords>  
  <search:altWord>  
    <search:keyword>  
    <search:altKeyword>  
  <search:autoExpand>
```

Element Descriptions

<search:altWords>

Contains one or more `<search:altWord>` elements.

<search:altWord>

Contains these elements:


```
<search:keyword>
<search:altKeyword>
<search:autoExpand>
```

<search:keyword>

Contains a search word or phrase. Keywords are not case sensitive. Required.

<search:altKeyword>

Contains a word or phrase that is suggested when users enter the keyword. Alternate words are displayed exactly as they appear here. Required.

<search:autoExpand>

Controls the display of alternative words in the search results: Set to `true` to include the alternative words automatically in the search, or set to `false` to display alternative word matches in a "do you mean..." message. The default is `false`.

Example

This XML document defines alternate words for OSES, text, and RAC:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:altWords>
    <search:altWord>
      <search:keyword>oses</search:keyword>
      <search:altKeyword>Oracle Secure Enterprise Search</search:altKeyword>
      <search:autoExpand>true</search:autoExpand>
    </search:altWord>
    <search:altWord>
      <search:keyword>rac</search:keyword>
      <search:altKeyword>Real Application Clusters</search:altKeyword>
      <search:autoExpand>>false</search:autoExpand>
    </search:altWord>
    <search:altWord>
      <search:keyword>text</search:keyword>
      <search:altKeyword>Oracle Text</search:altKeyword>
      <search:autoExpand>>false</search:autoExpand>
    </search:altWord>
  </search:altWords>
</search:config>
```

crawlerSettings

This object configures the global crawler settings that are used by default for new data sources. You can also configure the crawler settings for individual sources, as described in [source](#) on page 2-67.

The Oracle SES crawler is a Java process activated by a schedule. When activated, the crawler spawns a configurable number of processor threads that fetch information from various sources and index the documents. This index is used for searching sources.

Object Type

Universal

State Properties

None

Supported Operations

export
update

Administration GUI Page

Global Settings - Crawler Configuration

XML Description

The `<search:crawlerSettings>` element describes the crawler settings:

```
<search:crawlerSettings>  
  <search:numThreads>  
  <search:numProcessors>  
  <search:crawlDepth>  
    <search:limit>  
  <search:languageDetection>  
  <search:defaultLanguage>  
  <search:crawlTimeout>  
  <search:maxDocumentSize>  
  <search:charSetDetection>  
  <search:defaultCharset>  
  <search:preserveDocumentCache>  
  <search:servicePipeline>  
    <search:pipelineName>  
  <search:verboseLogging>  
  <search:logLanguage>  
  <search:badTitles>  
    <search:badTitle>
```

Element Descriptions

<search:crawlerSettings>

Contains all of the elements for configuring the crawler.

<search:numThreads>

Contains the number of processes the crawler starts to crawl sources.

<search:numProcessors>

Contains the number of CPUs (or cores in a multi-core processor) on the computer where the crawler runs. This setting determines the optimal number of processes used for document conversion. A document conversion process converts formatted documents into HTML documents for indexing.

<search:crawlDepth>

Controls whether crawling is limited to the number of nested links set by `<search:limit>`.

Attribute	Value
haslimit	Set to <code>true</code> to restrict crawling to the depth limit, or set to <code>false</code> otherwise. Required.

<search:limit>

Contains the number of nested links the crawler follows. Crawling depth starts at 0, so that the crawler only fetches the starting URL. With a crawling depth of 1, the crawler also fetches any document that it linked from the starting URL, and so forth.

<search:languageDetection>

Controls whether the crawler attempts to detect the language of documents that do not specify the language in their metadata.

Language detection involves these steps:

1. The crawler determines the language code by checking the HTTP header `content-language` or the `LANGUAGE` column of a table source.
2. If the crawler cannot determine the language, then the language recognizer attempts to determine a language. The language recognizer operates on the Latin-1 alphabet and any language with a deterministic Unicode range of characters, such as Chinese, Japanese, and Korean.
3. If the language recognizer cannot identify the language, then the default language is used.

Attribute	Value
enabled	Set to <code>true</code> to attempt to detect a language, or set to <code>false</code> to use the default language. Required.

<search:defaultLanguage>

Contains the code for the default language. The default language is used when language detection is disabled or when the crawler and language detector cannot determine the document language. See [Table 2-3, "Crawlable Languages"](#).

<search:crawlTimeout>

Contains the number of seconds allowed for the crawler to access a document.

<search:maxDocumentSize>

Contains the maximum document size in megabytes. Larger documents are not crawled.

<search:charSetDetection>

Contains a value of `true` to enable automatic character set detection, or `false` to disable it. The default value is `true`.

<search:defaultCharset>

Contains the default character set. The crawler uses this character set for indexing documents when the character set cannot be determined. See [Table 2-4, "Crawlable Character Sets"](#).

<search:preserveDocumentCache>

Controls whether the cache is saved after indexing.

Attribute	Value
<code>enabled</code>	Set to <code>true</code> to preserve the cache, or set to <code>false</code> to discard it. Required.

<search:servicePipeline>

Controls use of a document service pipeline. A document service pipeline is used for search result clustering. If your installation does not use result clustering for any source, then disable the pipeline.

Attribute	Value
<code>enabled</code>	Set to <code>true</code> to enable the pipeline, or set to <code>false</code> to disable it. Required.

<search:pipelineName>

Contains the name of the document service pipeline used when the pipeline is enabled.

<search:verboseLogging>

Controls the level of detail in logging messages.

Logging everything can create very large log files when crawling a large number of documents. However, in certain situations, it can be beneficial to configure the crawler to record detailed activity.

The crawler maintains the last seven versions of its log file. The format of the log file name is *ids.MMDDhhmm.log*, where *i* is a system-generated ID, *ds* is the source ID, *MM* is the month, *DD* is the date, *hh* is the launching hour in 24-hour format, and *mm* is the minutes. For example, if a schedule for source 23 is launched at 10 pm, July 8th, then the log file name is *i3ds23.07082200.log*. Each successive schedule launching has a unique log file name. When the total number of log files for a source reaches seven, the oldest log file is deleted.

Attribute	Value
<code>enabled</code>	Set to <code>true</code> to record all information, or set to <code>false</code> to record only summary information. Required.

<search:logLanguage>

Contains the language code for messages written to the log file. See [Table 2-3, "Crawlable Languages"](#).

<search:badTitles>

Contains one or more <search:badTitle> elements. This parameter can be set at the global level.

<search:badTitle>

Contains an exact character string for a document title that the crawler omits from the index. These bad titles are defined by default:

```
PowerPoint Presentation
Slide 1
```

Example

This XML document configures the crawler:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:crawlerSettings>
    <search:numThreads>5</search:numThreads>
    <search:numProcessors>3</search:numProcessors>
    <search:crawlDepth haslimit="true">
      <search:limit>2</search:limit>
    </search:crawlDepth>
    <search:languageDetection enabled="true"/>
    <search:defaultLanguage>en</search:defaultLanguage>
    <search:crawlTimeout>30</search:crawlTimeout>
    <search:maxDocumentSize>10</search:maxDocumentSize>
    <search:charSetDetection enabled="true"/>
    <search:defaultCharSet>8859_1</search:defaultCharSet>
    <search:cacheDirectory>${OH}/data/cache/</search:cacheDirectory>
    <search:preserveDocumentCache enabled="true"/>
    <search:servicePipeline enabled="true">
      <search:pipelineName>Default pipeline</search:pipelineName>
    </search:servicePipeline>
    <search:verboseLogging enabled="true"/>
    <search:logDirectory>${OH}/log/crawler/</search:logDirectory>
    <search:logLanguage>en-US</search:logLanguage>
    <search:badTitles>
      <search:badTitle>PowerPoint Presentation</search:badTitle>
      <search:badTitle>Slide 1</search:badTitle>
    </search:badTitles>
  </search:crawlerSettings>
</search:config>
```

docServiceInstance

A document service instance is a Java class that implements the document service API. It accepts input from documents and performs an operation on it. For example, you could create a document service for auditing or to show custom metatags.

Object Type

Creatable

Object Key

NAME

Object Key Command Syntax

--NAME=*object_name*

-n *object_name*

State Properties

None

Supported Operations

create
createAll
delete
deleteAll
deleteList
export
exportAll
exportList
getAllObjectKeys
update
updateAll

Administration GUI Page

Global Settings - Document Services - Create or Edit Document Service Instance

XML Description

The <search:docServiceInstances> element describes the document service instances:

```
<search:docServiceInstances>  
  <search:docServiceInstance>  
    <search:name>  
    <search:instanceManagerName>  
    <search:parameters>  
      <search:parameter>  
        <search:value>  
        <search:description>
```

Element Descriptions

<search:docServiceInstances>

Describes all document service instances. It contains one or more <search:docServiceInstance> elements, each defining a document service instance.

<search:docServiceInstance>

Describes a document service instance. It contains these elements:

```
<search:name>
<search:instanceManagerName>
<search:parameters>
```

<search:name>

Contains the name of the document service instance.

<search:instanceManagerName>

Contains the name of the manager for the document service instance. (Read only)

<search:parameters>

Contains one or more <search:parameter> elements, each describing a parameter of the document service instance.

<search:parameter>

Describes a parameter. It contains these elements:

```
<search:value>
<search:description>
```

Attribute	Value
name	Name of the parameter. (Read only)

<search:value>

Contains the value of the parameter.

Attribute	Value
encrypted	Indicates whether the value of <search:value> is encrypted. Set to true if the value is encrypted, or set to false if it is plain text.

<search:description>

Contains a description of the parameter. (Read only)

Example

This XML document describes the default image service:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:docServiceInstances>
    <search:docServiceInstance>
      <search:name>Default image service instance</search:name>
      <search:instanceManagerName>
        Secure Enterprise Search Image Document Service
      </search:instanceManagerName>
      <search:parameters>
```

```
<search:parameter name="attributes configuration file">
  <search:value>attr-config.xml</search:value>
  <search:description>EQG-12011:en-US:</search:description>
</search:parameter>
</search:parameters>
</search:docServiceInstance>
</search:docServiceInstances>
</search:config>
```


docServiceManager

A document service manager identifies the parameters for one or more document service instances.

Object Type

Creatable

Object Key

jarFilePath managerClassName

Object Key Command Syntax

```
--JAR_FILE=jarfile_name --MANAGER_CLASS=class
```

State Properties

None

Supported Operations

```
export
exportAll
exportList
getAllObjectKeys
```

Administration GUI Page

Global Settings - Document Services - Service Managers

XML Description

The `<search:docServiceManagers>` element describes all document service managers:

```
<search:docServiceManagers>
  <search:docServiceManager>
    <search:managerClassName>
    <search:jarFilePath>
    <search:name>
    <search:description>
    <search:parameterInfos>
      <search:parameterInfo>
        <search:defaultValue>
        <search:encrypted>
        <search:description>
```

Element Descriptions

`<search:docServiceManagers>`

Describes all document service managers. It contains one or more `<search:docServiceManager>` elements, each defining a document service manager.

`<search:docServiceManager>`

Describes a document service manager. It contains these elements:

```

<search:managerClassName>
<search:jarFilePath>
<search:name>
<search:description>
<search:parameterInfo>

```

<search:managerClassName>

Contains the class name of the manager plug-in.

<search:jarFilePath>

Contains the qualified name of the jar file. Paths can be absolute or relative path to the *ORACLE_HOME/search/lib/plugins/doc* directory.

<search:name>

Contains the name of the document service manager. (Read only)

<search:description>

Contains a description of the object. (Read only)

<search:parameterInfos>

Contains one or more `<search:parameterInfo>` elements, each describing a parameter of the document service manager. (Read only)

<search:parameterInfo>

Describes a parameter. (Read only)

This element contains these child elements:

```

<search:defaultValue>
<search:encrypted>
<search:description>

```

Attribute	Value
name	Name of the parameter. (Read only)

<search:defaultValue>

Contains the default value of the parameter. (Read only)

<search:encrypted>

Indicates whether the parameter represents a value that should be encrypted. (Read only)

Example

This XML document describes the Image Document Service Manager.

```

<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:docServiceManager>
    <search:managerClassName>
      oracle.search.plugin.doc.ordim.ImageDocumentServiceManager
    </search:managerClassName>
    <search:jarFilePath>ordim/ordimses.jar</search:jarFilePath>
    <search:name>ImageDocumentService</search:name>
    <search:description>
      document service that processes JPEG, GIF, TIFF, JPEG 2000 andDICOM image metadata
      for search
    </search:description>
  </search:docServiceManager>
</search:config>

```

```
<search:parameterInfos>
  <search:parameterInfo name="attributes configuration file">
    <search:defaultValue>attr-config.xml</search:defaultValue>
    <search:encrypted>>false</search:encrypted>
    <search:description>
name of the configuration file that defined search attributes for image documents.
The file must exist at search/lib/plugins/doc/ordim/config.
    </search:description>
  </search:parameterInfo>
</search:parameterInfos>
</search:docServiceManager>
</search:docServiceManagers>
</search:config>
```

docServicePipeline

A document service pipeline is a list of document service instances that are invoked in the order of the list. The same instance can be assigned to different pipelines, but it cannot be assigned twice in the same pipeline. You can have multiple pipeline definitions; for example, one pipeline could be used globally and another pipeline used for certain sources. An instance does not need to be in a pipeline.

Object Type

Creatable

Object Key

NAME

Object Key Command Syntax

--NAME=*object_name*

-n *object_name*

State Properties

None

Supported Operations

create
createAll
delete
deleteAll
deleteList
export
exportAll
exportList
getAllObjectKeys
update
updateAll

Administration GUI Page

Global Settings - Document Services - Create or Edit Document Service Pipeline

XML Description

The `<search:docServicePipelines>` element describes the document service pipelines:

```
<search:docServicePipelines>  
  <search:docServicePipeline>  
    <search:name>  
    <search:description>  
    <search:assignedSources>  
      <search:assignedSource>  
    <search:serviceInstances>  
      <search:serviceInstance>
```

Element Descriptions

<search:docServicePipelines>

Describes all document service pipelines. It contains one or more <search:docServicePipeline> elements, each defining a document service pipeline.

<search:docServicePipeline>

Describes a document service pipeline. It contains these elements:

```
<search:name>
<search:description>
<search:assignedSources>
<search:serviceInstances>
```

<search:name>

Contains the name of the document service pipeline.

<search:description>

Contains a description of the pipeline.

<search:assignedSources>

Contains one or more <search:assignedSource> element, each describing a source that the document service pipeline is assigned to. (Read only)

<search:assignedSource>

Contains the name of a source crawled using this pipeline. (Read only)

<search:serviceInstances>

Contains one or more <search:serviceInstance> elements, each describing an existing document service instance to be invoked by the document service pipeline.

<search:serviceInstance>

Contains the name of an existing document service instance to be invoked by the document service pipeline.

Example

This XML document describes a document service pipeline:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:docServicePipelines>
    <search:docServicePipeline>
      <search:name>My pipeline</search:name>
      <search:description>
        My document service pipeline
      </search:description>
      <search:assignedSources>
        <search:assignedSource>
          this_web_source
        </search:assignedSource>
        <search:assignedSource>
          that_web_source
        </search:assignedSource>
      </search:assignedSources>
      <search:serviceInstances>
        <search:serviceInstance>
          My web service instance
```

```
        </search:serviceInstance>
      </search:serviceInstances>
    </search:docServicePipeline>
  </search:docServicePipelines>
</search:config>
```

facetTree

Facets are a way of labeling data so that it can be navigated in different ways. A facet tree is a hierarchy of facets that narrow the number of matching documents.

Object Type

Creatable

Object Key

facetName

Object Key Command Syntax

--FACETNAME=*name*

State Properties

None

Supported Operations

create
createAll
delete
deleteAll
deleteList
export
exportAll
exportList

Administration GUI Page

None

XML Description

The `<search:facetTrees>` element describes facet trees:

```
<search:facetTrees>
  <search:facetTree>
<!-- Properties -->
    <search:facetName>
    <search:facetType>
    <search:mappedSearchAttribute>
    <search:newValuePolicy>
```

Element Descriptions

<search:facetTrees>

One or more `<search:facetTree>` elements.

<search:facetTree>

Describes a facet tree. It contains these elements:

```
<search:facetName>
<search:facetType>
<search:mappedSearchAttribute>
```

```
<search:newValuePolicy>
<search:translations>
```

<search:facetName>

Name of the facet. The maximum length is 2000 bytes in UTF-8. Required.

<search:facetType>

Data type of <search:mappedSearchAttribute>. Set to *STRING* only. Required.

<search:mappedSearchAttribute>

Name of the search attribute whose values are used as the facet values. The data type must be the same as <search:facetType>. The maximum length of a string facet is 2000 bytes in UTF-8.

<search:newValuePolicy>

Controls validation of new values in the facet during a crawl:

- **ACCEPT ALL:** Adds new values to the facet tree.

Example

This XML document describes two facet trees, Country and Variety:

```
<?xml version="1.0" encoding="UTF-8"?>

<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
<search:facetTrees>
  <search:facetTree>
    <search:facetName>Country</search:facetName>
    <search:facetType>STRING</search:facetType>
    <search:mappedSearchAttribute>Country</search:mappedSearchAttribute>
    <search:newValuePolicy>ACCEPT_ALL</search:newValuePolicy>
    <search:translations>
      <search:translation language="en">
        <search:translatedValue>Country</search:translatedValue>
      </search:translation>
    </search:translations>
  </search:facetTree>
  <search:facetTree>
    <search:facetName>Variety</search:facetName>
    <search:facetType>STRING</search:facetType>
    <search:mappedSearchAttribute>Variety</search:mappedSearchAttribute>
    <search:newValuePolicy>ACCEPT_ALL</search:newValuePolicy>
    <search:translations>
      <search:translation language="en">
        <search:translatedValue>Variety</search:translatedValue>
      </search:translation>
      <search:translation language="de">
        <search:translatedValue>Vielfalt</search:translatedValue>
      </search:translation>
    </search:translations>
  </search:facetTree>
</search:facetTrees>
</search:config>
```


globalBoundaryRules

The default boundary rules specified in this object are copied to new sources that are created with no other boundary rules.

Boundary rules restrict the crawler to those URLs that match the specified rules. Exclusion rules override inclusion rules. The order in which the rules are listed has no impact.

For file sources with no boundary rules, crawling is limited to the underlying file system access privileges. Files accessible from the specified seed file URL are crawled to the default crawling depth.

Object Type

Universal

State Properties

None

Supported Operations

export
update

Administration GUI Page

None

XML Description

The `<search:globalBoundaryRules>` element describes the rules limiting the scope of the crawler. It contains these elements:

```
<search:globalBoundaryRules>
  <search:boundaryRule>
    <search:ruleType>
    <search:ruleOperation>
    <search:rulePattern>
```

Element Descriptions

`<search:globalBoundaryRules>`

Contains one or more `<search:boundaryRule>` elements, each describing a boundary rule.

`<search:boundaryRules>`

Contains one or more `<search:boundaryRule>` elements.

`<search:boundaryRule>`

Describes a boundary rule. It contains these child elements:

```
<search:ruleType>
<search:ruleOperation>
<search:rulePattern>
```

`<search:ruleType>`

Type of URL boundary rule:

- INCLUSION: The URL matches `<search:rulePattern>`.
- EXCLUSION: The URL does not match `<search:rulePattern>`.

<search:ruleOperation>

Matching operation for a search rule pattern:

- CONTAINS: The URL contains the rule pattern for a case-insensitive match.
- STARTSWITH: The URL starts with the rule pattern for a case-insensitive match.
- ENDSWITH: The URL ends with the rule pattern for a case-insensitive match.
- REGEX: The URL matches the regular expression in a case-sensitive match.

<search:rulePattern>

The pattern of characters in the URL. You can use these special characters:

- Caret (^) denotes the beginning of a URL.
- Dollar sign (\$) denotes the end of a URL.
- A period (.) matches any one character.
- Question mark (?) before a character matches 0 or 1 occurrences of that character.
- Asterisk (*) before a pattern matches 0 or more occurrences of that pattern. Enclose the pattern in parentheses (), brackets [], or braces {}.
- A backslash (\) precedes a literal use of a special character, such as \? to match a question mark in a URL.

Files with the following filename extensions are excluded by the default boundary rule patterns:

- **Image:** bmp, png, tif
- **Audio:** wav, wma, mp3
- **Video:** avi, wmv, mpeg, mpg
- **Binary:** bin, cab, dll, dmp, ear, exe, iso, jar, scm, so, tar, war, wmv

Example

This XML document defines the default global boundary rules:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:globalBoundaryRules>
    <search:boundaryRules>
      <search:boundaryRule>
        <search:ruleType>EXCLUSION</search:ruleType>
        <search:ruleOperation>REGEX</search:ruleOperation>
        <search:rulePattern>
          (?i:(?:\.(jar)|(?:\.(bmp)|(?:\.(war)|(?:\.(ear)|(?:\.(mpg)|(?:\.(wmv)|(?:\.(mpeg)|(?:\.(sc
m)|(?:\.(iso)|(?:\.(dmp)|(?:\.(dll)|(?:\.(cab)|(?:\.(so)|(?:\.(avi)|(?:\.(wav)|(?:\.(mp3)|
(?:\.(wma)|(?:\.(bin)|(?:\.(exe)|(?:\.(iso)|(?:\.(tar)|(?:\.(png))$
        </search:rulePattern>
      </search:boundaryRule>
      <search:boundaryRule>
        <search:ruleType>EXCLUSION</search:ruleType>
        <search:ruleOperation>REGEX</search:ruleOperation>
        <search:rulePattern>\?.*(?:\+)\1{3}</search:rulePattern>
      </search:boundaryRule>
```

```
</search:boundaryRules>  
</search:globalBoundaryRules>  
</search:config>
```

globalDocumentTypes

This object identifies the default document types that are defined for each new source.

Object Type

Universal

Object Key

NAME

Object Key Command Syntax

--NAME=*object_name*

-n *object_name*

State Properties

None

Supported Operations

export
update

Administration GUI Page

None

XML Description

The `<search:documentTypes>` element describes the default document types:

```
<search:documentTypes>  
  <search:documentType>  
    <search:mimeType>
```

Element Descriptions

`<search:documentTypes>`

Contains one or more `<search:documentType>` elements.

`<search:documentType>`

Contains a `<search:mimeType>` element.

`<search:mimeType>`

Contains a supported MIME type, as described in [Table 2–1, "Document Formats"](#). These MIME types are defined by default:

```
application/msword  
application/pdf  
application/x-msexcel  
application/x-mspowerpoint  
text/html  
text/plain
```

Example

This XML document describes the default global document types:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:globalDocumentTypes>
    <search:documentTypes>
      <search:documentType>
        <search:mimeType>text/html</search:mimeType>
      </search:documentType>
      <search:documentType>
        <search:mimeType>text/plain</search:mimeType>
      </search:documentType>
      <search:documentType>
        <search:mimeType>application/msword</search:mimeType>
      </search:documentType>
      <search:documentType>
        <search:mimeType>application/pdf</search:mimeType>
      </search:documentType>
      <search:documentType>
        <search:mimeType>application/x-msexcel</search:mimeType>
      </search:documentType>
      <search:documentType>
        <search:mimeType>application/x-mspowerpoint</search:mimeType>
      </search:documentType>
    </search:documentTypes>
  </search:globalDocumentTypes>
</search:config>
```

identityPlugin

An identity plug-in provides an interface between Oracle Secure Enterprise Search and an identity management system to validate and authenticate users. An identity plug-in is required for secure searches. Secure searches return only the results that the user is allowed to view based on access privileges.

Only one identity plug-in can be active. It is responsible for all authentication and validation activity in Oracle SES. See "[activate identityPlugin](#)" on page 3-4.

Object Type

Creatable

Object Key

jarFilePath managerClassName

Object Key Command Syntax

```
--JAR_FILE=jar_filename --MANAGER_CLASS=class
```

State Properties

Property	Value
status	ACTIVE INACTIVE

Supported Operations

```
activate  
deactivate  
export  
exportAll  
exportList  
getAllObjectKeys  
getAllStates  
getState  
getStateList
```

Administration GUI Page

Global Settings - Identity Management Setup

XML Description

The `<search:identityPlugins>` element describes identity plug-ins:

```
<search:identityPlugins>  
  <search:identityPlugin>  
    <search:managerClassName>  
    <search:jarFilePath>  
    <search:description>  
    <search:version>  
    <search:authAttribute>  
  
    <!-- Include parameters for activate operation -->
```

```

<search:parameters>
  <search:parameter>
    <search:value>
    <search:description>

```

The implementation of the identity plug-in determines the parameters. You cannot create new parameters in the XML document.

Element Descriptions

<search:identityPlugins>

Contains one or more <search:identityPlugin> elements.

<search:identityPlugin>

Describes an identity plug-in. It contains these elements:

```

<search:managerClassName>
<search:jarFilePath>
<search:description>
<search:version>
<search:authAttribute>
<search:parameters>

```

<search:managerClassName>

Contains the class name of the plug-in.

<search:jarFilePath>

Contains the qualified name of the jar file. Paths can be absolute or relative to the *ORACLE_HOME*/search/lib/plugins/identity directory.

<search:description>

Contains a description of the plug-in. (Read only)

<search:version>

Contains the Oracle SES version of the plug-in. (Read only)

<search:authAttribute>

Contains the authentication attribute for the plug-in.

<search:parameters>

Contains one or more <search:parameter> elements.

<search:parameter>

Describes a plug-in parameter. Each plug-in has its own parameters. This element contains these child elements:

```

<search:value>
<search:description>

```

Attribute	Value
name	Name of the parameter.

<search:value>

Value of the parameter.

Attribute	Value
encrypted	Indicates whether the value of <search:value> is encrypted. Set to true if the password is encrypted, or set to false if it is plain text. The default value is false.

<search:description>

Description of the parameter.

Example

This XML document describes an Oracle Internet Directory plug-in:

```
<?xml version="1.0" encoding="UTF-8" ?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:identityPlugins>
    <search:identityPlugin>
      <search:managerClassName>
        oracle.search.plugin.security.identity.oid.OIDPluginManager
      </search:managerClassName>
      <search:jarFilePath>OIDPlugins.jar</search:jarFilePath>
      <search:description>Oracle Internet Directory identity plug-in manager
</search:description>
      <search:version>11.2.1.0.0</search:version>
      <search:authAttribute>nickname</search:authAttribute>
      <search:parameters>
        <search:parameter name="Host name">
          <search:value>my_computer</search:value>
          <search:description>Oracle Internet Directory host on my
computer</search:description>
        </search:parameter>
        <search:parameter name="Port">
          <search:value>7789</search:value>
          <search:description>Oracle Internet Directory port</search:description>
        </search:parameter>
        <search:parameter name="Use SSL">
          <search:value>>false</search:value>
          <search:description>SSL encryption
</search:description>
        </search:parameter>
        <search:parameter name="Realm">
          <search:value>dc=us,dc=example,dc=com</search:value>
          <search:description>Oracle Internet Directory realm</search:description>
        </search:parameter>
        <search:parameter name="User name">
          <search:value>cn=orcladmin</search:value>
          <search:description>Oracle Internet Directory user
name</search:description>
        </search:parameter>
        <search:parameter name="Password">
          <search:value encrypted="false">mypassword</search:value>
          <search:description>Password</search:description>
        </search:parameter>
        <search:parameter name="Use User Cache">
          <search:value>>false</search:value>
          <search:description> </search:description>
        </search:parameter>
        <search:parameter name="User Cache Source Name">
          <search:description> </search:description>
        </search:parameter>
      </search:parameters>
    </search:identityPlugin>
  </search:identityPlugins>
</search:config>
```



```
        </search:parameter>  
    </search:parameters>  
</search:identityPlugin>  
</search:identityPlugins>  
</search:config>
```

index

The index is a metadata repository for crawled documents and provides the search results list.

Object Type

Universal

State Properties

Property	Value
estimatedFragmentation	Decimal number representing the percent of fragmentation; optimize the index when fragmentation is greater than 50%

Supported Operations

export
getState
update

Administration GUI Page

Global Settings - Set Indexing Parameters

XML Description

The `<search:index>` element describes indexing:

```
<search:index>  
  <search:indexingBatchSize>  
  <search:indexingMemorySize>
```

Element Descriptions

<search:index>

Describes the indexing parameters. It contains these elements:

```
<search:indexingBatchSize>  
<search:indexingMemorySize>
```

<search:indexingBatchSize>

Contains the size in megabytes of the crawled documents before indexing begins. Crawling and indexing run concurrently after the initial batch size is reached. While the index is running, the crawler continues to crawl documents.

The default size is 250 MB.

<search:indexingMemorySize>

Contains the number of megabytes of memory used for indexing before swapping to disk. A large amount of memory improves both indexing and query performance.

The default size is 275 MB.

Example

This XML document configures the indexing properties:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:index>
    <search:indexingBatchSize>250</search:indexingBatchSize>
    <search:indexingMemorySize>275</search:indexingMemorySize>
  </search:index>
</search:config>
```

indexOptimizer

Optimizing the index reduces fragmentation and may significantly increase the speed of searches. In general, the fragmentation percentage should be less than 50%. A higher percentage indicates that search performance is compromised. If it is over 75%, then you should optimize the index as soon as possible.

Optimization of a very large index may take several hours. Schedule optimization during hours of low usage to ensure minimal disruption to users.

Object Type

Universal

State Properties

Property	Value
endTime	The date and time that the last optimization ended, in the form Day, DD Mon YYYY, HH:MM:SS GMT
startTime	The date and time that the last optimization started, in the same form as endTime
status	BLOCKED: Oracle Enterprise Scheduler attempted to start index optimization, but its execution was blocked. For example, a blackout date might prevent the job from executing. The job starts as soon as the blocking condition ends. DISABLED: Index optimization is currently disabled. EXECUTING: The index is currently being optimized. FAILED: Index optimization stopped with an error. HOLD: The Oracle Enterprise Scheduler administrator explicitly held execution of the index optimization. LAUNCHING: Index optimization has started. SCHEDULED: Index optimization is scheduled. STOPPED: Index optimization has stopped.

Supported Operations

activate
deactivate
export
getState
start
update

Administration GUI Page

Global Settings - Index Optimization

XML Description

The `<search:indexOptimizer>` element describes index optimization:

```
<search:indexOptimizer>  
  <search:frequency>
```

```

<!-- For hourly optimization -->
  <search:hourly>
    <search:hoursBtwnLaunches>

<!-- For daily optimization -->
  <search:daily>
    <search:daysBtwnLaunches>
    <search:startHour>

<!-- For weekly optimization -->
  <search:weekly>
    <search:weeksBtwnLaunches>
    <search:startDayOfWeek>
    <search:startHour>

<!-- For monthly optimization -->
  <search:monthly>
    <search:monthsBtwnLaunches>
    <search:startDayOfMonth>
    <search:startHour>

<!-- For all frequencies -->
  <search:duration>
    <search:maxHours>

```

Element Descriptions

<search:indexOptimizer>

Describes index optimization schedule. It contains these elements:

```

<search:frequency>
<search:duration>

```

<search:frequency>

Describes the optimization schedule. It contains one of these elements:

```

<search:hourly>
<search:daily>
<search:weekly>
<search:monthly>

```

<search:hourly>

Describes an hourly schedule. It contains a <search:hoursBtwnLaunches> element.

<search:hoursBtwnLaunches>

The number of hours between optimizations.

<search:daily>

Describes a daily schedule. It contains these elements:

```

<search:daysBtwnLaunches>
<search:startHour>

```

<search:daysBtwnLaunches>

The number of days between optimizations.

<search:startHour>

The time the crawl begins using a 24-hour clock, such as 9 for 9:00 a.m. or 23 for 11:00 p.m. The default value is 1.

<search:weekly>

Describes a weekly schedule (default). It contains these elements:

```
<search:weeksBtwnLaunches>
<search:startDayOfWeek>
<search:startHour>
```

<search:weeksBtwnLaunches>

The number of weeks between optimizations.

<search:startDayOfWeek>

The day of the week that the crawl begins, such as MONDAY or TUESDAY. The default is SATURDAY.

<search:monthly>

Describes a monthly schedule. It contains these elements:

```
<search:monthsBtwnLaunches>
<search:startDayOfMonth>
<search:startHour>
```

<search:monthsBtwnLaunches>

The number of time periods between starting a crawl.

<search:startDayOfMonth>

An integer value for the day of the month that the crawl begins, such as 1 or 15.

<search:duration>

Controls the duration of the optimization process. It contains a `<search:maxhours>` element.

Attribute	Value
haslimit	Set to true to enforce the time limit, or set to false to allow the process to finish. Required.

<search:maxHours>

The number of hours the optimization process is allowed to continue. For best results, allow the optimization to finish.

Example

This XML document describes the index optimizer settings:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:indexOptimizer>
    <search:frequency>
      <search:weekly>
        <search:weeksBtwnLaunches>3</search:weeksBtwnLaunches>
        <search:startDayOfWeek>MONDAY</search:startDayOfWeek>
        <search:startHour>23</search:startHour>
      </search:weekly>
    </search:frequency>
    <search:duration haslimit="true">
```

```
        <search:maxHours>8</search:maxHours>
    </search:duration>
</search:indexOptimizer>
</search:config>
```

partitionConfig

Partitioning is used to improve the query performance of large data sets. You can use multiple partitions to distribute the document index across physical storage devices. I/O is then performed in parallel to gain the best query performance.

See Also: ["Partitioning for Parallel Query"](#) on page 2-10

Object Type

Universal

State Properties

Property	Value
status	ACTIVE INACTIVE

Supported Operations

activate
export *
getState
update

* The `partitionConfig` object must be activated before you can export it.

Administration GUI Page

None

XML Description

The `<search:partitionConfig>` element describes partitioning:

```
<search:partitionConfig>
  <search:partitionAttrs>
    <search:partitionAttr>
      <search:name>
    <search:partitionRules>
      <search:partitionRule>
        <search:partitionValue>
        <search:valueType>
        <search:ruleType>
        <search:storageArea>
```

Element Descriptions

`<search:partitionConfig>`

Describes the partition configuration rules. It contains these elements:

```
<search:partitionAttrs>
<search:partitionRules>
```

`<search:partitionAttrs>`

Contains a `<search:partitionAttr>` element.

<search:partitionAttr>

Describes an attribute on which partitioning is based. It contains a `<search:name>` element.

<search:name>

Contains the name of any String-type search attribute, or one of these values:

- `EQ_SOURCE_NAME`: The name of the data source.
- `EQ_SOURCE_TYPE`: The source type, which must exactly match a defined source type name. For a list of source types, export the [sourceType](#) object.

<search:partitionRules>

Contains one or more `<search:partitionRule>` elements.

<search:partitionRule>

Describes a partition rule for the expected values of the partitioning attribute. It contains these elements:

```
<search:partitionValue>
<search:valueType>
<search:ruleType>
<search:storageArea>
```

<search:partitionValue>

Contains the partition value. It can contain an expected value of the partitioning attribute or one of these values:

- `EQ_OTHER`: Identifies the partition rule when none of the other defined values of `<search:partitionValue>` match the attribute value of the document.
- `EQ_DEFAULT`: Identifies the partition rule when no partitioning attribute is defined.

<search:valueType>

Contains the type of `partitionValue`: `ATTR` if it is an attribute value, or `META` if it is `EQ_OTHER` or `EQ_DEFAULT`. Required.

<search:ruleType>

Contains the type of partition rule. Required.

- `HASH`: Evenly distributes the index values for a large set of documents across the list of storage areas. Each partition is located in one storage area.
- `VALUE`: Maps the specified partition value to one partition. Oracle SES assigns this rule initially when partitioning is enabled and only one storage area is defined out of the box. Do not use this value when you plan to use multiple storage areas for parallel query. Specify `HASH` instead.

<search:storageArea>

For a `VALUE` rule, the name of a single `storageArea` object.

For a `HASH` rule, a comma-delimited list of `storageArea` objects used by this partition rule. Repeat the name of a `storageArea` to create multiple partitions within a single tablespace. Remember that a `storageArea` object is a tablespace in Oracle Database that is registered for use with Oracle SES.

For example, this list creates one partition in each tablespace:

```
sa1, sa2, sa3
```

The next list creates three partitions in `sa1` and two partitions in `sa2`:

```
sa1, sa1, sa1, sa2, sa2
```

Examples

This XML document describes partitioning of the document index across six storage areas named sa1 to sa6:

```
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:partitionConfig>
    <search:partitionRules>
      <search:partitionRule>
        <search:partitionValue>EQ_DEFAULT</search:partitionValue>
        <search:valueType>META</search:valueType>
        <search:ruleType>HASH</search:ruleType>
        <search:storageArea>sa1, sa2, sa3, sa4, sa5, sa6</search:storageArea>
      </search:partitionRule>
    </search:partitionRules>
  </search:partitionConfig>
</search:config>
```

This example creates a partitioning rule based on the Language attribute. Documents with a value of en (English) or ja (Japanese) for the Language attribute are indexed in the sa1 storage area. All other documents are hashed into the sa2 and sa3 storage areas.

```
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:partitionConfig>
    <search:partitionAttrs>
      <search:partitionAttr>
        <search:name>Language</search:name>
      </search:partitionAttr>
    </search:partitionAttrs>
    <search:partitionRules>
      <search:partitionRule>
        <search:partitionValue>en, ja</search:partitionValue>
        <search:valueType>ATTR</search:valueType>
        <search:ruleType>VALUE</search:ruleType>
        <search:storageArea>sa1</search:storageArea>
      </search:partitionRule>
      <search:partitionRule>
        <search:partitionValue>EQ_DEFAULT</search:partitionValue>
        <search:valueType>META</search:valueType>
        <search:ruleType>HASH</search:ruleType>
        <search:ruleSetting></search:ruleSetting>
        <search:storageArea>sa2, sa3</search:storageArea>
      </search:partitionRule>
    </search:partitionRules>
  </search:partitionConfig>
</search:config>
```

The next example stores the document index from the Doc Library source in sa1, from My Web Site in sa2, and from all other sources in sa3:

```
<search:config xmlns:search="http://xmlns.oracle.com/search"
productVersion="11.2.1.0.0">
  <search:partitionConfig>
    <search:partitionAttrs>
      <search:partitionAttr>
        <search:name>EQ_SOURCE_NAME</search:name>
```

```
</search:partitionAttr>
</search:partitionAttrs>
  <search:partitionRules>
    <search:partitionRule>
      <search:partitionValue>Doc Library</search:partitionValue>
      <search:valueType>ATTR</search:valueType>
      <search:ruleType>VALUE</search:ruleType>
      <search:storageArea>sa1</search:storageArea>
    </search:partitionRule>
    <search:partitionRule>
      <search:partitionValue>My Web Site</search:partitionValue>
      <search:valueType>ATTR</search:valueType>
      <search:ruleType>VALUE</search:ruleType>
      <search:storageArea>sa2</search:storageArea>
    </search:partitionRule>
    <search:partitionRule>
      <search:partitionValue>EQ_OTHER</search:partitionValue>
      <search:valueType>META</search:valueType>
      <search:ruleType>VALUE</search:ruleType>
      <search:storageArea>sa3</search:storageArea>
    </search:partitionRule>
  </search:partitionRules>
</search:partitionConfig>
</search:config>
```

proxyLogin

When performing a secure search on a federation endpoint, the federation broker must transmit the identity of the user to the federation endpoint. If the endpoint instance trusts the broker instance, then the broker instance can proxy as the end user. To establish this trust relationship, Oracle SES instances exchange a secret. This secret is exchanged in the form of a trusted entity.

A trusted entity consists of two values: an entity name and an entity password. Each Oracle SES instance can have one or more trusted entities that it can use to participate in secure federated search. A federated trusted entity is also referred to as a proxy user or a proxy log-in.

Object Type

Creatable

Object Key

name

Object Key Command Syntax

```
--NAME=object_name
```

```
-n object_name
```

State Properties

None

Supported Operations

```
create  
createAll  
delete  
deleteAll  
deleteList  
export  
exportAll  
exportList  
getAllObjectKeys  
update  
updateAll
```

Administration GUI Page

Global Settings - Federation Trusted Entities

XML Description

The `<search:proxyLogins>` element describes proxy log-ins:

```
<search:proxyLogins>  
  <search:proxyLogin>  
    <search:name>  
    <search:password>  
    <search:useIdentityPlugin>
```

Element Descriptions

<search:proxyLogins>

Describes proxy log-ins. It contains one or more <search:proxyLogin> elements.

<search:proxyLogin>

Describes a proxy log-in. It contains these elements:

```
<search:name>
<search:password>
<search:useIdentityPlugin>
```

<search:name>

Name of the proxy. Required.

<search:password>

Password for the proxy server. Required when <search:useIdentityPlugin> is false.

Attribute	Value
encrypted	Indicates whether the value of <search:password> is encrypted. Set to true if the password is encrypted, or set to false if it is plain text.

<search:useIdentityPlugin>

Controls use of an identity plug-in. Set to true to use the active identity plug-in for authentication, or set to false otherwise. Required.

Example

This XML document describes two proxy log-ins:

```
<?xml version="1.0" encoding="UTF-8" ?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:proxyLogins>
    <search:proxyLogin>
      <search:name>this_proxy</search:name>
      <search:useIdentityPlugin>true</search:useIdentityPlugin>
    </search:proxyLogin>
    <search:proxyLogin>
      <search:name>that_proxy</search:name>
      <search:password encrypted="false">password</search:password>
      <search:useIdentityPlugin>false</search:useIdentityPlugin>
    </search:proxyLogin>
  </search:proxyLogins>
</search:config>
```

queryConfig

Query configuration enables you to customize the query results and tune the search engine.

Object Type

Universal

State Properties

None

Supported Operations

export
update

Administration GUI Page

Global Settings - Query Configuration

XML Description

The `<search:queryConfig>` element sets the query configuration parameters:

```
<search:queryConfig>
  <search:maxNumResults>
  <search:lastCrawlDatesMergeRange>
  <search:searchTimeout>
  <search:enableWildcardQueries>
  <search:displayUrls>
    <search:tableDisplayUrl>
    <search:fileDisplayUrl>
    <search:mailingListDisplayUrl>
    <search:emailDisplayUrl>
  <search:relevancyBoosting>
  <search:spellingCorrection>
    <search:useLanguageDictionary>
    <search:useIndexedDocsAndQueryLog>
  <search:hitCount>
    <search:countMethod>
    <search:maxExactHitCount>
  <search:queryStatistics>
    <search:loggingPeriod>
  <search:urlSubmission>
    <search:sourceName>
    <search:checkUrlBoundaryRules>
  <search:federation>
    <search:timeout>
    <search:minNumThreads>
    <search:maxNumThreads>
  <search:queryTimeAuthorization>
    <search:timeout>
    <search:minNumThreads>
    <search:maxNumThreads>
    <search:logFilteredDocs>
  <search:secureSearch>
    <search:loginRequirement>
```

```

<search:securityFilterLifespan>
<search:securityFilterRefreshWaitTimeout>
<search:authenticationTimeout>
<search:authorizationTimeout>
<search:minNumThreads>
<search:maxNumThreads>
<search:preserveStaleSecurityFilterOnError>

```

Element Descriptions

<search:queryConfig>

Describes query configuration parameters. It contains these elements:

```

<search:maxNumResults>
<search:lastCrawlDatesMergeRange>
<search:timeout>
<search:enableWildcardQueries>
<search:displayUrls>
<search:relevancyBoosting>
<search:parallelQuery>
<search:spellingCorrection>
<search:hitCount>
<search:queryStatistics>
<search:urlSubmission>
<search:federation>
<search:queryTimeauthorization>
<search:secureSearch>

```

<search:maxNumResults>

Maximum number of search results returned by a query.

<search:lastCrawlDatesMergeRange>

Threshold for merging last crawl dates from different data sources. The default value is 86,400,000.

<search:searchTimeout>

Number of milliseconds allowed for processing each parallel query phase. The default value is 1,200,000.

<search:enableWildcardQueries>

Controls whether question marks (?) and asterisks (*) in queries are used as wildcards or literal characters for matching documents.

Attribute	Value
enabled	Set to <code>true</code> to enable wildcards, or set to <code>false</code> otherwise. True is the default for Oracle Fusion Applications. Required.

<search:displayUrls>

Describes the display URLs. It contains these elements:

```

<search:tableDisplayUrl>
<search:fileDisplayUrl>
<search:mailingListDisplayUrl>
<search:emailDisplayUrl>

```

<search:tableDisplayUrl>

URL used to display the retrieved data for a table source.

<search:fileDisplayUrl>

URL used to display the retrieved data for a file source.

<search:mailingListDisplayUrl>

URL used to display the retrieved data for a mailing list source.

<search:emailDisplayUrl>

URL used to display the retrieved data for an e-mail source.

<search:relevancyBoosting>

Controls relevancy boosting.

Attribute	Value
enabled	Set to <code>true</code> to enable relevancy boosting, or set to <code>false</code> otherwise. Required.

<search:spellingCorrection>

Controls spelling correction. When enabled, this element contains these child elements:

```
<search:useLanguageDictionary>
<search:useIndexedDocsAndQueryLog>
```

Attribute	Value
enabled	Set to <code>true</code> to enable spelling correction, or set to <code>false</code> otherwise. Required.

<search:useLanguageDictionary>

Controls use of an English dictionary for spelling suggestions. Set to `true` to use an English dictionary, or set to `false` to derive spelling suggestions only from terms in indexed documents and the query log. Consider `false` if users typically search for non-English terms.

<search:useIndexedDocsAndQueryLog>

Contains a value of `true` or `false` to control use of terms from indexed documents and the query log for spelling suggestions. Terms that occur frequently are extracted to the Oracle SES dictionary. Set to `true` to use terms from these sources, or set to `false` to use only the English dictionary for suggestions. Consider `false` if suggestions from crawled documents to all search users may breach security.

<search:hitCount>

Contains a `<search:countMethod>` element.

<search:countMethod>

A hit count method:

- `APPROX_COUNT`: Displays an estimated number of matching documents. This method supports better performance than `EXACT_COUNT`. (Default)
- `EXACT_COUNT`: Displays the exact number of matching documents.
- `EXACT_COUNT_QTA`: Displays the exact number of matching documents adjusted for query-time filtering.

<search:maxExactHitCount>

The maximum number of exact results. An estimated number is returned for a higher number of results.

<search:queryStatistics>

Controls the collection of search statistics. Set to `true` to collect statistics, or set to `false` otherwise. This operation degrades search performance, so you should disable it during peak hours.

Attribute	Value
enabled	Set to <code>true</code> to enable collection or set to <code>false</code> otherwise. Required.

<search:loggingPeriod>

Number of days the data is saved. Statistics are compiled for this number of days.

<search:urlSubmission>

Controls the submission of URLs. When enabled, this element contains these child elements:

```
<search:sourceName>
<search:checkUrlBoundaryRules>
```

Attribute	Value
enabled	Set to <code>true</code> to enable URL submission, or set to <code>false</code> otherwise. Required.

<search:sourceName>

A Web source to which user-suggested URLs are added.

<search:checkUrlBoundaryRules>

Controls the enforcement of boundary rules for URLs submitted by users. Set to `true` to accept only URLs that match the rules, or set to `false` to ignore the boundary rules.

<search:federation>

Describes the querying parameters of federated sources. It contains these child elements:

```
<search:timeout>
<search:minNumThreads>
<search:maxNumThreads>
```

<search:timeout>

Contains the number of milliseconds for search results to be returned.

<search:minNumThreads>

Contains the minimum number of processes to use for searching when demand is low.

<search:maxNumThreads>

Contains the maximum number of processes to use for searching when demand is high.

<search:queryTimeAuthorization>

Describes authorization. It contains these optional child elements:

```
<search:timeout>
```

```
<search:minNumThreads>
<search:maxNumThreads>
<search:logFilteredDocs>
```

<search:logFilteredDocs>

Controls document logging. Set to `true` to record all filtered documents in the query application log file, or set to `false` otherwise

Query-time filtering errors are always logged.

<search:secureSearch>

Describes secure search. It contains these child elements:

```
<search:loginRequirement>
<search:securityFilterLifespan>
<search:authenticationTimeout>
<search:authorizationTimeout>
<search:minNumThreads>
<search:maxNumThreads>
<search:preserveStaleSecurityFilterOnError>
```

<search:loginRequirement>

A log-in method:

- `ALL_CONTENT`: Users must log in to view any content, whether public or secure.
- `SECURE_CONTENT`: Users must log in to view secure content.

<search:securityFilterLifespan>

Number of minutes a stored security filter is retained. Set to a value between 0 (no cache) and 526500 (one-year cache retention).

<search:securityFilterRefreshWaitTimeout>

Number of milliseconds to block a query for a security filter refresh before returning no results or using an expired security filter, depending on the value of [<search:preserveStaleSecurityFilterOnError>](#). The default value is 1000 ms.

<search:authenticationTimeout>

Number of milliseconds for authentication.

<search:authorizationTimeout>

Number of milliseconds for authorization.

<search:preserveStaleSecurityFilterOnError>

Controls the response to queries when an expired security filter is being refreshed. Set to `true` to use the expired security filter, or set to `false` to return no results. The default value is `false`.

When the security filter is expired, Oracle SES triggers a security filter refresh. During the refresh, if there is any error from any data source, then the user's existing security filter is preserved or overwritten, depending on this setting.

Example

This XML document describes the query parameters:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config xmlns:search="http://xmlns.oracle.com/search"
productVersion="11.2.1.0.0">
  <search:queryConfig>
    <search:maxNumResults>200</search:maxNumResults>
```

```

<search:lastCrawlDatesMergeRange>8640000</search:lastCrawlDatesMergeRange>
<search:searchTimeout>120000</search:searchTimeout>
<search:enableWildcardQueries enabled="false" />
<search:displayUrls>
  <search:tableDisplayUrl>
    /search/query/display.jsp?type=table</search:tableDisplayUrl>
  <search:fileDisplayUrl>
    /search/query/display.jsp?type=file</search:fileDisplayUrl>
  <search:mailingListDisplayUrl>
    /search/query/mail.jsp</search:mailingListDisplayUrl>
  <search:emailDisplayUrl>
    /search/query/pmail.jsp</search:emailDisplayUrl>
</search:displayUrls>
<search:relevancyBoosting enabled="true" />
<search:spellingCorrection enabled="false" />
<search:hitCount>
  <search:countMethod>APPROX_COUNT</search:countMethod>
</search:hitCount>
<search:queryStatistics enabled="true">
  <search:loggingPeriod>7</search:loggingPeriod>
</search:queryStatistics>
<search:urlSubmission enabled="false" />
<search:federation>
  <search:timeout>30000</search:timeout>
  <search:minNumThreads>5</search:minNumThreads>
  <search:maxNumThreads>20</search:maxNumThreads>
</search:federation>
<search:queryTimeAuthorization>
  <search:timeout>30000</search:timeout>
  <search:minNumThreads>5</search:minNumThreads>
  <search:maxNumThreads>20</search:maxNumThreads>
  <search:logFilteredDocs>>false</search:logFilteredDocs>
</search:queryTimeAuthorization>
<search:secureSearch>
  <search:loginRequirement>SECURE_CONTENT</search:loginRequirement>
  <search:securityFilterLifespan>60</search:securityFilterLifespan>
  <search:authenticationTimeout>10000</search:authenticationTimeout>
  <search:authorizationTimeout>10000</search:authorizationTimeout>
  <search:minNumThreads>5</search:minNumThreads>
  <search:maxNumThreads>20</search:maxNumThreads>
  <search:securityFilterRefreshWaitTimeout>
    1000</search:securityFilterRefreshWaitTimeout>
  <search:preserveStaleSecurityFilterOnError>
    false</search:preserveStaleSecurityFilterOnError>
</search:secureSearch>
</search:queryConfig>
</search:config>

```

relevanceRanking

Relevance ranking controls the importance given to various document attributes when ordering the search results. By customizing the ranking rules, you can produce more relevant search results for your enterprise.

In Oracle SES 11.1.2 and earlier releases, these parameters were stored in a file named `ranking.xml`.

Object Type

Universal

State Properties

None

Supported Operations

export
update

Administration GUI Page

None

XML Description

The `<search:relevanceRanking>` element describes the relevance ranking of search attributes:

```
<search:relevanceRanking>
  <search:defaultFactors>
    <search:defaultFactor>
      <search:name>
      <search:weight>
    <search:customFactors>
      <search:customFactor>
        <search:attributeName>
        <search:attributeType>
        <search:factorType>
          <search:queryFactor>
            <search:weight>
          <search:staticFactor>
            <search:matches>
              <search:match>
                <search:value>
                <search:weight>
```

Element Descriptions

`<search:relevanceRanking>`

Contains these elements:

```
<search:defaultFactors>
<search:customFactors>
```

<search:defaultFactors>

Sets the weights for the default attributes used for ranking. It contains one or more <search:defaultFactor> elements.

Attribute	Value
enabled	Set to <code>true</code> to enable default factors (default), or set to <code>false</code> otherwise. Required.

<search:defaultFactor>

Identifies a default search attribute and its weight. It contains these elements:

```
<search:name>
<search:weight>
```

The following table lists the default attributes and weights:

Attribute	Weight
Title	High
Description	Medium
Reftext	High
Keywords	Medium
Subject	Low
Author	Medium
H1headline	Low
H2headline	Very low
Url	Low
Urldepth	High
Language Match	High
Linkscore	High

<search:name>

Name of the attribute, such as `Title` or `Description`.

<search:weight>

Contains the weight assigned to an attribute: `very high`, `high`, `medium`, `low`, `very low`, and `none`. If the weight is not specified, the default weight for the attribute is used.

<search:customFactors>

Adds other attributes for ranking. It contains one or more <search:customFactor> elements.

<search:customFactor>

Describes an attribute used for ranking. Any indexed search attribute can be a custom ranking attribute. This element contains these child elements:

```
<search:attributeName>
<search:attributeType>
<search:factorType>
```

<search:attributeName>

The exact name of a search attribute defined in Oracle SES. This name is case-insensitive.

<search:attributeType>

The data type of the attribute. Only `String` is supported.

<search:factorType>

Identifies the type of ranking. It contains one of these elements:

```
<search:queryFactor>
<search:staticFactor>
```

<search:queryFactor>

Matches the attribute value against query terms. For example, if a custom attribute has the value "Terry Francona," then a query for "Terry Francona" is given the relevancy ranking of the attribute.

This element contains a `<search:weight>` element.

<search:staticFactor>

Matches the attribute value against an attribute of the documents. For example, assume a company identifies its documents as good or poor and defines a custom search attribute for quality. If a custom attribute for quality ranks good documents very high and poor documents low, then a good document appears higher than a poor document in the list of search results.

This element contains a `<search:matches>` element.

<search:matches>

Contains one or more `<search:match>` elements.

<search:match>

Identifies a matching search attribute and value. It contains these elements:

```
<search:value>
<search:weight>
```

<search:value>

The value of the search attribute specified in `<search:name>` being given a weight.

Example

This XML document describes relevance ranking:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:relevanceRanking>
    <search:defaultFactors enabled="true">
      <search:defaultFactor>
        <search:name>TITLE</search:name>
        <search:weight>MEDIUM</search:weight>
      </search:defaultFactor>
    </search:defaultFactors>
  </search:relevanceRanking>
</search:config>
```

schedule

Schedules define the frequency of updating the index with information about each source.

The Oracle SES middle tier time zone is used to execute the schedule.

Object Type

Creatable

Object Key

name

Object Key Command Syntax

--NAME=*object_name*

-n *object_name*

State Properties

Property	Value
lastCrawled	The date of the last scheduled crawl in the format Day, DD MMM YYYY HH:MM:SS GMT
logFilePath	The full path to the crawler log files
nextCrawl	The date of the next scheduled crawl in the same format as lastCrawled
scheduleError	The text of the last error message
status	<p>BLOCKED: Oracle Enterprise Scheduler attempted to start the job, but its execution was blocked. For example, a blackout date might prevent the job from executing. The job starts as soon as the blocking condition ends.</p> <p>DISABLED: The job is currently disabled.</p> <p>EXECUTING: The job is currently running.</p> <p>FAILED: The job stopped with an error. Oracle Enterprise Scheduler will attempt to restart the crawl at the next scheduled time.</p> <p>HOLD: The Oracle Enterprise Scheduler administrator explicitly held execution of the job.</p> <p>LAUNCHING: The crawler has started.</p> <p>SCHEDULED: The crawler is scheduled.</p> <p>STOPPED: The crawler has stopped.</p>

Supported Operations

activate
create
createAll
deactivate
delete
deleteAll
deleteList

```
export
exportAll
exportList
getAllObjectKeys
getAllStates
getState
getStateList
start
stop
update
updateAll
```

Administration GUI Page

Home - Schedules - Create or Edit Schedule

XML Description

A `<search:schedules>` element describes the schedules for crawling sources:

```
<search:schedules>
  <search:schedule>
    <search:name>
    <search:crawlingMode>
    <search:recrawlPolicy>
    <search:frequency>

<!-- For hourly crawls: -->
    <search:hourly>
      <search:hoursBtwnLaunches>

<!-- For daily crawls: -->
    <search:daily>
      <search:daysBtwnLaunches>
      <search:startHour>

<!-- For weekly crawls: -->
    <search:weekly>
      <search:weeksBtwnLaunches>
      <search:startDayOfWeek>
      <search:startHour>

<!-- For monthly crawls: -->
    <search:monthly>
      <search:monthsBtwnLaunches>
      <search:startDayOfMonth>
      <search:startHour>

<!-- For manual crawls: -->
    <search>manual>

<!-- For all crawls: -->
    <search:assignedSources>
      <search:assignedSource>
```

Element Descriptions

`<search:schedules>`

Contains one or more `<search:schedule>` elements, one for each schedule.

<search:schedule>

Describes a schedule for crawling sources. It contains these elements:

```
<search:name>
<search:crawlingMode>
<search:recrawlPolicy>
<search:frequency>
<search:assignedSources>
```

<search:name>

The name of the schedule. Required.

<search:crawlingMode>

A crawling mode:

- **ACCEPT_ALL**: Crawls and indexes all URLs in the source, and extracts and indexes any links found in the URLs of Web sources. If the URL has been crawled before, then it is reindexed only after it changes.
- **EXAMINE_URLS**: Crawls but does not index any URLs in the source. It also crawls any links found in those URLs. Use this mode when first crawling a new source, so that you can examine the documents and refine the crawling parameters if necessary before indexing.
- **INDEX_ONLY**: Crawls and indexes all URLs in the source. It does not extract any links from those URLs. In general, select this option for a source that has been crawled previously using **EXAMINE_URLS**.

<search:recrawlPolicy>

Specifies the recrawl policy:

- **PROCESS_ALL**: Recrawls all documents in the source.
- **PROCESS_CHANGED**: Crawls only documents that changed after the last crawl.
For file sources, documents are also crawled if the parent directory changed.

<search:frequency>

Controls the intervals between starting a schedule. It contains one of these elements:

```
<search:hourly>
<search:daily>
<search:weekly>
<search:monthly>
<search>manual>
```

<search:hourly>

Describes an hourly schedule. It contains a `<search:hoursBtwnLaunches>` element.

<search:hoursBtwnLaunches>

Number of hours between starting crawls, in the range of 1 to 23.

<search:daily>

Describes a daily schedule. It contains these elements:

```
<search:daysBtwnLaunches>
<search:startHour>
```

<search:daysBtwnLaunches>

Number of days between starting crawls, in the range of 1 to 99.

<search:startHour>

The time the crawl begins using a 24-hour clock, such as 9 for 9:00 a.m. or 23 for 11:00 p.m.

<search:weekly>

Describes a weekly schedule. It contains these elements:

```
<search:weeksBtwnLaunches>
<search:startDayOfWeek>
<search:startHour>
```

<search:weeksBtwnLaunches>

Number of weeks between starting crawls, in the range of 1 to 12.

<search:startDayOfWeek>

The day of the week that the crawl begins, such as MONDAY or TUESDAY.

<search:monthly>

Describes a monthly schedule. It contains these elements:

```
<search:monthsBtwnLaunches>
<search:startDayOfMonth>
<search:startHour>
```

<search:monthsBtwnLaunches>

Number of months between starting crawls, in the range of 1 to 12.

<search:startDayOfMonth>

An integer value for the day of the month that the crawl begins, such as 1 or 15.

<search>manual>

Describes a manual search.

<search:assignedSources>

Contains one or more `<search:assignedSource>` elements, one for each source that is crawled using this schedule.

<search:assignedSource>

The name of a source crawled using this schedule. The source cannot be a mailing-list source or a federated source.

Example

This XML document describes a schedule for `mySource` that runs every third Monday at 11:00 p.m.:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:schedules>
    <search:schedule>
      <search:name>schedule1</search:name>
      <search:crawlingMode>INDEX_ONLY</search:crawlingMode>
      <search:recrawlPolicy>PROCESS_ALL</search:recrawlPolicy>
      <search:frequency>
        <search:weekly>
          <search:weeksBtwnLaunches>3</search:weeksBtwnLaunches>
          <search:startDayOfWeek>MONDAY</search:startDayOfWeek>
          <search:startHour>23</search:startHour>
        </search:weekly>
      </search:frequency>
    </search:schedule>
  </search:schedules>
</search:config>
```

```
    </search:frequency>
    <search:assignedSources>
      <search:assignedSource>mySource</search:assignedSource>
    </search:assignedSources>
  </search:schedule>
</search:schedules>
</search:config>
```

searchAttr

Search attributes are attributes exposed to the search user. Oracle Secure Enterprise Search (SES) provides system-defined attributes, such as author and description, and enables administrators to create custom attributes.

When the indexed documents contain metadata, such as author and date information, you can let users refine their searches based on this information. For example, users can search for all documents by a particular author, that is, where the author attribute has a particular value.

Oracle Secure Enterprise Search has several default search attributes. They can be incorporated in search applications for a more detailed search and richer presentation. If an attribute List of Values (LOV) is available, then the crawler registers the LOV definition, which includes attribute value, attribute value display name, and its translation.

You can create, delete, and update custom attributes, and update the default attributes.

Object Type

Creatable

Object Key

name

Object Key Command Syntax

--NAME=*object_name*

-n *object_name*

State Properties

None

Supported Operations

create
createAll
delete
deleteAll
deleteList
export
exportAll
exportList
getAllObjectKeys
update
updateAll

Administration GUI Pages

Global Settings - Search Attributes
Global Settings - Search Attributes - Manage LOVs for Attribute
Global Settings - Translate Search Attribute Name
Global Settings - Translate LOV Display Name

XML Description

The `<search:Attrs>` element describes search attributes:

```
<search:searchAttrs>
  <search:searchAttr>
    <search:name>
    <search:type>
    <search:translations>
    <search:lovEntries>
      <search:lovEntry>>
        <search:lovValue>
        <search:sourceName>
        <search:translations>
```

Element Descriptions

<search:searchAttrs>

Contains one or more `<search:searchAttr>` elements.

<search:searchAttr>

Describes a search attribute. It contains these elements:

```
<search:name>
<search:type>
<search:translations>
<search:lovEntries>
```

<search:name>

Name of the search attribute. (Required)

<search:type>

Data type of the attribute values. Set to `STRING`, `NUMBER`, or `DATE`. (Required)

<search:translations>

Contains translations of the object name for display. See ["Providing Translations of Object Names"](#) on page 2-6.

<search:lovEntries>

Contains one or more `<search:lovEntry>` elements, each describing a list of values (LOV).

```
<search:lovValue>
<search:sourceName>
<search:translations>
```

<search:lovEntry>

Describes a list of values. It contains these child elements:

```
<search:lovValue>
<search:sourceName>
<search:translations>
```

<search:lovValue>

Name of the list of values. (Required)

<search:sourceName>

Name of the source for a source-specific list of values.

Example

This XML document describes a search attribute named Copyright:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:searchAttrs>
    <search:searchAttr>
      <search:name>Copyright</search:name>
      <search:type>DATE</search:type>
    </search:searchAttr>
  </search:searchAttrs>
</search:config>
```

source

Sources are collections of data to be searched, such as Web sites, database tables, content management repositories, collaboration repositories, and applications.

Note: The current release of the Oracle SES Administration API supports these source types:

- File
 - Federated
 - User Defined
 - Web
-
-

Object Type

Creatable

Object Key

name

Object Key Command Syntax

`--NAME=object_name`

`-n object_name`

State Properties

None

Supported Operations

create
createAll
delete
deleteAll
deleteList
export
exportAll
exportList
getAllObjectKeys
update
updateAll

Administration GUI Page

Home - Sources - Create or Edit Source
Home - Sources - Customize Federated Source

XML Descriptions

Each supported source type has a unique XML description:

- [XML Description: Federated Sources](#)

- [XML Description: File Sources](#)
- [XML Description: User-Defined Sources](#)
- [XML Description: Web Sources](#)

XML Description: Federated Sources

For a federated source, the `<search:sources>` element contains a `<search:federatedSource>` element:

```
<search:sources>
  <search:federatedSource>
    <search:name>
    <search:url>
    <search:security>
      <search:entityName>
      <search:entityPassword>
      <search:authAttribute>
    <search:queryRouting>
      <search:filterRule>
    <search:searchRestrictions>
      <search:groupRestrictedEnabled>
      <search:searchedGroups>
        <search:fedSourceGroup>
    <search:attributeRetrieval>
      <search:retrievedAttrs>
        <search:fedSearchAttr>
      <search:attributeMappings>
        <search:attributeMapping>
          <search:localAttribute>
          <search:remoteAttribute>
```

Element Descriptions

<search:sources>

Contains one or more source descriptions.

<search:federatedSource>

Describes a federated source. It contains these elements:

```
<search:name>
<search:url>
<search:security>
<search:queryRouting>
<search:searchRestrictions>
<search:attributeRetrieval>
```

<search:name>

Contains the name of the source. (Required)

<search:url>

Contains the Web service URL.

<search:security>

Describes security for connecting to the federated source. It contains these child elements:

```
<search:entityName>
<search:entityPassword>
<search:authAttribute>
```


<search:entityName>

Contains the name of the federation trusted entity on the federation endpoint. Contact the administrator of the federated endpoint for this information

<search:entityPassword>

Contains the password for the entity name.

Attribute	Value
encrypted	Indicates whether the value of <search:entityPassword> is encrypted. Set to <code>true</code> if the password is encrypted, or set to <code>false</code> if it is plain text.

<search:authAttribute>

Contains the name of an attribute that identifies and can authenticate a user on the federation endpoint.

<search:queryRouting>

Describes the rules for routing queries to the federated source. Without any rules, Oracle SES routes all queries to the federated source. This element is optional, but can improve scalability. It contains a <search:filterRule> element.

<search:filterRule>

Contains the rules within a CDATA element. Rules consist of an attribute, a colon (:), and an expression. Attributes can be DATE, STRING, or NUMBER. DATE and NUMBER attributes can include these operators: -, =, >, >=, <, <=. The AND or OR operators separate multiple rules.

<search:searchRestrictions>

Restricts searches to a list of source groups. It contains these child elements:

```
<search:groupRestrictedEnabled>
<search:searchedGroups>
```

<search:groupRestrictedEnabled>

Controls whether source groups are restricted during searches. Set to `true` to restrict searches, or set to `false` otherwise. The default value is `false`. (Optional)

<search:searchedGroups>

Describes the source groups to be searched on the federated source. It contains one or more <search:fedSourceGroup> elements.

<search:fedSourceGroup>

Empty element that uses parameters to identify source group. (Read only)

Attribute	Value
isAvailable	Identifies whether the source group is currently available in the federated source.
name	Name of a federated source group. (Required)

<search:attributeRetrieval>

Describes the attributes to be retrieved from the federated source. It contains a <search:retrieveAttrs> element.

<search:retrievedAttrs>

Contains one or more <search:fedSearchAttr> elements.

<search:fedSearchAttr>

Empty element that uses parameters to identify a search attribute.

Attribute	Value
name	Name of a search attribute. (Required)
type	Data type of the attribute: <code>STRING</code> , <code>NUMBER</code> , or <code>DATE</code> .
isAvailable	Identifies whether the attribute is currently available in the federated source: <code>true</code> if it is available, or <code>false</code> otherwise.
isMandatory	Identifies whether retrieval of the attribute is mandatory: <code>true</code> if it must be listed in the <code><search:retrievedAttrs></code> element, or <code>false</code> if it can be omitted without causing an error.

<search:attributeMappings>

Contains one or more `<search:attributeMapping>` elements.

<search:attributeMapping>

Maps a local attribute to a remote attribute. It contains one of each of these elements:

```
<search:localAttribute>
<search:remoteAttribute>
```

<search:localAttribute>

Identifies the local attribute being mapped.

Attribute	Value
name	Name of the local attribute. (Required)
type	Data type of the local attribute: <code>STRING</code> , <code>NUMBER</code> , or <code>DATE</code> . (Required)

<search:remoteAttribute>

Identifies the remote attribute being mapped.

Attribute	Value
name	Name of the remote attribute. (Required)
type	Data type of the remote attribute: <code>STRING</code> , <code>NUMBER</code> , or <code>DATE</code> . (Required)
isAvailable	Identifies whether the remote attribute is currently available in the federated source: <code>true</code> if it is available, or <code>false</code> otherwise.

Example 2-1 Federated Source Description

This XML document describes a federated source:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:sources>
    <search:federatedSource>
      <search:name>fed1</search:name>
      <search:url>http://example:7777/search/query/OracleSearch</search:url>
      <search:security>
        <search:entityName>entity2</search:entityName>
        <search:entityPassword encrypted="false">password</search:entityPassword>
        <search:authAttribute>nickname</search:authAttribute>
      </search:security>
    </search:federatedSource>
  </search:sources>
</search:config>
```

```

</search:security>
<search:queryRouting>
  <search:filterRule>
    <![CDATA[
      (language:en) AND (idm::mail:a.*)
    ]]>
  </search:filterRule>
</search:queryRouting>
<search:searchRestrictions>
  <search:groupRestrictedEnabled>true</search:groupRestrictedEnabled>
  <search:searchedGroups>
    <search:fedSourceGroup isAvailable="true" name="FILE" />
    <search:fedSourceGroup isAvailable="true" name="Web" />
  </search:searchedGroups>
</search:searchRestrictions>
<search:attributeRetrieval>
  <search:retrievedAttrs>
    <search:fedSearchAttr type="STRING" isAvailable="true"
      isMandatory="true" name="Author" />
    <search:fedSearchAttr type="STRING" isAvailable="true"
      isMandatory="true" name="Description" />
    <search:fedSearchAttr type="STRING" isAvailable="true"
      isMandatory="true" name="Infosource" />
    <search:fedSearchAttr type="STRING" isAvailable="true"
      isMandatory="true" name="Infosource Path" />
    <search:fedSearchAttr type="STRING" isAvailable="true"
      isMandatory="true" name="Language" />
    <search:fedSearchAttr type="DATE" isAvailable="true"
      isMandatory="true" name="LastModifiedDate" />
    <search:fedSearchAttr type="STRING" isAvailable="true"
      isMandatory="true" name="Mimetype" />
    <search:fedSearchAttr type="STRING" isAvailable="true"
      isMandatory="true" name="Title" />
    <search:fedSearchAttr type="STRING" isAvailable="true"
      isMandatory="true" name="Url" />
    <search:fedSearchAttr type="STRING" isAvailable="true"
      isMandatory="false" name="custom1" />
    <search:fedSearchAttr type="STRING" isAvailable="true"
      isMandatory="false" name="custom2" />
    <search:fedSearchAttr type="NUMBER" isAvailable="true"
      isMandatory="true" name="eqdocid" />
    <search:fedSearchAttr type="STRING" isAvailable="true"
      isMandatory="true" name="eqfedid" />
    <search:fedSearchAttr type="STRING" isAvailable="true"
      isMandatory="true" name="eqsnippet" />
  </search:retrievedAttrs>
</search:attributeRetrieval>
</search:federatedSource>
</search:sources>
</search:config>

```

XML Description: File Sources

For a file source, the `<search:sources>` element contains a `<search:fileSource>` element:

```

<search:sources>
  <search:fileSource>
    <search:name>
    <search:fileDisplayUrl>
    <search:fileUrlPrefix>

```

```

    <search:displayUrlPrefix>
  <search:startingUrls>
    <search:startingUrl>
      <search:url>
    <search:aclPolicy>
  <search:authorizationPlugin>
  <search:boundaryRules>
  <search:attributeMappings>
    <search:attributeMapping>
      <search:documentAttr>
      <search:searchAttr>
  <search:crawlerSettings>
  <search:documentTypes>
    <search:documentType>
      <search:mimeType>

```

Element Descriptions

<search:sources>

Contains one or more source descriptions.

<search:fileSource>

Describes a file source. It contains these elements:

```

<search:name>
<search:fileDisplayUrl>
<search:startingUrls>
<search:aclPolicy>
<search:boundaryRules>
<search:attributeMappings>
<search:crawlerSettings>
<search:documentTypes>

```

<search:name>

Contains the name of the file source.

<search:fileDisplayUrl>

Identifies a physical path that is replaced by a display URL for security reasons when the file is retrieved during a search.

Attribute	Value
enabled	Controls whether the display URL prefix is used for security reasons. Set to <code>true</code> to use the display URL, or set to <code>false</code> to display the physical location of the file. (Required)

<search:fileUrlPrefix>

Contains the physical file URL to be replaced by the display URL.

<search:displayUrlPrefix>

Contains a URL prefix displayed instead of the file URL.

<search:startingUrls>

Identifies the file path where the crawler begins. It consists of one or more of these child elements:

<search:startingUrl>

Contains a `<search:url>` element.

<search:url>

Contains an entry point for starting to crawl files. The URL must be in its original form as an unencoded file path.

<search:aclPolicy>

Describes an authorization policy for the source. See ["XML Description: Web Sources"](#) on page 2-79.

<search:authorizationPlugin>

Describes the authorization plug-in. See ["XML Description: User-Defined Sources"](#) on page 2-76.

<search:boundaryRules>

Describes the boundary rules for the source. See ["XML Description: Web Sources"](#) on page 2-79.

<search:attributeMappings>

Maps the document attributes to search attributes. It contains one or more `<search:attributeMapping>` elements.

<search:attributeMapping>

Contains a document attribute and a search attribute for mapping. It contains one of each of these child elements:

```
<search:documentAttr>
```

```
<search:searchAttr>
```

<search:documentAttr>

Identifies a document attribute by its name and data type.

Attribute	Value
name	Name of a document attribute
type	Data type of the attribute: DATE, NUMBER, or STRING

<search:searchAttr>

Identifies a search attribute by its name and data type. Search attributes are displayed to users in the Oracle SES Search interface.

Attribute	Value
name	Name of a search attribute
type	Data type of the attribute: DATE, NUMBER, or STRING

<search:crawlerSettings>

Configures the crawler. It contains these child elements:

```
<search:numThreads>
```

```
<search:languageDetection>
```

```
<search:defaultLanguage>
```

```
<search:crawlTimeout>
```

```
<search:maxDocumentSize>
```

```
<search:preserveDocumentCache>
```

```
<search:charSetDetection>
```

```
<search:defaultCharSet>
```

```
<search:servicePipeline>
```

```
<search:indexProfileName>
```

```

<search:indexNullTitleFallback>
<search:badTitles>
<search:logLevel>
<search:followSymlinks>

```

See the [<search:crawlerSettings>](#) for Web sources on page 2-83 for descriptions, except for `<search:followSymlinks>`:

<search:followSymlinks>

Contains `true` to prevent the crawler from following links to the absolute path, or `false` otherwise. The default value is `true`.

Applies only to file sources on Linux and UNIX systems.

<search:documentTypes>

Identifies the types of documents to be crawled. It contains one or more `<search:documentType>` elements.

<search:documentType>

Contains one or more `<search:mimeType>` elements.

<search:mimeType>

Contains the Internet media type of the content in the form `type/subtype`. See [Table 2-1, "Document Formats"](#) for supported MIME types.

Example 2-2 File Source Description

This XML document describes a file source:

```

<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:sources>
    <search:fileSource>
      <search:name>Document Library</search:name>
      <search:fileDisplayUrl enabled="false"/>
      <search:startingUrls>
        <search:startingUrl>
          <search:url>file://localhost/startingDirectory/</search:url>
        </search:startingUrl>
      </search:startingUrls>
      <search:aclPolicy>
        <search:noACL/>
      </search:aclPolicy>
      <search:attributeMappings>
        <search:attributeMapping>
          <search:documentAttr name="AUTHOR" type="STRING"/>
          <search:searchAttr name="Author" type="STRING"/>
        </search:attributeMapping>
        <search:attributeMapping>
          <search:documentAttr name="CREATOR" type="STRING"/>
          <search:searchAttr name="Author" type="STRING"/>
        </search:attributeMapping>
        <search:attributeMapping>
          <search:documentAttr name="DESCRIPTION" type="STRING"/>
          <search:searchAttr name="Description" type="STRING"/>
        </search:attributeMapping>
        <search:attributeMapping>
          <search:documentAttr name="HOST" type="STRING"/>
          <search:searchAttr name="Host" type="STRING"/>
        </search:attributeMapping>
      </search:attributeMappings>
    </search:fileSource>
  </search:sources>
</search:config>

```

```

</search:attributeMapping>
<search:attributeMapping>
  <search:documentAttr name="INFOSOURCE" type="STRING"/>
  <search:searchAttr name="Infosource" type="STRING"/>
</search:attributeMapping>
<search:attributeMapping>
  <search:documentAttr name="KEYWORD" type="STRING"/>
  <search:searchAttr name="Keywords" type="STRING"/>
</search:attributeMapping>
<search:attributeMapping>
  <search:documentAttr name="KEYWORDS" type="STRING"/>
  <search:searchAttr name="Keywords" type="STRING"/>
</search:attributeMapping>
<search:attributeMapping>
  <search:documentAttr name="LANGUAGE" type="STRING"/>
  <search:searchAttr name="Language" type="STRING"/>
</search:attributeMapping>
<search:attributeMapping>
  <search:documentAttr name="LASTMODIFIEDDATE" type="DATE"/>
  <search:searchAttr name="LastModifiedDate" type="DATE"/>
</search:attributeMapping>
<search:attributeMapping>
  <search:documentAttr name="MIMETYPE" type="STRING"/>
  <search:searchAttr name="Mimetype" type="STRING"/>
</search:attributeMapping>
<search:attributeMapping>
  <search:documentAttr name="SUBJECT" type="STRING"/>
  <search:searchAttr name="Subject" type="STRING"/>
</search:attributeMapping>
<search:attributeMapping>
  <search:documentAttr name="SUBJECTS" type="STRING"/>
  <search:searchAttr name="Subject" type="STRING"/>
</search:attributeMapping>
<search:attributeMapping>
  <search:documentAttr name="TITLE" type="STRING"/>
  <search:searchAttr name="Title" type="STRING"/>
</search:attributeMapping>
</search:attributeMappings>
<search:crawlerSettings>
  <search:numThreads>5</search:numThreads>
  <search:languageDetection enabled="false"/>
  <search:defaultLanguage>en</search:defaultLanguage>
  <search:crawlTimeout>30</search:crawlTimeout>
  <search:maxDocumentSize>10</search:maxDocumentSize>
  <search:preserveDocumentCache enabled="true"/>
  <search:defaultCharSet>8859_1</search:defaultCharSet>
  <search:servicePipeline enabled="true">
    <search:pipelineName>Default pipeline</search:pipelineName>
  </search:servicePipeline>
</search:crawlerSettings>
<search:documentTypes>
  <search:documentType>
    <search:mimeType>text/html</search:mimeType>
  </search:documentType>
  <search:documentType>
    <search:mimeType>text/plain</search:mimeType>
  </search:documentType>
  <search:documentType>
    <search:mimeType>text/xml</search:mimeType>
  </search:documentType>

```

```

        </search:documentTypes>
    </search:fileSource>
</search:sources>
</search:config>

```

XML Description: User-Defined Sources

For a user-defined source, a `<search:sources>` element contains a `<search:userDefinedSource>` element:

```

<search:sources>
  <search:userDefinedSource>
    <search:name>
    <search:sourceTypeName>
    <search:aclPolicy>
    <search:authorizationPlugin>
      <search:managerClassName>
      <search:jarFilePath>
    <search:parameters>
      <search:parameter>
    <search:securityAttrs>
      <search:securityAttr>
    <search:parameters>
      <search:parameter>
        <search:value>
    <search:boundaryRules>
    <search:attributeMappings>
    <search:crawlerSettings>
    <search:documentTypes>
      <search:documentType>
        <search:mimeType>

```

Element Descriptions

`<search:sources>`

Describes one or more sources.

`<search:userDefinedSource>`

Describes a user-defined source. It contains these child elements:

```

<search:name>
<search:sourceTypeName>
<search:boundaryRules>
<search:aclPolicy>
<search:attributeMappings>
<search:documentTypes>
<search:parameters>

```

`<search:name>`

Name of the user-defined source.

`<search:sourceTypeName>`

Type of user-defined source. For a definitive list of user-defined source types, issue an `exportAll sourceType` command. Set to the source type exactly as shown.

```

Database
EMC Documentum Content Server
EMC Documentum eRoom
Federated User Authorization Cache
Lotus Notes
Microsoft Exchange)

```


Microsoft NTFS
 Microsoft SharePoint 2007
 Oracle Calendar
 Oracle Collaboration Suite E-Mail
 Oracle Content Database
 Oracle Content Database (JDBC)
 Oracle Content Server
 Oracle E-Business Suite
 Oracle Fusion
 Oracle WebCenter
 Siebel 7.8
 Siebel 7.8(Public)
 Siebel 8
 User Authorization Cache

<search:aciPolicy>

See ["XML Description: Web Sources"](#) on page 2-79.

<search:authorizationPlugin>

Describes an authorization plug-in. It contains these elements:

```

<search:managerClassName>
<search:jarFilePath>
<search:parameters>

```

<search:managerClassName>

Contains the name of the plug-in manager Java class.

<search:jarFilePath>

Contains the qualified name of the jar file. Paths can be absolute or relative to the *ORACLE_HOME*/search/lib/plugins/identity directory.

<search:parameters>

Contains one or more `<search:parameter>` elements, each one setting a parameter. This element appears in a `<search:userDefinedSource>` element to define parameters supported by the source. It also appears in a `<search:authorizationPlugin>` to define parameters supported by the plug-in.

<search:parameter>

Describes a parameter. It contains the following elements:

```

<search:value>
<search:description>

```

Attribute	Value
name	Name of a parameter.

<search:value>

Contains the value of the parameter.

Attribute	Value
encrypted	Indicates whether the value of <code><search:value></code> is encrypted. Set to <code>true</code> if the value is encrypted, or set to <code>false</code> if it is plain text.

<search:description>

Contains a description of the parameter.

<search:securityAttrs>

Contains one or more <search:securityAttr> elements.

<search:securityAttr>

Contains a user or a group that is granted or denies access to the data source, depending on the value of the type attribute. (Read only)

Attribute	Value
type	Set to GRANT if the user or group has access to the source, or set to DENY otherwise.

<search:boundaryRules>

Describes the boundary rules. See ["XML Description: Web Sources"](#) on page 2-79.

<search:attributeMappings>

Maps the document attributes to search attributes.

<search:crawlerSettings>

Configures the crawler. It contains these child elements:

```
<search:numThreads>
<search:languageDetection>
<search:defaultLanguage>
<search:crawlTimeout>
<search:maxDocumentSize>
<search:preserveDocumentCache>
<search:charSetDetection>
<search:defaultCharSet>
<search:servicePipeline>
<search:indexNullTitleFallback>
<search:badTitles>
<search:logLevel>
<search:useInMemoryQueue>
```

See [<search:crawlerSettings>](#) for Web sources on page 2-83 for descriptions of these elements, except for <search:useInMemoryQueue>.

<search:useInMemoryQueue>

Contains `true` to put the queue in memory, or `false` otherwise. The default value is `false`. This setting is used only by connectors associated with Oracle Database.

<search:documentTypes>

Identifies the types of documents to be crawled. It contains one or more <search:documentType> elements.

<search:documentType>

Contains a <search:mimeType> element.

<search:mimeType>

Contains the Internet media type of the content in the form *type/subtype*. See [Table 2-1, "Document Formats"](#).

Example 2-3 User-Defined Source Description

This XML document describes an Oracle Content Database source.

```
<?xml version="1.0"?>
<search:config productVersion="11.2.1.0.0"
```

```

xmlns:search="http://xmlns.oracle.com/search">
  <search:sources>
    <search:userDefinedSource>
      <search:name>contentdb</search:name>
      <search:sourceTypeName>Oracle Content Database</search:sourceTypeName>
      <search:aclPolicy>
        <search:noACL/>
      </search:aclPolicy>
      <search:parameters>
        <search:parameter name="Oracle Content Database URL">
          <search:value>http://contentDBUrl.com:7777/content</search:value>
        </search:parameter>
        <search:parameter name="Starting paths">
          <search:value>/us</search:value>
        </search:parameter>
        <search:parameter name="Depth">
          <search:value>-1</search:value>
        </search:parameter>
        <search:parameter name="Oracle Content Database admin user">
          <search:value>myUserName</search:value>
        </search:parameter>
        <search:parameter name="Entity name">
          <search:value>
orclapplicationcommonname=ocscsplugin,cn=ifs,cn=products,cn=oraclecontext
          </search:value>
        </search:parameter>
        <search:parameter name="Entity password">
          <search:value encrypted="false">password</search:value>
        </search:parameter>
        <search:parameter name="Crawl only">
          <search:value>>false</search:value>
        </search:parameter>
        <search:parameter name="Use e-mail for authorization">
          <search:value>>false</search:value>
        </search:parameter>
      </search:parameters>
    </search:userDefinedSource>
  </search:sources>
</search:config>

```

XML Description: Web Sources

For a Web source, the <search:source> element contains a <search:webSource> element:

```

<search:sources>
  <search:webSource>
    <search:name>
    <search:selfService>
    <search:startingUrls>
      <search:startingUrl>
        <search:url>

      <search:aclPolicy>
<!-- No ACL policy -->
        <search:noACL>
<!-- Document-level ACL policy -->
        <search:documentLevelACL>
<!-- Source-level ACL policy -->
        <search:sourceLevelACL>
          <search:accessControlEntries>

```

```
        <search:accessControlEntry>
            <search:name>
            <search:privilege>
        </search:accessControlEntry>

<!-- Boundary rules -->
    <search:boundaryRules>
        <search:boundaryRule>
            <search:ruleType>
            <search:ruleOperation>
            <search:rulePattern>
        </search:boundaryRule>
    </search:boundaryRules>

    <search:metatagMappings>
        <search:metatagMapping>
            <search:documentAttr>
            <search:searchAttr>
        </search:metatagMapping>
    </search:metatagMappings>

<!-- Crawler settings -->
    <search:crawlerSettings>
        <search:numThreads>
        <search:languageDetection>
        <search:defaultLanguage>
        <search:crawlDepth>
            <search:limit>
        </search:crawlDepth>
        <search:crawlTimeout>
        <search:maxDocumentSize>
        <search:preserveDocumentCache>
        <search:charsetDetection>
        <search:defaultCharSet>
        <search:servicePipeline>
            <search:pipelineName>
        </search:servicePipeline>
        <search:indexNullTitleFallback>
        <search:badTitles>
            <search:badTitle>
        </search:badTitles>
        <search:honorRobotsExclusion>
        <search:indexDynamicPages>
        <search:httpCharSetOverride>
        <search:cookies>
            <search:cookieContentInLog>
            <search:maxCookieSize>
            <search:maxCookies>
            <search:maxCookiesPerHost>
        </search:cookies>
        <search:agentString>
        <search:duplicateDetection>
        <search:connections>
            <search:crawlConnectionSettingsType>
        </search:connections>
        <search:logLevel>
    </search:crawlerSettings>

    <search:documentTypes>
        <search:documentType>
            <search:mimeType>
        </search:documentType>
    </search:documentTypes>

    <search:httpAuthentications>
        <search:httpAuthentication>
            <search:host>
            <search:realm>
            <search:username>
            <search:password>
        </search:httpAuthentication>
    </search:httpAuthentications>

    <search:htmlForms>
        <search:htmlForm>
            <search:name>
        </search:htmlForm>
    </search:htmlForms>
```

```

    <search:formUrl>
    <search:action>
    <search:successUrl>
    <search:formControls>
      <search:formControl>
        <search:name>
        <search:value>
        <search:isPasswordField>

    <search:ssoAuthentication>
    <search:username>
    <search:password>
    <search:userAgent>

```

Element Descriptions

<search:sources>

Contains one or more source descriptions.

<search:webSource>

Describes a Web source. It contains these child elements:

```

<search:name>
<search:selfService
<search:startingUrls>
<search:aclPolicy>
<search:boundaryRules>
<search:metatagMappings>
<search:crawlerSettings>
<search:documentTypes>
<search:httpAuthentications>
<search:htmlForms>
<search:ssoAuthentication>

```

<search:name>

Name of the Web source.

<search:selfService>

Contains a value of `true` to enable self-service authentication, or a value of `false` to disable it. Self-service authentication lets users enter authentication credentials at run time, instead of the administrator entering credentials at the time the source is created.

<search:startingUrls>

Contains one or more `<search:startingUrl>` elements.

<search:startingUrl>

Contains a `<search:url>` element.

<search:url>

Contains the URL-encoded Web address that is an entry point for starting to crawl Web pages.

<search:aclPolicy>

Describes an ACL policy for the source. It contains one of these child elements:

```

<search:noACL>
<search:documentLevelACL>
<search:sourceLevelACL>

```

<search:noACL>

Indicates no ACL policy. All documents are visible and searchable.

<search:documentLevelACL>

Describes a document-level ACL policy.

<search:sourceLevelACL>

Describes an Oracle SES ACL policy used when crawling private content. It preserves authorizations specified in OracleAS Portal.

For user-defined sources, crawler plug-ins (or connectors) can supply ACL information with documents for indexing, which provides finer control document protection. That is, each document within one source may be viewed by a different set of users or groups.

This element contains a `<search:accessControlEntries>` element.

<search:accessControlEntries>

Contains one or more `<search:accessControlEntry>` elements.

<search:accessControlEntry>

Provides a list of users and groups that have access to the source or are restricted from access. It contains these child elements:

```
<search:name>  
<search:privilege>
```

<search:name>

Contains the name of a user or group that is valid for the currently active identity plug-in.

<search:privilege>

Set to GRANTED to allow access to the source, or set to DENIED to restrict access.

<search:boundaryRules>

Contains one or more `<search:boundaryRule>` elements, each describing a boundary rule.

<search:boundaryRule>

Describes a boundary rule. It contains these child elements:

```
<search:ruleType>  
<search:ruleOperation>  
<search:rulePattern>
```

<search:ruleType>

Type of URL boundary rule:

- INCLUSION: The URL matches `<search:rulePattern>`.
- EXCLUSION: The URL does not match `<search:rulePattern>`.

<search:ruleOperation>

Matching operation for a search rule pattern:

- CONTAINS: The URL contains the rule pattern for a case-insensitive match.
- STARTSWITH: The URL starts with the rule pattern for a case-insensitive match.
- ENDSWITH: The URL ends with the rule pattern for a case-insensitive match.
- REGEX: The URL contains the regular expression in a case-sensitive match.

<search:rulePattern>

The pattern of characters in the URL. You can use these special characters:

- Caret (^) denotes the beginning of a URL.
- Dollar sign (\$) denotes the end of a URL.
- A period (.) matches any one character.
- Question mark (?) before a character matches 0 or 1 occurrences of that character.
- Asterisk (*) before a pattern matches 0 or more occurrences of that pattern. Enclose the pattern in parentheses (), brackets [], or braces {}.
- A backslash (\) precedes a literal use of a special character, such as \? to match a question mark in a URL.

<search:metatagMappings>

Contains one or more <search:metaMappings> elements.

<search:metatagMapping>

Contains a mapped pair of attributes in these child elements:

```
<search:documentAttr>
```

```
<search:searchAttr>
```

<search:documentAttr>

Identifies a document attribute by its name and data type. Document attributes are among the properties of a document.

Attribute	Value
name	Name of a document attribute. (Required)
type	Data type of the attribute: DATE, NUMBER, or STRING.

<search:searchAttr>

Identifies a search attribute by its name and data type. Search attributes are displayed to users in the Oracle SES Search interface.

Attribute	Value
name	Name of a search attribute. (Required)
type	Data type of the attribute: DATE, NUMBER, or STRING.

<search:crawlerSettings>

Configures the crawler. It contains these child elements:

```
<search:numThreads>
<search:languageDetection>
<search:defaultLanguage>
<search:crawlDepth>
<search:crawlTimeout>
<search:maxDocumentSize>
<search:preserveDocumentCache>
<search:charSetDetection>
<search:defaultCharSet>
<search:servicePipeline>
<search:indexNullTitleFallback>
<search:badTitles>
<search:honorRobotsExclusion>
```

```

<search:indexDynamicPages>
<search:httpCharSetOverride>
<search:cookies>
<search:agentString>
<search:duplicateDetection>
<search:connections>
<search:logLevel>

```

<search:numThreads>

Number of processes to use for crawling the source.

<search:languageDetection>

Controls the use of a language detector when the metadata for a document does not identify the language.

Attribute	value
enabled	Controls use of language detection when a source document does not indicate the language in the header. Set to <code>true</code> to enable language detection, or set to <code>false</code> otherwise. (Required)

<search:defaultLanguage>

Default language used by the crawler when the document language cannot be detected.

<search:crawlDepth>

Controls use of a limit on crawling nested links. It contains a `<search:limit>` element.

Attribute	Value
haslimit	Controls whether the search limit is enforced. Set to <code>true</code> to impose the limit, or set to <code>false</code> otherwise. (Required)

<search:limit>

Contains the maximum number of nested links to be crawled.

<search:crawlTimeout>

Number of milliseconds for search results to be returned.

<search:maxDocumentSize>

Maximum document size in megabytes. Larger documents are not crawled.

<search:preserveDocumentCache>

Controls retention of the document cache after indexing.

Attribute	Value
enabled	Set to <code>true</code> to retain the cache, or set to <code>false</code> otherwise. (Required)

<search:charsetDetection>

Contains a value of `true` to enable automatic character set detection, or `false` to disable it. The default value is `true`. This parameter can be set at the global level.

<search:defaultCharSet>

Code for the default character set, which is used when a source document does not identify its character set in the header. See [Table 2-4, "Crawlable Character Sets"](#).

<search:servicePipeline>

Controls use of a document service pipeline.

Attribute	Value
enabled	Set to <code>true</code> to use the pipeline, or set to <code>false</code> otherwise. When <code>true</code> , <code><search:servicePipeline></code> contains a <code><search:pipelineName></code> element.

<search:pipelineName>

Contains the name of a pipeline.

<search:indexNullTitleFallback>

Controls whether the default title is included in the index for documents with null titles:

- `indexForAll`: Includes the default title in the index. (Default)
- `noIndex`: Does not include the default title in the index.

<search:badTitles>

Contains one or more `<search:badTitle>` elements. This parameter can be set at the global level.

<search:badTitle>

Contains an exact character string for a document title that the crawler omits from the index. These bad titles are defined by default:

```
PowerPoint Presentation
Slide 1
```

<search:honorRobotsExclusion>

Controls visits by robots to the Web site.

Attribute	Value
enabled	Set to <code>true</code> to exclude robots, or set to <code>false</code> otherwise.

<search:indexDynamicPages>

Controls whether dynamic pages are crawled and indexed.

Attribute	Value
enabled	Set to <code>true</code> to crawl dynamic pages, or set to <code>false</code> otherwise.

<search:httpCharSetOverride>

Controls the character set used for a Web page.

Attribute	Value
enabled	Set to <code>true</code> to exclude robots, or set to <code>false</code> otherwise.

<search:cookies>

Controls whether cookies are used to remember context. It contains these child elements:

```
<search:cookiecontentInLog>
<search:maxCookieSize>
```

```
<search:maxCookies>
<search:maxCookiesPerHost>
```

Attribute	Value
enabled	Set to <code>true</code> to enable cookies (default), or <code>false</code> otherwise.

<search:cookieContentInLog>

Controls whether information about cookies appears in the log file.

Attribute	Value
enabled	Set to <code>true</code> to log cookie messages, or set to <code>false</code> otherwise (default).

<search:maxCookieSize>

Contains the maximum size in bytes of a cookie.

<search:maxCookies>

Contains the total number of cookies allowed in a crawl.

<search:maxCookiesPerHost>

Contains the maximum number of cookies permitted for a Web site.

<search:agentString>

Contains the browser agent string presented to the Web server. The default value is "Oracle Secure Enterprise Search". Applies only to Web and Portal sources.

<search:duplicateDetection>

Contains a value of `true` to enable duplicate detection during a Web crawl, or `false` to disable it. The default value is `true`.

<search:connections>

Sets limits on a connection to Web and Portal sources. It contains these elements:

```
<search:timeout>
<search:retries>
<search:retryInterval>
```

<search:timeout>

Contains the maximum number of milliseconds to make a connection to a data source. The default value is 10.

<search:retries>

Contains the maximum number of connection attempts to a data source. The default value is 10.

<search:retryInterval>

Contains the number of milliseconds between connection retry attempts. The default value is 5.

<search:crawlConnectionSettingsType>

<search:logLevel>

Contains a logging level for the crawler:

Logging Level	Description
DEBUG	Debugging messages
INFO	Informational messages (Default)
WARN	Warning messages
ERROR	Error messages
FATAL	Fatal messages

<search:documentTypes>

Identifies the types of documents to be crawled. It contains one or more <search:documentType> elements.

<search:documentType>

Contains one or more <search:mimeType> elements.

<search:mimeType>

Contains the Internet media type of the content in the form *type/subtype*. See [Table 2-1, "Document Formats"](#).

<search:httpAuthentications>

Contains one or more <search:httpAuthentication> elements.

<search:httpAuthentication>

Describes HTTP authentication. For proxy authentication, it contains these elements:

```
<search:host>
<search:realm>
<search:username>
<search:password>
```

<search:host>

Contains the address of the target computer.

<search:realm>

Contains a name associated with the protected area of a Web site.

<search:username>

Contains the name of the log-in user.

<search:password>

Contains the password associated with the user name.

Attribute	Value
encrypted	Indicates whether the value of <search:password> is encrypted. Set to <i>true</i> if the password is encrypted, or set to <i>false</i> if it is plain text.

<search:htmlForms>

Contains one or more <search:htmlForm> elements, each one describing an HTML form.

<search:htmlForm>

Describes an HTML form. It contains these elements:

```
<search:name>
```

```

<search:formUrl>
<search:action>
<search:successUrl>
<search:formControls>

```

<search:name>

Contains the name of the HTML form object.

<search:formUrl>

Contains the Web address of the HTML form.

<search:action>

Contains the address where the browser sends the form.

<search:successUrl>

Contains the URL displayed after the user successfully submits the form.

<search:formControls>

Contains one or more `<search:formControl>` elements.

<search:formControl>

Describes a form control. It contains these elements:

```

<search:name>
<search:value>
<search:isPasswordField>

```

<search:name>

Contains the name of the form control.

<search:value>

Contains the value of the form control.

Attribute	Value
encrypted	Indicates whether the value of <code><search:value></code> is encrypted. Set to <code>true</code> if the value is encrypted, or set to <code>false</code> if it is plain text.

<search:isPasswordField>

Identifies whether the field contains a password. Set to `true` for a password field, or `false` otherwise.

<search:ssoAuthentication>

Describes OracleAS Single Sign-On authentication. It contains these elements:

```

<search:username>
<search:password>
<search:userAgent>

```

Attribute	Value
enabled	Controls use of OracleAS Single Sign-On for authentication. Set to <code>true</code> to enable Single Sign-On, or <code>false</code> otherwise.

<search:username>

Contains a user name for OracleAS Single Sign-On.

<search:password>

Contains the password for the OracleAS Single Sign-On user.

Attribute	Value
encrypted	Indicates whether the value of <search:password> is encrypted. Set to true if the password is encrypted, or set to false if it is plain text.

<search:userAgent>

Contains an authentication value that overrides the default User Agent value for OracleAS Single Sign-On. The default value is null.

Example 2-4 Web Source Description

This XML document describes a Web source.

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:sources>
    <search:webSource>
      <search:name>this_websource</search:name>
      <search:startingUrls>
        <search:startingUrl>
          <search:url>http://www.example.com/</search:url>
        </search:startingUrl>
      </search:startingUrls>
      <search:aclPolicy>
        <search:noACL/>
      </search:aclPolicy>
      <search:boundaryRules>
        <search:boundaryRule>
          <search:ruleType>EXCLUSION</search:ruleType>
          <search:ruleOperation>STARTSWITH</search:ruleOperation>
          <search:rulePattern>
            <![CDATA[http://www.example.com?test=test_val3]]>
          </search:rulePattern>
        </search:boundaryRule>
        <search:boundaryRule>
          <search:ruleType>INCLUSION</search:ruleType>
          <search:ruleOperation>CONTAINS</search:ruleOperation>
          <search:rulePattern>
            <![CDATA[http://www.example.com?test=test_val]]>
          </search:rulePattern>
        </search:boundaryRule>
        <search:boundaryRule>
          <search:ruleType>INCLUSION</search:ruleType>
          <search:ruleOperation>REGEX</search:ruleOperation>
          <search:rulePattern>
            <![CDATA[https://www\.example\.com(?:\:\d{1,5})?(?:$|/)]>
          </search:rulePattern>
        </search:boundaryRule>
      </search:boundaryRules>
      <search:metatagMappings>
        <search:metatagMapping>
          <search:documentAttr name="AUTHOR" type="STRING"/>
          <search:searchAttr name="Author" type="STRING"/>
        </search:metatagMapping>
        <search:metatagMapping>
          <search:documentAttr name="CREATOR" type="STRING"/>
          <search:searchAttr name="Author" type="STRING"/>
        </search:metatagMapping>
      </search:metatagMappings>
    </search:webSource>
  </search:sources>
</search:config>
```

```
<search:metatagMapping>
  <search:documentAttr name="DESCRIPTION" type="STRING"/>
  <search:searchAttr name="Description" type="STRING"/>
</search:metatagMapping>
<search:metatagMapping>
  <search:documentAttr name="KEYWORD" type="STRING"/>
  <search:searchAttr name="Keywords" type="STRING"/>
</search:metatagMapping>
<search:metatagMapping>
  <search:documentAttr name="KEYWORDS" type="STRING"/>
  <search:searchAttr name="Keywords" type="STRING"/>
</search:metatagMapping>
<search:metatagMapping>
  <search:documentAttr name="SUBJECT" type="STRING"/>
  <search:searchAttr name="Subject" type="STRING"/>
</search:metatagMapping>
<search:metatagMapping>
  <search:documentAttr name="SUBJECTS" type="STRING"/>
  <search:searchAttr name="Subject" type="STRING"/>
</search:metatagMapping>
</search:metatagMappings>
<search:crawlerSettings>
  <search:numThreads>7</search:numThreads>
  <search:languageDetection enabled="true"/>
  <search:defaultLanguage>fr</search:defaultLanguage>
  <search:crawlDepth haslimit="true">
    <search:limit>2</search:limit>
  </search:crawlDepth>
  <search:crawlTimeout>100</search:crawlTimeout>
  <search:maxDocumentSize>1000</search:maxDocumentSize>
  <search:preserveDocumentCache enabled="true"/>
  <search:defaultCharSet>JIS</search:defaultCharSet>
  <search:servicePipeline enabled="false"/>
  <search:honorRobotsExclusion enabled="false"/>
  <search:indexDynamicPages enabled="true"/>
  <search:httpCharSetOverride enabled="false"/>
  <search:cookies enabled="true">
    <search:cookieContentInLog enabled="false"/>
    <search:maxCookieSize>1</search:maxCookieSize>
    <search:maxCookies>2</search:maxCookies>
    <search:maxCookiesPerHost>3</search:maxCookiesPerHost>
  </search:cookies>
</search:crawlerSettings>
<search:documentTypes>
  <search:documentType>
    <search:mimeType>application/msword</search:mimeType>
  </search:documentType>
  <search:documentType>
    <search:mimeType>application/pdf</search:mimeType>
  </search:documentType>
  <search:documentType>
    <search:mimeType>application/x-msexcel</search:mimeType>
  </search:documentType>
  <search:documentType>
    <search:mimeType>application/x-mspowerpoint</search:mimeType>
  </search:documentType>
  <search:documentType>
    <search:mimeType>text/html</search:mimeType>
  </search:documentType>
</search:documentTypes>
```

```
        <search:mimeType>text/plain</search:mimeType>
    </search:documentType>
</search:documentTypes>
<search:httpAuthentications>
    <search:httpAuthentication>
        <search:host>testhost1</search:host>
        <search:realm>testrealm1</search:realm>
        <search:username>testusername1</search:username>
        <search:password encrypted="false">
            password
        </search:password>
    </search:httpAuthentication>
</search:httpAuthentications>
<search:htmlForms>
    <search:htmlForm>
        <search:name>testformname1</search:name>
        <search:formUrl>http://test2.oracle.com</search:formUrl>
        <search:action>test</search:action>
        <search:successUrl>
            http://successurl.oracle.com
        </search:successUrl>
        <search:formControls>
            <search:formControl>
                <search:name>testcontrol1</search:name>
                <search:value encrypted="false">testvalue1</search:value>
                <search:isPasswordField>>false</search:isPasswordField>
            </search:formControl>
            <search:formControl>
                <search:name>testcontrol2</search:name>
                <search:value encrypted="false">
                    this_value
                </search:value>
                <search:isPasswordField>>true</search:isPasswordField>
            </search:formControl>
        </search:formControls>
    </search:htmlForm>
</search:htmlForms>
<search:ssoAuthentication enabled="true">
    <search:username>testssso</search:username>
    <search:password encrypted="false">
        password
    </search:password>
</search:ssoAuthentication>
</search:webSource>
</search:sources>
</search:config>
```

sourceGroup

A source group consists of one or more sources. When entering a search, users can select the source groups to search instead of searching all available sources. A source can belong to multiple source groups.

Object Type

Creatable

Object Key

name

Object Key Command Syntax

--NAME=*object_name*

-n *object_name*

State Properties

None

Supported Operations

create
createAll
delete
deleteAll
deleteList
export
exportAll
exportList
getAllObjectKeys
update
updateAll

Administration GUI Page

Global Settings - Translate Source Group Name
Search - Source Groups - Create or Edit Source Group

XML Description

The <search:sourceGroups> element describes source groups:

```
<search:sourceGroups>  
  <search:sourceGroup>  
    <search:name>  
    <search:translations>  
    <search:assignedSources>  
      <search:assignedSource>
```


Schema Descriptions

<search:sourceGroups>

Contains one or more <search:sourceGroup> elements, each defining a source group.

<search:sourceGroup>

Describes a source group. It contains these elements:

```
<search:name>
<search:translations>
<search:assignedSources>
```

<search:name>

Contains the name of the source group. (Required)

<search:translations>

Contains translations of the object name for display. See ["Providing Translations of Object Names"](#) on page 2-6.

<search:assignedSources>

Contains one or more <search:assignedSource> elements, each identifying a source assigned to this source group.

<search:assignedSource>

Contains the name of a source in this source group.

Example

This XML document describes two source groups, Web and Calendar:

```
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:sourceGroups>
    <search:sourceGroup>
      <search:name>Web</search:name>
    </search:sourceGroup>
    <search:sourceGroup>
      <search:name>Calendar</search:name>
      <search:translations>
        <search:translation language="de">
          <search:translatedValue>Kalender</search:translatedValue>
        </search:translation>
        <search:translation language="fi">
          <search:translatedValue>kalenteri</search:translatedValue>
        </search:translation>
        <search:translation language="es">
          <search:translatedValue>calendario</search:translatedValue>
        </search:translation>
        <search:translation language="pt-br">
          <search:translatedValue>calendario</search:translatedValue>
        </search:translation>
      </search:translations>
    </search:sourceGroup>
  </search:sourceGroups>
</search:config>
```

sourceType

A source type identifies where the information for a source is stored, such as on a Web site or in a database table. Oracle SES provides several built-in source types.

Object Type

Creatable

Object Key

name

Object Key Command Syntax

--NAME=*object_name*

-n *object_name*

State Properties

None

Supported Operations

export
exportAll
exportList
getAllObjectKeys

Administration GUI Page

Global Settings - Source Types - Create or Update Source Type

XML Description

The `<search:sourceTypes>` element describes the source types:

```
<search:sourceTypes>
  <search:sourceType>
    <search:name>
    <search:managerClassName>
    <search:jarFilePath>
    <search:description>
    <search:securityCapability>
    <search:parameterInfos>
      <search:parameterInfo>
        <search:defaultValue>
        <search:encrypted>
        <search:description>
```

Element Descriptions

`<search:sourceTypes>`

Describes all source types. It contains one or more `<search:sourceType>` elements, each defining a source type.

<search:sourceType>

Describes a source type. It contains these elements:

```
<search:name>
<search:managerClassName>
<search:jarFilePath>
<search:description>
<search:securityCapability>
<search:parameterInfos>
```

<search:name>

Contains the name of the source type.

<search:managerClassName>

Contains the name of the plug-in manager Java class.

<search:jarFilePath>

Contains the qualified name of the jar file. Paths can be absolute or relative to the *ORACLE_HOME*/search/lib/plugins directory.

<search:description>

Contains a description of the source type.

<search:securityCapability>

Contains a value for the plug-in: *IDENTITY_BASED*, *USER_DEFINED*, or *UNKNOWN*. (Read only)

<search:parameterInfos>

Contains one or more `<search:parameterInfo>` elements, each describing a parameter of the source type.

<search:parameterInfo>

Describes a parameter. It contains these elements:

```
<search:defaultValue>
<search:encrypted>
<search:description>
```

Attribute	Value
Name	Name of the parameter. (Required)

<search:defaultValue>

Default value of the parameter.

<search:encrypted>

Indicates whether the parameter represents a value that should be encrypted. Set to *true* to encrypt the value, or set to *false* otherwise. The default value is *false*. (Optional)

Example

This XML document describes the Oracle Content Database source type:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:sourceTypes>
```

```

<search:sourceType>
  <search:name>Oracle Content Database</search:name>
  <search:managerClassName>
    oracle.search.plugin.ocs.cservices.OCSCSPluginMgr
  </search:managerClassName>
  <search:jarFilePath>cservices/ocscsrvV2.jar</search:jarFilePath>
  <search:description>
    Oracle Content Database crawler plug-in
  </search:description>
  <search:securityCapability>USER_DEFINED</search:securityCapability>
  <search:parameterInfos>
    <search:parameterInfo name="CDB Server public key alias">
      <search:encrypted>>false</search:encrypted>
      <search:description>
        Oracle Content Database Server public key alias
      </search:description>
    </search:parameterInfo>
    <search:parameterInfo name="Crawl only">
      <search:defaultValue>>false</search:defaultValue>
      <search:encrypted>>false</search:encrypted>
      <search:description>
        True will perform a crawl without indexing the documents
      </search:description>
    </search:parameterInfo>
    <search:parameterInfo name="Depth">
      <search:defaultValue>-1</search:defaultValue>
      <search:encrypted>>false</search:encrypted>
      <search:description>
        Depth from starting paths ("-1" for no limit)
      </search:description>
    </search:parameterInfo>
    <search:parameterInfo name="Entity name">
      <search:encrypted>>false</search:encrypted>
      <search:description>
        Name of the trusted entity in Oracle Internet Directory
      </search:description>
    </search:parameterInfo>
    <search:parameterInfo name="Entity password">
      <search:encrypted>>true</search:encrypted>
      <search:description>
        Password of the trusted entity in Oracle Internet Directory
      </search:description>
    </search:parameterInfo>
    <search:parameterInfo name="Oracle Content Database URL">
      <search:encrypted>>false</search:encrypted>
      <search:description>Oracle Content Database Web services endpoint;
for example, "http://contentserver:7777/content"</search:description>
    </search:parameterInfo>
    <search:parameterInfo name="Oracle Content Database Version">
      <search:defaultValue>10.1.2.3.0</search:defaultValue>
      <search:encrypted>>false</search:encrypted>
      <search:description>Oracle Content Database version; for example,
"10.1.2.3.0"</search:description>
    </search:parameterInfo>
    <search:parameterInfo name="Oracle Content Database admin user">
      <search:encrypted>>false</search:encrypted>
      <search:description>Name of administrator user for Oracle Content
Database; for example, orcladmin</search:description>
    </search:parameterInfo>
    <search:parameterInfo name="SES keystore location">

```

```

        <search:encrypted>>false</search:encrypted>
        <search:description>
            SES keystore location for WS security
        </search:description>
    </search:parameterInfo>
    <search:parameterInfo name="SES keystore password">
        <search:encrypted>>true</search:encrypted>
        <search:description>SES keystore password</search:description>
    </search:parameterInfo>
    <search:parameterInfo name="SES keystore type">
        <search:encrypted>>false</search:encrypted>
        <search:description>SES keystore type</search:description>
    </search:parameterInfo>
    <search:parameterInfo name="SES private key alias">
        <search:encrypted>>false</search:encrypted>
        <search:description>
            SES client private key alias
        </search:description>
    </search:parameterInfo>
    <search:parameterInfo name="SES private key password">
        <search:encrypted>>true</search:encrypted>
        <search:description>
            SES client private key password
        </search:description>
    </search:parameterInfo>
    <search:parameterInfo name="Starting paths">
        <search:defaultValue></search:defaultValue>
        <search:encrypted>>false</search:encrypted>
        <search:description>
            Paths (not encoded) to start crawling (separated by ";" )
        </search:description>
    </search:parameterInfo>
    <search:parameterInfo name="Use e-mail for authorization">
        <search:defaultValue>>false</search:defaultValue>
        <search:encrypted>>false</search:encrypted>
        <search:description>Use e-mail to resolve the user privilege. Set
this to true if the Oracle Internet Directory has been configured to use "mail" as
the nickname attribute.</search:description>
    </search:parameterInfo>
    </search:parameterInfos>
</search:sourceType>
</search:sourceTypes>
</search:config>

```

storageArea

A storage area is a physical structure, such as a data file, that Oracle SES uses to store data and metadata. The structure must already exist; the `storageArea` object just registers the structure with Oracle SES.

See Also:

- ["Partitioning for Parallel Query"](#) on page 2-10

Object Type

Creatable

Object Key

name

Object Key Command Syntax

```
--NAME=object_name
```

```
-n object_name
```

State Properties

None

Supported Operations

```
create  
createAll  
delete  
deleteAll  
deleteList  
export  
exportAll  
exportList  
getAllObjectKeys  
update  
updateAll
```

Administration GUI Page

None

XML Description

A `<search:storageAreas>` element describes a storage area:

```
<search:storageAreas>  
  <search:storageArea>  
    <search:name>  
    <search:description>  
    <search:usage>
```

Element Contents:**<search:storageAreas>**

Contains one or more <search:storageArea> elements, each defining a storage area for use by Oracle SES.

<search:storageArea>

Describes a storage area. It contains these elements:

```
<search:name>
<search:description>
<search:usage>
<search:locations>
```

<search:name>

Name of an existing storage area. (Required)

Enter the name of an existing ASSM tablespace and specify `PARTITION` for the usage type. An ASSM (Automatic Segment Space Management) tablespace is created with the SQL `CREATE TABLESPACE` clause `EXTENT MANAGEMENT LOCAL SEGMENT SPACE MANAGEMENT AUTO`.

The default tablespaces for Oracle SES are `SEARCH_DATA`, `SEARCH_INDEX`, and `SEARCH_TEMP`.

<search:description>

Description of the storage area. (Required)

<search:usage>

A usage type. You can create only the `PARTITION` storage type. (Required)

- `PARTITION`: Stores the document index.
- `CRAWLER`: Stores tokens for the index.
- `SYSTEM`: Stores index data.

Example

This XML document describes the default `SEARCH_DATA` tablespace:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:storageAreas>
    <search:storageArea>
      <search:name>SEARCH_DATA</search:name>
      <search:description>Default storage area</search:description>
      <search:usage>PARTITION</search:usage>
    </search:storageArea>
  </search:storageAreas>
</search:config>
```

suggLink

Suggested links direct users to a designated Web site for particular query keywords. For example, a suggested link might be `http://www.oracle.com/technetwork/indexes/documentation/index.html` for 'Oracle Secure Enterprise Search documentation', 'Enterprise Search documentation', and 'Search documentation'.

Object Type

Creatable

Object Key

keyword linkUrl

Object Key Command Syntax

```
--KEYWORD=keyword --LINK_URL=url
```

State Properties

None

Supported Operations

```
create
createAll
delete
deleteAll
deleteList
export
exportAll
exportList
getAllObjectKeys
update
updateAll
```

Administration GUI Page

Search - Suggested Links

XML Description

The `<search:suggLinks>` element describes suggested links:

```
<search:suggLinks>
  <search:suggLink>
    <search:keyword>
    <search:linkUrl>
    <search:linkText>
```

Element Descriptions

`<search:suggLinks>`

Contains one or more `<search:suggLink>` elements, each describing a suggested link.

<search:suggLink>

Describes a suggested link. It contains one of each of these child elements:

```
<search:keyword>
<search:linkUrl>
<search:linkText>
```

<search:keyword>

A word or phrase with optional operators that identifies which search queries display this suggested link. (Required)

Do not enter special characters, such as #, \$, =, &. You can include the following operators:

Operation	Syntax	Example
about	ABOUT (<i>term</i>)	about(dogs)
and	<i>term</i> AND <i>term</i>	dog and cat
near	<i>term</i> ; <i>term</i>	dog ; cat
or	<i>term</i> OR <i>term</i>	dog or cat
phrase	<i>phrase</i>	dog sled
stem	<i>\$term</i>	\$dog
thesaurus	{BT NT SYN}(<i>term</i>)	SYN(dog)
within	<i>term</i> WITHIN <i>term</i>	dog within title

<search:linkUrl>

A link to the suggested page, which appears in the result list., such as <http://www.example.com>. (Required)

<search:linkText>

The linked text that appears in the result list, such as Example Corp. (Required)

Example

This XML document describes a suggested link for a query on the term "oracle":

```
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:suggLinks>
    <search:suggLink>
      <search:keyword>oracle</search:keyword>
      <search:linkUrl>http://www.oracle.com</search:linkUrl>
      <search:linkText>Oracle</search:linkText>
    </search:suggLink>
  </search:suggLinks>
</search:config>
```

thesaurus

A thesaurus is a list of terms or phrases with relationships specified among them, such as a synonym, a broader term, and a narrower term. When a user issues a search query, Oracle SES can expand the search results to include matches for the related terms.

A thesaurus contains domain-specific knowledge. You can build a thesaurus, buy an industrial-specific thesaurus, or use utilities to extract a thesaurus from a specific corpus of documents. The thesaurus must be compliant with both the ISO-2788 and ANSI Z39.19(1993) standards.

A thesaurus must be loaded in Oracle SES for thesaurus-based query expansion. If no thesaurus is loaded or if the specified term or phrase cannot be found in the loaded thesaurus, then query expansion is not possible. Oracle SES only returns documents containing the original term or phrase. The default expansion level is one.

The proper encoding of an XML document for thesaurus configuration is UTF-8, which is the Oracle SES default language setting. Ensure that the NLS_LANG environment variable setting is consistent with the XML document encoding.

Object Type

Creatable

Object Key

name

Object Key Command Syntax

--NAME=*object_name*

-n *object_name*

State Properties

None

Supported Operations

create
delete
export
getAllObjectKeys
update

Administration GUI Page

None

XML Description

The `<search:thesauruses>` element defines a thesaurus:

```
<search:thesauruses>  
  <search:thesaurus>  
    <search:name>  
    <search:thesaurusContent>
```

Element Descriptions

<search:thesauruses>

Contains a <search:thesaurus> element, which describes a thesaurus.

<search:thesaurus>

Describes a thesaurus. It contains these child elements:

```
<search:name>
<search:thesaurusContent>
```

<search:name>

The name of the thesaurus. This name must be DEFAULT. (Required)

<search:thesaurusContent>

The thesaurus content. (Required)

Enter each term on a separate line within a CDATA element. You can identify broader terms (BT), narrower terms (NT) and synonyms (SYN). Note the one-space indentation of the related terms:

```
dog
  BT mammal
  NT domestic dog
  NT wild dog
  SYN canine
```

Example

This XML document describes a default thesaurus:

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:thesauruses>
    <search:thesaurus>
      <search:name>DEFAULT</search:name>
      <search:thesaurusContent>
<![CDATA[
cat
  SYN feline
  NT domestic cat
  NT wild cat
  BT mammal
mammal
  BT animal
domestic cat
  NT Persian cat
  NT Siamese cat
wild cat
  NT tiger
tiger
  NT Bengal tiger
dog
  BT mammal
  NT domestic dog
  NT wild dog
  SYN canine
domestic dog
  NT German Shepard
wild dog
```

```
NT Dingo
]]>
  </search:thesaurusContent>
    </search:thesaurus>
  </search:thesauruses>
</search:config>
```

searchadmin Commands

This chapter describes the `searchadmin` commands. It contains these topics:

- [Alphabetic List of searchadmin Commands](#)
- [Entering Special Characters](#)

Alphabetic List of searchadmin Commands

ACDEGSU

A

```
activate identityPlugin
activate indexOptimizer
activate partitionConfig
activate schedule
```

C

```
create altWord
create docServiceInstance
create docServicePipeline
create facetTree
create proxyLogin
create schedule
create searchAttr
create source
create sourceGroup
create storageArea
create suggLink
create thesaurus
createAll altWord
createAll docServiceInstance
createAll docServicePipeline
createAll facetTree
createAll proxyLogin
createAll schedule
createAll searchAttr
createAll source
createAll sourceGroup
createAll storageArea
createAll suggLink
```

D

```
deactivate identityPlugin
deactivate indexOptimizer
```

deactivate schedule
delete creatable_type
deleteAll creatable_type
deleteList creatable_type

E

export creatable_type
export universal_type
exportAll creatable_type
exportList creatable_type

G

getAllObjectKeys
getAPIVersion
getAllStates identityPlugin
getAllStates schedule
getState identityPlugin
getState index
getState indexOptimizer
getState partitionConfig
getState schedule
getStateList identityPlugin
getStateList schedule

S

start indexOptimizer
start schedule
stop schedule

U

update altWord
update crawlerSettings
update docServiceInstance
update docServicePipeline
update globalBoundaryRules
update globalDocumentTypes
update index
update indexOptimizer
update partitionConfig
update proxyLogin
update queryConfig
update relevanceRanking
update schedule
update searchAttr
update source
update sourceGroup
update storageArea
update suggLink
update thesaurus
updateAll altWord
updateAll docServiceInstance
updateAll docServicePipeline
updateAll proxyLogin
updateAll schedule
updateAll searchAttr
updateAll source
updateAll sourceGroup
updateAll storageArea

[updateAll](#) [suggLink](#)

Entering Special Characters

To enter special characters as part of a command, you may have to enclose the value in quotes, or precede the character with backslashes as an escape, or both.

- Enclose values containing spaces in quotes, such as `--NAME="Special Collection"`.
- To use the percent (%) and underscore (_) wildcard characters as literals for key patterns in operations such as `createAll` and `deleteAll`, escape the character with two backslashes, such as `--NAME=web_source` for an object named `web_source`. In single job mode, also enclose the values containing these characters in quotes, such as `--NAME="web_source"`. Otherwise, the underscore matches any single character.
- Because a backslash is an escape character, you must use two backslashes to enter one backslash as a literal. For example, enter a Windows file path such as `C:\\templates\\query.ftl`.
- When using the short form for arguments, escape literal values starting with a dash with two backslashes in single job mode, such as `-n \\-mysource`. In session mode, enclose the values in quotes or escape the dash with one backslash. For example, `-n \-mysource` or `-n "-mysource"`. Alternatively, use the long form for arguments, such as `--NAME=-mysource`.

See "[Command Interface](#)" on page 1-1 for a discussion of session mode and single job mode.

activate identityPlugin

Activates an identity plug-in.

Only one identity plug-in can be active at a time. To change identity plug-ins, deactivate the current one before activating a different identity plug-in. Otherwise, an error results. An identity plug-in is inactive when it is created.

Syntax

```
activate identityPlugin --JAR_FILE=jar_filename --MANAGER_CLASS=class [--INPUT_
FILE=xml_filename --ENCRYPT_KEY=key]
```

or

```
activate identityPlugin --JAR_FILE=jar_filename --MANAGER_CLASS=class [-i xml_
filename -e key]
```

Parameters

jar_filename

Content of a <search:jarFilePath> element in the XML document.

class

Content of a <search:managerClassName> element in the XML document.

xml_filename

Path to an XML document that contains parameter settings for the object. See [identityPlugin](#) on page 2-34.

key

Decryption key for passwords in *xml_filename*. If the plug-in description has been exported from Oracle SES, use the same key.

The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example activates an identity plug-in with the configuration settings in *identity.xml*:

```
SES>activate identityPlugin --JAR_FILE=OIDPlugins.jar --MANAGER_
CLASS=oracle.search.plugin.security.identity.oid.OIDPluginManager --INPUT_
FILE=identity.xml --ENCRYPT_KEY=key2decrypt
```

The object "[jarFilePath=OIDPlugins.jar, managerClassName=oracle.search.plugin.security.identity.oid.OIDPluginManager]" was successfully activated.

activate indexOptimizer

Activates the index optimizer schedule.

See Also

[start indexOptimizer](#)

Syntax

```
activate indexOptimizer
```

Example

This example activates the index optimizer:

```
SES>activate indexOptimizer
```

The object "indexOptimizer" was successfully activated.

activate partitionConfig

Activates partitioning. You can activate partitioning only on a new, empty instance. After documents are crawled, you cannot activate partitioning.

You cannot deactivate partitioning after activating it.

Syntax

```
activate partitionConfig
```

Example

This example activates partitioning:

```
SES>activate partitionConfig
```

The object "partitionConfig" was successfully activated.

activate schedule

Activates a schedule.

See Also

[start schedule](#)

Syntax

```
activate schedule --NAME=object_name [--INPUT_FILE=xml_filename]
```

or

```
activate schedule -n object_name [-i xml_filename]
```

Parameters

object_name

Content of a <search:name> element in the XML document.

xml_filename

Path to the XML document that describes the object. See [schedule](#) on page 2-59.

Example

This example activates a schedule named Mailing List Schedule:

```
SES>activate schedule --NAME="Mailing List Schedule"
```

The object "[name=Mailing List Schedule]" was successfully activated.

create altWord

Creates an alternate word pair from an XML description.

See Also

[createAll altWord](#)

Syntax

```
create altWord --KEYWORD=keyword --ALT_KEYWORD=alt_keyword --INPUT_FILE=xml_
filename
```

or

```
create altWord --KEYWORD=keyword --ALT_KEYWORD=alt_keyword -i xml_filename
```

Parameters

keyword

Content of a `<search:keyword>` element in the XML document.

alt_keyword

Content of a `<search:altKeyword>` element in the XML document.

xml_filename

Path to the XML document that defines the object. See [altWord](#) on page 2-12.

Example

This example creates an alternate word for RAC. No other objects in the XML document are created.

```
SES>create altWord --KEYWORD=rac --ALT_KEYWORD="Real Application Clusters"
--INPUT_FILE=altwords.xml
```

The object "[keyword=rac, altKeyword=Real Application Clusters]" was successfully created.

create docServiceInstance

Creates a document service instance from an XML description.

See Also

[createAll docServiceInstance](#)

Syntax

```
create docServiceInstance --NAME=object_name --INPUT_FILE=xml_filename [--ENCRYPT_KEY=key]
```

or

```
create docServiceInstance -n object_name -i xml_filename [-e key]
```

Parameters

object_name

Content of a <search:name> element in the XML document.

xml_filename

Path to the XML document that defines the object. See [docServiceInstance](#) on page 2-18.

key

Encryption key for passwords in *xml_filename*. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example creates a service instance from the description in docserviceinstance.xml:

```
SES>create docServiceInstance --NAME="Default summarizer service instance"  
--INPUT_FILE=docserviceinstance.xml --ENCRYPT_KEY=key2encrypt
```

The object "[name=Default summarizer service instance]" was successfully created.

create docServicePipeline

Creates a document service pipeline from an XML description.

See Also

[createAll docServicePipeline](#)

Syntax

```
create docServicePipeline --NAME=object_name --INPUT_FILE=xml_filename
```

or

```
create docServicePipeline -n object_name -i xml_filename
```

Parameters

object_name

Content of a <search:name> element in the XML document.

xml_filename

Path to the XML document that defines the object. See [docServicePipeline](#) on page 2-24.

Example

This example creates a document service pipeline:

```
SES>create docServicePipeline --NAME=Default pipeline --INPUT_
FILE=docservicepipeline.xml
```

The object "[name=Default pipeline]" was successfully created.

create facetTree

Creates a facet tree from an XML description.

See Also

[createAll facetTree](#)

Syntax

```
create facetTree --NAME=object_name --INPUT_FILE=xml_filename
```

or

```
create facetTree -n object_name -i xml_filename
```

Parameters

object_name

Content of a <search:name> element in the XML document.

xml_filename

Path to the XML document that defines the object. See [facetTree](#) on page 2-27.

Example

This example creates a facet tree named Country:

```
SES>create facetTree --FACETNAME=Country --INPUT_FILE=facettree.xml
```

The object "[facetName=Country]" was successfully created.

create proxyLogin

Creates a proxy log-in (federation trusted entity) from an XML description.

See Also

[createAll proxyLogin](#)

Syntax

```
create proxyLogin --NAME=object_name --INPUT_FILE=xml_filename [--ENCRYPT_KEY=key]  
or  
create proxyLogin -n object_name -i xml_filename [-e key]
```

Parameters

object_name

Content of a <search:name> element in the XML document.

xml_filename

Path to the XML document that defines the object. See [proxyLogin](#) on page 2-48.

key

Encryption key for passwords in *xml_filename*. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example creates `this_proxy` as defined in `proxy.xml`. The user is prompted for a password after omitting the `--ENCRYPT_KEY` option.

```
SES>create proxyLogin --NAME=this_proxy --INPUT_FILE=proxy.xml  
Enter encryption key:
```

The object "[name=this_proxy]" was successfully created.

create schedule

Creates a schedule from an XML description. You must create the source before creating the schedule. See [create source](#) on page 3-15.

See Also

[createAll schedule](#)

Syntax

```
create schedule --NAME=object_name --INPUT_FILE=xml_filename
```

or

```
create schedule -n object_name -i xml_filename
```

Parameters

object_name

Content of a `<search:name>` element in the XML document.

xml_filename

Path to the XML document that defines the object. See [schedule](#) on page 2-59.

Example

This example creates the Doc Library schedule as defined in `schedule.xml`:

```
SES>create schedule --NAME="Doc Library" --INPUT_FILE=schedule.xml
```

```
The object "[name=Doc Library]" was successfully created.
```

create searchAttr

Creates a custom search attribute from an XML description.

See Also

[createAll searchAttr](#)

Syntax

```
create searchAttr --NAME=object_name --INPUT_FILE=xml_filename
```

or

```
create searchAttr -n object_name -i xml_filename
```

Parameters

object_name

Content of a `<search:name>` element in the XML document.

xml_filename

Path to the XML document that defines the object. See [searchAttr](#) on page 2-64.

Example

This example creates the `Copyright` search attribute:

```
SES>create searchAttr --NAME=Copyright --INPUT_FILE=searchattrs.xml
```

The object "[name=Copyright]" was successfully created.

create source

Creates a source from an XML description.

See Also

[createAll source](#)

Syntax

```
create source --NAME=object_name --INPUT_FILE=xml_filename [--ENCRYPT_KEY=key]
```

or

```
create source -n object_name -i xml_filename [-e key]
```

Parameters

object_name

Content of a <search:name> element in the XML document.

xml_filename

Path to the XML document that defines the object. See [source](#) on page 2-67.

key

Encryption key for passwords in *xml_filename*. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example creates the Doc Library source defined in sources.xml:

```
SES>create source --NAME="Doc Library" --INPUT_FILE=sources.xml --ENCRYPT_
KEY=key2encrypt
```

The object "[name=Doc Library]" was successfully created.

create sourceGroup

Creates a source group from an XML description.

See Also

[createAll sourceGroup](#)

Syntax

```
create sourceGroup --NAME=object_name --INPUT_FILE=xml_filename
```

or

```
create sourceGroup -n object_name -i xml_filename
```

Parameters

object_name

Content of a `<search:name>` element in the XML document.

xml_filename

Path to the XML document that defines the object. See [sourceGroup](#) on page 2-92.

Example

This example creates the Mail source group defined in `sourcegroups.xml`:

```
SES>create sourceGroup --NAME=Mail --INPUT_FILE=sourcegroups.xml
```

The object "[name=Mail]" was successfully created.

create storageArea

Creates a storage area from an XML description.

See Also

[createAll storageArea](#)

Syntax

```
create storageArea --NAME=object_name --INPUT_FILE=xml_filename
```

or

```
create storageArea -n object_name -i xml_filename
```

Parameters

object_name

Content of a <search:name> element in the XML document.

xml_filename

Path to the XML document that defines the object. See [storageArea](#) on page 2-98.

Example

This example creates a storage area named Prosperity:

```
SES>create storageArea --NAME=Prosperity --INPUT_FILE=storage.xml
```

The object "[name=Prosperity]" was successfully created.

create suggLink

Creates a suggested link from an XML description.

See Also

[createAll suggLink](#)

Syntax

```
create suggLink --KEYWORD=keyword --LINK_URL=url --INPUT_FILE=xml_filename
```

or

```
create suggLink --KEYWORD=keyword --LINK_URL=url -i xml_filename
```

Parameters

keyword

Content of the <search:keyword> element in the XML document.

url

Content of the <search:linkUrl> element in the XML document.

xml_filename

Path to the XML document that defines the suggested link. See [suggLink](#) on page 2-100.

Example

This example creates a suggested link for the `oracle` keyword from the description in `sugglinks.xml`:

```
SES>create suggLink --KEYWORD=oracle --LINK_URL=http://www.oracle.com --INPUT_FILE=sugglinks.xml
```

The object "[keyword=oracle, linkUrl=http://www.oracle.com]" was successfully created.

create thesaurus

Creates a thesaurus from an XML description.

Syntax

```
create thesaurus --NAME=object_name --INPUT_FILE=xml_filename
```

or

```
create thesaurus -n object_name -i xml_filename
```

Parameters

object_name

Content of a <search:name> element in the XML document.

xml_filename

Path to the XML document that defines the object. See [thesaurus](#) on page 2-102.

Example

This example creates the DEFAULT thesaurus defined in thesaurus.xml:

```
SES>create thesaurus --NAME=DEFAULT --INPUT_FILE=thesaurus.xml
```

The object "[name=DEFAULT]" was successfully created.

createAll altWord

Creates all alternate words described in an XML file.

See Also

[create altWord](#)

Syntax

```
createAll altWord --INPUT_FILE=xml_filename [--DUPE_METHOD=action]
```

or

```
createAll altWord -i xml_filename [-d action]
```

Parameters

xml_filename

Path to the XML document that contains the object descriptions. See [altWord](#) on page 2-12.

action

Action to take when an object already exists:

- **error**: The createAll command fails with an error. (Default)
- **ignore**: The existing object description is kept.
- **overwrite**: The new description replaces the existing object description.

Example

This example creates the three altWord objects defined in altwords.xml.

```
SES>createAll altWord --INPUT_FILE=altwords.xml
```

```
createAll operation succeeded for type "altWord".
```

```
3 object(s) with status CREATE_SUCCEEDED
```

The next example shows use of the --DUPE_METHOD option:

```
SES>createAll altWord --INPUT_FILE=altwords.xml
```

```
The object with key "[keyword=text, altKeyword=Oracle Text]" and type "altWord" already exists.
```

```
SES>createAll altWord --INPUT_FILE=altwords.xml --DUPE_METHOD=overwrite
```

```
createAll operation succeeded for type "altWord".
```

```
2 object(s) with status CREATE_SUCCEEDED
```

```
1 object(s) with status DUPLICATE_OVERWRITTEN
```

createAll docServiceInstance

Creates all document service instances described in an XML file.

See Also

[create docServiceInstance](#)

Syntax

```
createAll docServiceInstance --INPUT_FILE=xml_filename [--DUPE_METHOD=action]
```

or

```
createAll docServiceInstance -i xml_filename [-d action]
```

Parameters

xml_filename

Path to the XML document that contains the object descriptions. See [docServiceInstance](#) on page 2-18.

action

Action to take when an object already exists:

- **error**: The `createAll` command fails with an error. (Default)
- **ignore**: The existing object description is kept.
- **overwrite**: The new description replaces the existing object description.

Example

This example creates one new document service instance and overwrites an exiting one:

```
SES>createAll docServiceInstance --INPUT_FILE=docserviceinstance.xml --DUPE_
METHOD=overwrite --ENCRYPT_KEY=key2encrypt
```

```
createAll operation succeeded for type "docServiceInstance".
```

```
1 object(s) with status CREATE_SUCCEEDED
1 object(s) with status DUPLICATE_OVERWRITTEN
```

createAll docServicePipeline

Creates all document service pipelines described in an XML document.

See Also

[create docServicePipeline](#)

Syntax

```
createAll docServicePipeline --INPUT_FILE=xml_filename [--DUPE_METHOD=action]
```

or

```
createAll docServicePipeline -i xml_filename [-d action]
```

Parameters

xml_filename

Path to the XML document that contains the object descriptions. See [docServicePipeline](#) on page 2-24.

action

Action to take when an object already exists:

- **error**: The createAll command fails with an error. (Default)
- **ignore**: The existing object description is kept.
- **overwrite**: The new description replaces the existing object description.

Example

This example creates a new document service pipeline and replaces an existing one:

```
SES>createAll docServicePipeline --INPUT_FILE=docservicepipeline.xml --DUPE_METHOD=overwrite
```

```
createAll operation succeeded for type "docServicePipeline".
```

```
1 object(s) with status CREATE_SUCCEEDED
1 object(s) with status DUPLICATE_OVERWRITTEN
```

createAll facetTree

Creates all facet trees described in an XML document.

See Also

[create facetTree](#)

Syntax

```
createAll facetTree --INPUT_FILE=xml_filename [--DUPE_METHOD=action]
```

or

```
createAll facetTree -i xml_filename [-d action]
```

Parameters

xml_filename

Path to the XML document that contains the object descriptions. See [facetTree](#) on page 2-27.

action

Action to take when an object already exists:

- **error**: The createAll command fails with an error. (Default)
- **ignore**: The existing object description is kept.

Example

This example attempts to create two facet trees. One facet tree is created successfully, and the other attempt is ignored because the object already exists.

```
SES>createAll facetTree --INPUT_FILE=facettree.xml --DUPE_METHOD=ignore
```

```
createAll operation succeeded for type "facetTree".
```

```
1 object(s) with status CREATE_SUCCEEDED
1 object(s) with status DUPLICATE_IGNORED
```

createAll proxyLogin

Creates all proxy log-ins described in an XML file.

See Also

[create proxyLogin](#)

Syntax

```
createAll proxyLogin --INPUT_FILE=xml_filename [--DUPE_METHOD=action] [--ENCRYPT_
KEY=key]
```

or

```
createAll proxyLogin -i xml_filename [-d action] [-e key]
```

Parameters

xml_filename

Path to the XML document that contains the object descriptions. See [proxyLogin](#) on page 2-48.

action

Action to take when an object already exists:

- `error`: The createAll command fails with an error. (Default)
- `ignore`: The existing object description is kept.
- `overwrite`: The new description replaces the existing object description.

key

Encryption key for passwords in *xml_filename*. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example creates all proxy log-ins described in proxy.xml. The status message shows that one already exists.

```
SES>createAll proxyLogin --INPUT_FILE=proxy.xml --DUPE_METHOD=ignore --ENCRYPT_
KEY=key2decrypt
```

```
createAll operation succeeded for type "proxyLogin".
```

```
2 object(s) with status CREATE_SUCCEEDED
1 object(s) with status DUPLICATE_IGNORED
```

createAll schedule

Creates all schedules described in an XML file.

See Also

[create schedule](#)

Syntax

```
createAll schedule --INPUT_FILE=xml_filename [--DUPE_METHOD=action [--IGNORE_INVALID_STATE=state]]
```

or

```
createAll schedule -i xml_filename [-d action [-s state]]
```

Parameters

xml_filename

Path to the XML document that contains the object descriptions. See [schedule](#) on page 2-59.

action

Action to take when an object already exists:

- **error**: The createAll command fails with an error. (Default)
- **ignore**: The existing object description is kept.
- **overwrite**: The new description replaces the existing object description.

state

Controls whether processing continues when an object cannot be overwritten because it is in an invalid state. This option is used only when `--DUPE_METHOD=overwrite`.

- **true**: Continue processing with the next object.
- **false**: Stop processing with an error and roll back all changes. (Default)

Example

This example creates three schedules described in `schedule.xml`. Two of the schedules already exist.

```
SES>createAll schedule --INPUT_FILE=schedule.xml --DUPE_METHOD=ignore
```

```
createAll operation succeeded for type "schedule".
```

```
3 object(s) with status CREATE_SUCCEEDED
2 object(s) with status DUPLICATE_IGNORED
```

createAll searchAttr

Creates all custom search attributes described in an XML file.

See Also

[create searchAttr](#)

Syntax

```
createAll searchAttr --INPUT_FILE=xml_filename [--DUPE_METHOD=action]
```

or

```
createAll searchAttr -i xml_filename [-d action]
```

Parameters

xml_filename

Path to the XML document that contains the object descriptions. See [searchAttr](#) on page 2-64.

action

Action to take when an object already exists:

- **error**: The createAll command fails with an error. (Default)
- **ignore**: The existing object description is kept.
- **overwrite**: The new description replaces the existing object description.

Example

This example creates three objects described in searchattr.xml. A fourth object already exists.

```
SES>createAll searchAttr --INPUT_FILE=searchattr.xml --DUPE_METHOD=ignore
```

```
createAll operation succeeded for type "searchAttr".
```

```
3 object(s) with status CREATE_SUCCEEDED  
1 object(s) with status DUPLICATE_IGNORED
```

createAll source

Creates all sources described in an XML file.

See Also

[create source](#)

Syntax

```
createAll source --INPUT_FILE=xml_filename [--DUPE_METHOD=action] [--ENCRYPT_
KEY=key]
```

or

```
createAll source -i xml_filename [-d action] [-e key]
```

Parameters

xml_filename

Path to the XML document that contains the object descriptions. See [source](#) on page 2-67.

action

Action to take when an object already exists:

- **error**: The createAll command fails with an error. (Default)
- **ignore**: The existing object description is kept.
- **overwrite**: The new description replaces the existing object description.

key

Encryption key for passwords in *xml_filename*. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example creates one source defined in sources.xml. The second source already exists.

```
SES>createAll source --INPUT_FILE=sources.xml --DUPE_METHOD=ignore --ENCRYPT_
KEY=key2encrypt
```

```
createAll operation succeeded for type "source".
```

```
1 object(s) with status CREATE_SUCCEEDED
1 object(s) with status DUPLICATE_IGNORED
```

createAll sourceGroup

Creates all source groups described in an XML file.

See Also

[create sourceGroup](#)

Syntax

```
createAll sourceGroup --INPUT_FILE=xml_filename [--DUPE_METHOD=action]
```

or

```
createAll creatable_type -i xml_filename [-d action]
```

Parameters

xml_filename

Path to the XML document that contains the object descriptions. See [sourceGroup](#) on page 2-92.

action

Action to take when an object already exists:

- **error**: The createAll command fails with an error. (Default)
- **ignore**: The existing object description is kept.
- **overwrite**: The new description replaces the existing object description.

Example

This example creates a source groups described in sourcegroups.xml. A second source group already existed.

```
SES>createAll sourceGroup --INPUT_FILE=sourcegroups.xml --DUPE_METHOD=ignore
```

```
createAll operation succeeded for type "sourceGroup".
```

```
1 object(s) with status CREATE_SUCCEEDED  
1 object(s) with status DUPLICATE_IGNORED
```

createAll storageArea

Creates all of the storage areas described in an XML document.

See Also

[create storageArea](#)

Syntax

```
createAll storageArea --INPUT_FILE=xml_filename [--DUPE_METHOD=action] [--IGNORE_INVALID_STATE=state]
```

or

```
createAll storageArea -i xml_filename [-d action] [-s state]
```

Parameters

xml_filename

Path to the XML document that contains the object descriptions. See [storageArea](#) on page 2-98.

action

Action to take when an object already exists:

- **error**: The createAll command fails with an error. (Default)
- **ignore**: The existing object description is kept.
- **overwrite**: The new description replaces the existing object description.

state

Controls whether processing continues when an object cannot be overwritten because it is in an invalid state. This option is used only when `--DUPE_METHOD=overwrite`.

- **true**: Continue processing with the next object.
- **false**: Stop processing with an error and roll back all changes. (Default)

Example

This example creates a storage area defined in a file named storage.xml:

```
SES>createAll storageArea --INPUT_FILE=storage.xml
```

```
createAll operation succeeded for type "storageArea".
```

```
1 object(s) with status CREATE_SUCCEEDED
```

createAll suggLink

Creates all suggested links described in an XML file.

See Also

[create suggLink](#)

Syntax

```
createAll suggLink --INPUT_FILE=xml_filename [--DUPE_METHOD=action]
```

or

```
createAll suggLink -i xml_filename [-d action]
```

Parameters

xml_filename

Path to the XML document that contains the object descriptions. See [suggLink](#) on page 2-100.

action

Action to take when an object already exists:

- **error**: The createAll command fails with an error. (Default)
- **ignore**: The existing object description is kept.
- **overwrite**: The new description replaces the existing object description.

Example

This example creates two suggested links from the descriptions in sugglinks.xml. A third object already exists.

```
SES>createAll suggLink --INPUT_FILE=sugglinks.xml --DUPE_METHOD=overwrite
```

```
createAll operation succeeded for type "suggLink".
```

```
2 object(s) with status CREATE_SUCCEEDED
1 object(s) with status DUPLICATE_OVERWRITTEN
```

deactivate identityPlugin

Deactivates an identity plug-in.

Syntax

```
deactivate identityPlugin --JAR_FILE=jar_filename --MANAGER_CLASS=class
```

Parameters

jar_filename

Content of a <search:jarFilePath> element in the XML document.

class

Content of a <search:managerClassName> element in the XML document.

Example

This example deactivates an identity plug-in:

```
SES>deactivate identityPlugin --JAR_FILE=OIDPlugins.jar --MANAGER_
CLASS=oracle.search.plugin.security.identity.oid.OIDPluginManager
```

The object "[jarFilePath=OIDPlugins.jar, managerClassName=oracle.search.plugin.security.identity.oid.OIDPluginManager]" was successfully deactivated.

deactivate indexOptimizer

Deactivates index optimization.

Syntax

```
deactivate indexOptimizer
```

Example

This example deactivates index optimization:

```
SES>>deactivate indexOptimizer
```

```
The object "indexOptimizer" was successfully deactivated.
```

deactivate schedule

Deactivates a schedule.

Syntax

```
deactivate schedule --NAME=object_name
```

or

```
deactivate schedule -n object_name
```

Parameters

object_name

Content of a <search:name> element in the XML document.

Example

This example fails to deactivate a schedule because it is executing:

```
SES>deactivate schedule --NAME="Doc Library"
```

Operation "deactivate" cannot be performed on an object with type "schedule" in state "EXECUTING".

delete *creatable_type*

Deletes a creatable object.

See Also

[deleteAll creatable_type](#)
[deleteList creatable_type](#)

Syntax

```
delete creatable_type object_key
```

Parameters

creatable_type

A creatable type:

```
altWord  
docServiceInstance  
docServicePipeline  
facetTree  
proxyLogin  
schedule  
searchAttr  
source  
sourceGroup  
storageArea  
suggLink  
thesaurus
```

object_key

Unique identifier of the object. See the object descriptions in [Chapter 2, "Administration Object Types."](#)

Example

This example deletes the Doc Library schedule.

```
SES>delete schedule --NAME="Doc Library"
```

```
The object "[name=Doc Library]" was successfully deleted.
```

deleteAll *creatable_type*

Deletes all objects of a specified type.

Caution: This operation deletes all objects, including those supplied with Oracle SES. Use a *key_pattern* to limit the operation to those objects you want to delete, especially when deleting *identityPlugin*, *sourceType*, and *storageArea* objects.

See Also

[delete creatable_type](#)
[deleteList creatable_type](#)

Syntax

```
deleteAll creatable_type [--IGNORE_INVALID_STATE=state] [key_pattern]
```

or

```
deleteAll creatable_type [-s state] [key_pattern]
```

Parameters

creatable_type

A creatable type:

```
altWord
docServiceInstance
docServicePipeline
facetTree
proxyLogin
schedule
searchAttr
source
sourceGroup
storageArea
suggLink
```

state

Controls whether *clusterTree*, *identityPlugin*, *schedule*, or *skinBundle* objects are skipped because they are in an invalid state.

- `true`: Objects are deleted regardless of their state.
- `false`: Invalid objects are not deleted. (Default)

key_pattern

Object key that specifies a subset of objects to process in the format *key=value*. The value can include wildcard characters:

- A percent sign (%) matches zero or more characters. In a multibyte character set, it matches zero or more bytes.
- An underscore (_) matches exactly one character. In a multibyte character set, it matches one byte.

Examples

This example deletes all `clusterTree` objects:

Note: The `clusterTree` object used in this example is disabled in Oracle Fusion Applications.

```
SES>deleteAll clusterTree
```

```
deleteAll operation succeeded for type "clusterTree".
```

```
1 object(s) with status DELETE_SUCCEEDED
```

The next example deletes two `sourceType` objects with the string `Documentum` in the name:

```
SES>deleteAll sourceType --NAME=%Documentum%
```

```
deleteAll operation succeeded for type "sourceType".
```

```
2 object(s) with status DELETE_SUCCEEDED
```


deleteList *creatable_type*

Deletes objects of a specified type that are listed in a text file.

See Also

`delete creatable_type`
`deleteAll creatable_type`

Syntax

```
deleteList creatable_type --KEYS_FILE=key_filename [--IGNORE_NOT_FOUND=action]
[--IGNORE_INVALID_STATE=state]
```

or

```
deleteList creatable_type -k key_filename [-f action] [-s state]
```

Parameters

creatable_type

A creatable type:

```
altWord
docServiceInstance
docServicePipeline
facetTree
proxyLogin
schedule
searchAttr
source
sourceGroup
storageArea
suggLink
```

key_filename

Path to a text file that identifies the objects to be deleted. Each line of the file contains an object key. For example:

```
--NAME=this_proxy
--NAME=that_proxy
```

action

Controls the resulting action when an object in the list does not exist.

- `true`: The object is skipped and processing continues.
- `false`: Processing stops with an error. (Default)

state

Controls whether `clusterTree`, `identityPlugin`, `schedule`, or `skinBundle` objects are skipped because they are in an invalid state.

- `true`: Objects are deleted regardless of their state.
- `false`: Invalid objects are not deleted. (Default)

Example

This example deletes the identity plug-ins listed in `identity.lst`:

```
SES>deleteList identityPlugin --KEYS_FILE=identity.lst --IGNORE_NOT_FOUND=true
```

```
deleteList operation succeeded for type "identityPlugin".
```

```
2 object(s) with status DELETE_SUCCEEDED
```

export creatable_type

Returns the XML description of an object.

See Also

`export universal_type`
`exportAll creatable_type`
`exportList creatable_type`

Syntax

```
export creatable_type object_key [--OUTPUT_FILE=output_file] [--ENCRYPT_KEY=key]
```

or

```
export creatable_type object_key [-o output_file] [-e key]
```

Parameters

creatable_type

A creatable type, as described in ["Creatable Types"](#) on page 1-8.

object_key

Unique identifier of the object. See the object description in [Chapter 2, "Administration Object Types."](#)

output_file

Name of a file in which the exported XML document is stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `export` command creates a separate file for each one and appends the host name and port number to the base name.

key

Encryption key for passwords in the XML description of `identityPlugin`, `proxyLogin`, and `source` objects. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example displays the XML for the `rac` alternative word.

```
SES>export altWord --KEYWORD=rac --ALT_KEYWORD="Real Application Clusters"
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:altWords>
    <search:altWord>
      <search:keyword>rac</search:keyword>
      <search:altKeyword>Real Application Clusters</search:altKeyword>
      <search:autoExpand>>false</search:autoExpand>
    </search:altWord>
  </search:altWords>
</search:config>
```

The next example creates a file named `acme.xml` containing the XML document for the `acme` skin bundle.

Note: The `skinBundle` object used in this example is disabled in Oracle Fusion Applications.

```
SES>export skinBundle --NAME=acme --OUTPUT_FILE=acme.xml
```

The object "[name=acme]" was successfully exported.

4 attachment(s) written to file.

export *universal_type*

Returns the XML description of an object.

See Also

[export creatable_type](#)

Syntax

```
export universal_type [--OUTPUT_FILE=output_file]
```

or

```
export universal_type [-o output_file]
```

Parameters

universal_type

A universal type, as described in "[Universal Objects](#)" on page 1-7.

output_file

Name of a file in which the exported XML document is stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `export` command creates a separate file for each one and appends the host name and port number to the base name.

Example

This example displays an XML document for a `crawlerSettings` object:

```
SES>export crawlerSettings
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:crawlerSettings>
    <search:numThreads>5</search:numThreads>
    <search:numProcessors>3</search:numProcessors>
    <search:crawlDepth haslimit="">
      <search:limit>2</search:limit>
    </search:crawlDepth>
    <search:languageDetection enabled=""/>
    <search:defaultLanguage>en</search:defaultLanguage>
    <search:crawlTimeout>30</search:crawlTimeout>
    <search:maxDocumentSize>10</search:maxDocumentSize>
    <search:defaultCharSet>8859_1</search:defaultCharSet>
    <search:cacheDirectory>
      /home/oracle/dbs/ses111/cache/
    </search:cacheDirectory>
    <search:preserveDocumentCache enabled=""/>
    <search:servicePipeline enabled="">
      <search:pipelineName>Default pipeline</search:pipelineName>
    </search:servicePipeline>
    <search:verboseLogging enabled=""/>
    <search:logDirectory>/home/oracle/dbs/ses111/log/</search:logDirectory>
    <search:logLanguage>en-US</search:logLanguage>
  </search:crawlerSettings>
```

</search:config>

exportAll *creatable_type*

Returns the XML descriptions of all objects of a specific type.

See Also

`export creatable_type`
`exportList creatable_type`

Syntax

```
exportAll creatable_type [key_pattern] [--OUTPUT_FILE=output_file] [--ENCRYPT_
KEY=key]
```

or

```
exportAll creatable_type [key_pattern] [-o output_file] [-e key]
```

Parameters

creatable_type

One of these creatable object types:

```
altWord
docServiceInstance
docServiceManager
docServicePipeline
identityPlugin
proxyLogin
schedule
searchAttr
source
sourceGroup
sourceType
storageArea
suggLink
```

output_file

The name of a file in which the exported XML document is stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `export` command creates a separate file for each one and appends the host name and port number to the base name.

key_pattern

An object key that specifies a subset of objects to process in the format *key=value*. The value can include wildcard characters:

- A percent sign (%) matches zero or more characters. In a multibyte character set, it matches zero or more bytes.
- An underscore (_) matches one character. In a multibyte character set, it matches one byte.

key

The encryption key for passwords in the XML description of `identityPlugin`, `proxyLogin`, and `source` objects. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example displays all suggested links:

```
SES>exportAll suggLink
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:suggLinks>
    <search:suggLink>
      <search:keyword>database</search:keyword>
      <search:linkUrl>
        http://www.oracle.com/technetwork/database/enterprise-edition/overview/index.html
      </search:linkUrl>
      <search:linkText>Oracle 11g</search:linkText>
    </search:suggLink>
    <search:suggLink>
      <search:keyword>oracle</search:keyword>
      <search:linkUrl>http://www.oracle.com</search:linkUrl>
      <search:linkText>Oracle</search:linkText>
    </search:suggLink>
    <search:suggLink>
      <search:keyword>ses</search:keyword>
      <search:linkUrl>
        http://www.oracle.com/technetwork/search/oses/overview/index.htm
      </search:linkUrl>
      <search:linkText>Oracle SES</search:linkText>
    </search:suggLink>
  </search:suggLinks>
</search:config>
```

The next example uses a key pattern to find the suggested link for Oracle.

```
SES>exportAll suggLink --KEYWORD=ora%
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:suggLinks>
    <search:suggLink>
      <search:keyword>oracle</search:keyword>
      <search:linkUrl>http://www.oracle.com</search:linkUrl>
      <search:linkText>Oracle</search:linkText>
    </search:suggLink>
  </search:suggLinks>
</search:config>
```


exportList *creatable_type*

Returns the XML descriptions of a list of objects of the same type.

See Also

[export creatable_type](#)
[exportAll creatable_type](#)

Syntax

```
exportList creatable_type --KEYS_FILE=key_filename [--IGNORE_NOT_FOUND=action]
[--ENCRYPT_KEY=key]
```

or

```
exportList creatable_type -k key_filename [-f action] [-e key]
```

Parameters

creatable_type

A creatable object type:

```
altWord
docServiceInstance
docServiceManager
docServicePipeline
identityPlugin
proxyLogin
schedule
searchAttr
source
sourceGroup
sourceType
storageArea
suggLink
```

key_filename

Path to a text file that containing the keys that identify the objects to be deleted. The objects must be the same object type. Each line of the file identifies an object using this format:

```
key=value [key=value]
```

For example, these keys identify altWord objects:

```
--KEYWORD=oses --ALT_KEYWORD="Oracle Secure Enterprise Search"
--KEYWORD=rac --ALT_KEYWORD="Real Application Clusters"
--KEYWORD=oem --ALT_KEYWORD="Oracle Enterprise Manager"
```

action

Controls the resulting action when an object in the list does not exist:

- true: The object is skipped and processing continues.
- false: Processing stops with an error. (Default)

key

Encryption key for passwords in the XML description of identityPlugin, proxyLogin, and source objects. The key must be at least eight ASCII characters

long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Examples

This example exports the XML descriptions of the alternate words listed in `altwords.lst`:

```
SES>exportList altWord --KEYS_FILE=altwords.lst
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:altWords>
    <search:altWord>
      <search:keyword>oses</search:keyword>
      <search:altKeyword>Oracle Secure Enterprise Search</search:altKeyword>
      <search:autoExpand></search:autoExpand>
    </search:altWord>
    <search:altWord>
      <search:keyword>rac</search:keyword>
      <search:altKeyword>Real Application Clusters</search:altKeyword>
      <search:autoExpand>>false</search:autoExpand>
    </search:altWord>
  </search:altWords>
</search:config>
```

The next example shows use of the `--IGNORE_NOT_FOUND` option:

```
SES>exportList altWord --KEYS_FILE=altwords.lst
```

The object with key "[keyword=oem, altKeyword=Oracle Enterprise Manager]" and type "altWord" was not found.

```
SES>exportList altWord --KEYS_FILE=altwords.lst --IGNORE_NOT_FOUND=true
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:altWords>
    <search:altWord>
      <search:keyword>oses</search:keyword>
      <search:altKeyword>Oracle Secure Enterprise Search</search:altKeyword>
      <search:autoExpand></search:autoExpand>
    </search:altWord>
    <search:altWord>
      <search:keyword>rac</search:keyword>
      <search:altKeyword>Real Application Clusters</search:altKeyword>
      <search:autoExpand>>false</search:autoExpand>
    </search:altWord>
  </search:altWords>
</search:config>
```

getAllObjectKeys

Returns the object keys for the specified object type.

Syntax

```
getAllObjectKeys creatable_type --OUTPUT_FILE=output_file [key_pattern...
```

or

```
getAllObjectKeys creatable_type -o output_file [key_pattern...
```

Parameters

creatable_type

One of these creatable object types:

```
altWord
docServiceInstance
docServiceManager
docServicePipeline
identityPlugin
proxyLogin
schedule
searchAttr
source
sourceGroup
sourceType
storageArea
suggLink
thesaurus
```

output_file

Name of a file in which the exported object keys stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `getAllObjectKeys` command creates a separate file for each one and appends the host name and port number to the base name. You can use this file as input to the `deleteList`, `exportList`, and `getStateList` operations.

key_pattern

Object key that specifies a subset of objects to process in the format `key=value`. The value can include wildcard characters:

- A percent sign (%) matches zero or more characters. In a multibyte character set, it matches zero or more bytes.
- An underscore (_) matches one character. In a multibyte character set, it matches one byte.

Examples

This example returns all suggested links:

```
SES>getAllObjectKeys suggLink

--KEYWORD=database --LINK_
URL=http://www.oracle.com/technetwork/database/enterprise-edition/overview/index.h
tml
--KEYWORD=oracle --LINK_URL=http://www.oracle.com
```

```
--KEYWORD=ses --LINK_  
URL=http://www.oracle.com/technetwork/search/oses/overview/index.html  
]
```

The next example returns only the suggested links with a keyword that begins with data:

```
SES>getAllObjectKeys suggLink --KEYWORD=data%
```

```
[--KEYWORD=database --LINK_  
URL=http://www.oracle.com/technetwork/database/enterprise-edition/overview/index.html]
```

getAPIVersion

Displays the version number of the Oracle SES Administration API.

Syntax

```
getAPIVersion
```

Example

This example displays the current version of the Administration API.

```
SES>getAPIVersion
```

```
11.2.1.0.0
```

getAllStates identityPlugin

Returns the current state of all identity plug-ins as an XML document.

See Also

[getState identityPlugin](#)
[getStateList identityPlugin](#)

Syntax

```
getAllStates identityPlugin [--OUTPUT_FILE=output_file] [--PROPERTY_LIST=status]
[key_pattern...]
```

or

```
getAllStates identityPlugin [-o output_file] [-l status] [key_pattern...]
```

Parameters

output_file

Name of a file in which the exported XML document is stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `getAllStates` command creates a separate file for each one and appends the host name and port number to the base name.

key_pattern

Object key that specifies a subset of objects to process in the format `key=value`. The value can include wildcard characters:

- A percent sign (%) matches zero or more characters. In a multibyte character set, it matches zero or more bytes.
- An underscore (_) matches one character. In a multibyte character set, it matches one byte.

Example

This example returns the current state of all identity plug-ins:

```
SES>getAllStates identityPlugin
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:state productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:objectStates>
    <search:objectState>
      <search:objectType>identityPlugin</search:objectType>
      <search:objectKey>
        <search:keyPairs>
          <search:keyPair>
            <search:name>jarFilePath</search:name>
            <search:value>OIDPlugins.jar</search:value>
          </search:keyPair>
          <search:keyPair>
            <search:name>managerClassName</search:name>
            <search:value>oracle.search.plugin.security.identity.oid.OIDPluginManager</search:
value>
```

```
        </search:keyPair>
    </search:keyPairs>
</search:objectKey>
<search:stateProperties>
    <search:stateProperty>
        <search:propertyName>status</search:propertyName>
        <search:propertyValues>
            <search:propertyValue>
                <search:value>ACTIVE</search:value>
            </search:propertyValue>
        </search:propertyValues>
    </search:stateProperty>
</search:stateProperties>
</search:objectState>
</search:objectStates>
</search:state>
```

getAllStates schedule

Returns the current state of all schedules as an XML document.

See Also

[getState schedule](#)
[getStateList schedule](#)

Syntax

```
getAllStates schedule [--OUTPUT_FILE=output_file] [--PROPERTY_LIST=state_property]  
[key_pattern...]
```

or

```
getAllStates schedule [-o output_file] [-l state_property] [key_pattern...]
```

Parameters

output_file

Name of a file in which the exported XML document is stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `getAllStates` command creates a separate file for each one and appends the host name and port number to the base name.

state_properties

List of one or more state properties: `lastCrawled`, `logFilePath`, `nextCrawl`, `scheduleError`, or `status`. Separate multiple properties with commas. All state properties are returned by default.

key_pattern

Object key that specifies a subset of objects to process in the format `key=value`. The value can include wildcard characters:

- A percent sign (%) matches zero or more characters. In a multibyte character set, it matches zero or more bytes.
- An underscore (_) matches one character. In a multibyte character set, it matches one byte.

Example

This example uses the percent (%) wildcard character to find the `Doc Library` schedule and requests two status properties. The status is currently `SCHEDULED` and the next crawl is `MANUAL`.

```
SES>getAllStates schedule --NAME=Doc% --PROPERTY_LIST=status,nextCrawl
```

```
<?xml version="1.0" encoding="UTF-8"?>  
<search:state productVersion="11.2.1.0.0"  
xmlns:search="http://xmlns.oracle.com/search">  
  <search:objectStates>  
    <search:objectState>  
      <search:objectType>schedule</search:objectType>  
      <search:objectKey>  
        <search:keyPairs>  
          <search:keyPair>
```



```
        <search:name>name</search:name>
        <search:value>Doc Library</search:value>
    </search:keyPair>
</search:keyPairs>
</search:objectKey>
<search:stateProperties>
  <search:stateProperty>
    <search:propertyName>status</search:propertyName>
    <search:propertyValues>
      <search:propertyValue>
        <search:value>SCHEDULED</search:value>
      </search:propertyValue>
    </search:propertyValues>
  </search:stateProperty>
  <search:stateProperty>
    <search:propertyName>nextCrawl</search:propertyName>
    <search:propertyValues>
      <search:propertyValue>
        <search:value>MANUAL</search:value>
      </search:propertyValue>
    </search:propertyValues>
  </search:stateProperty>
</search:stateProperties>
</search:objectState>
</search:objectStates>
</search:state>
```

getState identityPlugin

Returns the current state of an identity plug-in as an XML document.

See Also

[getAllStates identityPlugin](#)
[getStateList identityPlugin](#)

Syntax

```
getState identityPlugin --JAR_FILE=jar_filename --MANAGER_CLASS=class [--OUTPUT_
FILE=output_file] [--PROPERTY_LIST=status]
```

or

```
getState identityPlugin --JAR_FILE=jar_filename --MANAGER_CLASS=class [-o output_
file] [-l status]
```

Parameters

jar_filename

Content of a `search:jarFilePath` element in the XML document.

class

Content of a `search:managerClassName` element in the XML document.

output_file

Name of a file in which the exported XML document is stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `getState` command creates a separate file for each one and appends the host name and port number to the base name.

Example

This example gets the current state of a particular identity plug-in:

```
SES>getState identityPlugin --JAR_FILE=OIDPlugins.jar --MANAGER_
CLASS=oracle.search.plugin.security.identity.oid.OIDPluginManager
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:state productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:objectStates>
    <search:objectState>
      <search:objectType>identityPlugin</search:objectType>
      <search:objectKey>
        <search:keyPairs>
          <search:keyPair>
            <search:name>jarFilePath</search:name>
            <search:value>OIDPlugins.jar</search:value>
          </search:keyPair>
          <search:keyPair>
            <search:name>managerClassName</search:name>
            <search:value>
              oracle.search.plugin.security.identity.oid.OIDPluginManager
            </search:value>
          </search:keyPair>
        </search:keyPairs>
      </search:objectKey>
    </search:objectState>
  </search:objectStates>
</search:state>
```

```
        </search:keyPairs>
    </search:objectKey>
<search:stateProperties>
    <search:stateProperty>
        <search:propertyName>status</search:propertyName>
        <search:propertyValues>
            <search:propertyValue>
                <search:value>ACTIVE</search:value>
            </search:propertyValue>
        </search:propertyValues>
    </search:stateProperty>
</search:stateProperties>
</search:objectState>
</search:objectStates>
</search:state>
```

getState index

Returns the percent of fragmentation of the index as an XML document.

Syntax

```
getState index [--OUTPUT_FILE=output_file] [--PROPERTY_LIST=estimatedFragmentation]
```

or

```
getState index [-o output_file] [-l estimatedFragmentation]
```

Parameters

output_file

Name of a file in which the exported XML document is stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `getState` command creates a separate file for each one and appends the host name and port number to the base name.

Example

This example shows that the index has a current estimated fragmentation level of 52.98% and should be optimized:

```
SES>getState index
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:state productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:objectStates>
    <search:objectState>
      <search:objectType>index</search:objectType>
      <search:stateProperties>
        <search:stateProperty>
          <search:propertyName>estimatedFragmentation</search:propertyName>
          <search:propertyValues>
            <search:propertyValue>
              <search:value>52.98</search:value>
            </search:propertyValue>
          </search:propertyValues>
        </search:stateProperty>
      </search:stateProperties>
    </search:objectState>
  </search:objectStates>
</search:state>
```

getState indexOptimizer

Returns the current state of index optimization as an XML document.

Syntax

```
getState indexOptimizer [--OUTPUT_FILE=output_file] [--PROPERTY_LIST=state_
properties]
```

or

```
getState indexOptimizer [-o output_file] [-l state_properties]
```

Parameters

output_file

Name of a file in which the exported XML document is stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `getState` command creates a separate file for each one and appends the host name and port number to the base name.

state_properties

One or more of the indexOptimizer state properties. Separate multiple properties with commas. All state properties are returned by default. See [indexOptimizer](#) on page 2-40 for the list of state properties.

Example

This example shows that the index optimizer started at 5:44 PM GMT and is still executing:

```
SES>getState indexOptimizer
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:state productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:objectStates>
    <search:objectState>
      <search:objectType>indexOptimizer</search:objectType>
      <search:stateProperties>
        <search:stateProperty>
          <search:propertyName>status</search:propertyName>
          <search:propertyValues>
            <search:propertyValue>
              <search:value>EXECUTING</search:value>
            </search:propertyValue>
          </search:propertyValues>
        </search:stateProperty>
        <search:stateProperty>
          <search:propertyName>startTime</search:propertyName>
          <search:propertyValues>
            <search:propertyValue>
              <search:value>Thu, 09 Jul 2009 17:44:43 GMT</search:value>
            </search:propertyValue>
          </search:propertyValues>
        </search:stateProperty>
      </search:stateProperties>
    </search:objectState>
```

```
</search:objectStates>  
</search:state>
```

getState partitionConfig

Returns the current state of partitioning.

Syntax

```
getState partitionConfig [--OUTPUT_FILE=output_file] [--PROPERTY_LIST=status]
```

or

```
getState partitionConfig [-o output_file] [-l status]
```

Parameters

output_file

Name of a file in which the exported XML document is stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `getState` command creates a separate file for each one and appends the host name and port number to the base name.

Example

This example shows that `partitionConfig` is active:

```
SES>getState partitionConfig
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:state xmlns:search="http://xmlns.oracle.com/search"
productVersion="11.2.1.0.0">
  <search:objectStates>
    <search:objectState>
      <search:objectType>partitionConfig</search:objectType>
      <search:stateProperties>
        <search:stateProperty>
          <search:propertyName>status</search:propertyName>
          <search:propertyValues>
            <search:propertyValue>
              <search:value>ACTIVE</search:value>
            </search:propertyValue>
          </search:propertyValues>
        </search:stateProperty>
      </search:stateProperties>
    </search:objectState>
  </search:objectStates>
</search:state>
```

getState schedule

Returns the current state of a schedule as an XML document.

See Also

[getAllStates schedule](#)
[getStateList schedule](#)

Syntax

```
getState schedule --NAME=object_name [--OUTPUT_FILE=output_file] [--PROPERTY_
LIST=state_properties]
```

or

```
getState schedule -n object_name [-o output_file] [-l state_properties]
```

Parameters

object_name

Content of a `<search:name>` element in the XML document.

output_file

Name of a file in which the exported XML document is stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `getState` command creates a separate file for each one and appends the host name and port number to the base name.

state_properties

One or more of these state properties: `lastCrawled`, `logFilePath`, `nextCrawl`, `scheduleError`, and `status`. Separate multiple properties with commas. All state properties are returned by default.

Example

This example directs a schedule to a file named `mailing_schedule.xml`. The XML shows that the current status of the schedule is disabled.

```
SES>getState schedule --NAME="Mailing List Schedule" --OUTPUT_FILE=mailing_
schedule.xml
```

The `getState` operation succeeded.

```
$ more mailing_schedule.xml
<?xml version="1.0" encoding="UTF-8"?>
<search:state productVersion="11.2.1.0.0" xmlns:search="http://xmlns.oracle.com/
search">
  <search:objectStates>
    <search:objectState>
      <search:objectType>schedule</search:objectType>
      <search:objectKey>
        <search:keyPairs>
          <search:keyPair>
            <search:name>name</search:name>
            <search:value>Mailing list Schedule</search:value>
          </search:keyPair>
        </search:keyPairs>
      </search:objectKey>
    </search:objectState>
  </search:objectStates>
</search:state>
```



```
</search:objectKey>
<search:stateProperties>
  <search:stateProperty>
    <search:propertyName>status</search:propertyName>
    <search:propertyValues>
      <search:propertyValue>
        <search:value>DISABLED</search:value>
      </search:propertyValue>
    </search:propertyValues>
  </search:stateProperty>
</search:stateProperties>
</search:objectState>
</search:objectStates>
```

getStateList identityPlugin

Returns the current state of a list of objects of the same type.

See Also

[getAllStates identityPlugin](#)
[getState identityPlugin](#)

Syntax

```
getStateList object_type --KEYS_FILE=key_filename [--OUTPUT_FILE=output_file]
```

or

```
getStateList object_type -k key_filename [-o output_file]
```

Parameters

key_filename

Path to a text file that identifies the objects. Each line of the file contains an object key. For example:

```
--JAR_FILE=OIDPlugins.jar --MANAGER_  
CLASS=oracle.search.plugin.security.identity.oid.OIDPluginManager  
--JAR_FILE=../oracleapplications/Siebel8Crawler.jar --MANAGER_  
CLASS=oracle.search.plugin.security.identity.siebel.SiebelIdentityPluginMgr
```

output_file

Name of a file in which the exported XML document is stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `getStateList` command creates a separate file for each one and appends the host name and port number to the base name.

Example

This example displays the last crawl and next crawl dates for the schedules listed in `identity.lst`:

```
SES>getStateList identityPlugin --KEYS_FILE=identity.lst
```

```
<?xml version="1.0" encoding="UTF-8"?>  
<search:state productVersion="11.2.1.0.0"  
xmlns:search="http://xmlns.oracle.com/search">  
  <search:objectStates>  
    <search:objectState>  
      <search:objectType>identityPlugin</search:objectType>  
      <search:objectKey>  
        <search:keyPairs>  
          <search:keyPair>  
            <search:name>jarFilePath</search:name>  
            <search:value>OIDPlugins.jar</search:value>  
          </search:keyPair>  
          <search:keyPair>  
            <search:name>managerClassName</search:name>  
            <search:value>  
              oracle.search.plugin.security.identity.oid.OIDPluginManager  
            </search:value>  
          </search:keyPair>
```

```

        </search:keyPairs>
    </search:objectKey>
<search:stateProperties>
    <search:stateProperty>
        <search:propertyName>status</search:propertyName>
        <search:propertyValues>
            <search:propertyValue>
                <search:value>ACTIVE</search:value>
            </search:propertyValue>
        </search:propertyValues>
    </search:stateProperty>
</search:stateProperties>
</search:objectState>
<search:objectState>
    <search:objectType>identityPlugin</search:objectType>
    <search:objectKey>
        <search:keyPairs>
            <search:keyPair>
                <search:name>jarFilePath</search:name>
                <search:value>
                    ../oracleapplications/Siebel8Crawler.jar
                </search:value>
            </search:keyPair>
            <search:keyPair>
                <search:name>managerClassName</search:name>
                <search:value>
                    oracle.search.plugin.security.identity.siebel.SiebelIdentityPluginMgr
                </search:value>
            </search:keyPair>
        </search:keyPairs>
    </search:objectKey>
<search:stateProperties>
    <search:stateProperty>
        <search:propertyName>status</search:propertyName>
        <search:propertyValues>
            <search:propertyValue>
                <search:value>INACTIVE</search:value>
            </search:propertyValue>
        </search:propertyValues>
    </search:stateProperty>
</search:stateProperties>
</search:objectState>
</search:objectStates>
</search:state>

```

getStateList schedule

Returns the current state of a list of schedules

See Also

[getAllStates schedule](#)
[getState schedule](#)

Syntax

```
getStateList schedule --KEYS_FILE=key_filename [--OUTPUT_FILE=output_file]
[--PROPERTY_LIST=state_properties]
```

or

```
getStateList schedule -k key_filename [-o output_file] [-l state_properties]
```

Parameters

key_filename

Path to a text file that identifies the objects. Each line of the file contains an object key. For example:

```
--NAME="Doc Library"
--NAME="SQL Script Library"
```

output_file

Name of a file in which the exported XML document is stored. You can specify a simple file name, a relative path, or a fully qualified path. When executing on multiple instances, the `getStateList` command creates a separate file for each one and appends the host name and port number to the base name.

state_properties

One or more state properties: `lastCrawled`, `logFilePath`, `nextCrawl`, `scheduleError`, and `status`. Separate multiple properties with commas. All state properties are returned by default.

Example

This example displays the last crawl and next crawl dates for the schedules listed in `schedules.lst`:

```
SES>getStateList schedule --KEYS_FILE=schedules.lst --PROPERTY_
LIST=lastCrawled,nextCrawl
```

```
<?xml version="1.0" encoding="UTF-8"?>
<search:state productVersion="11.2.1.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:objectStates>
    <search:objectState>
      <search:objectType>schedule</search:objectType>
      <search:objectKey>
        <search:keyPairs>
          <search:keyPair>
            <search:name>name</search:name>
            <search:value>Doc Library</search:value>
          </search:keyPair>
        </search:keyPairs>
      </search:objectKey>
    </search:objectState>
  </search:objectStates>
</search:state>
```

```

    </search:keyPairs>
  </search:objectKey>
<search:stateProperties>
  <search:stateProperty>
    <search:propertyName>nextCrawl</search:propertyName>
    <search:propertyValues>
      <search:propertyValue>
        <search:value>MANUAL</search:value>
      </search:propertyValue>
    </search:propertyValues>
  </search:stateProperty>
  <search:stateProperty>
    <search:propertyName>lastCrawled</search:propertyName>
    <search:propertyValues>
      <search:propertyValue key="Doc Library">
        <search:value>Thu, 21 May 2009 16:54:17 GMT</search:value>
      </search:propertyValue>
    </search:propertyValues>
  </search:stateProperty>
</search:stateProperties>
</search:objectState>
<search:objectState>
  <search:objectType>schedule</search:objectType>
  <search:objectKey>
    <search:keyPairs>
      <search:keyPair>
        <search:name>name</search:name>
        <search:value>SQL Script Library</search:value>
      </search:keyPair>
    </search:keyPairs>
  </search:objectKey>
  <search:stateProperties>
    <search:stateProperty>
      <search:propertyName>nextCrawl</search:propertyName>
      <search:propertyValues>
        <search:propertyValue>
          <search:value>MANUAL</search:value>
        </search:propertyValue>
      </search:propertyValues>
    </search:stateProperty>
    <search:stateProperty>
      <search:propertyName>lastCrawled</search:propertyName>
      <search:propertyValues>
        <search:propertyValue key="SQL Script Library">
          <search:value>Thu, 21 May 2009 16:57:18 GMT</search:value>
        </search:propertyValue>
      </search:propertyValues>
    </search:stateProperty>
  </search:stateProperties>
</search:objectState>
</search:objectStates>
</search:state>

```

start indexOptimizer

Starts index optimization

Syntax

```
start indexOptimizer]
```

Example

This example starts the index optimizer:

```
SES>start indexOptimizer
```

```
The "start" operation succeeded for "indexOptimizer".
```

start schedule

Starts a schedule.

Syntax

```
start schedule --NAME=object_name ]
```

or

```
start schedule -n object_name ]
```

Parameters

object_name

Content of a <search:name> element in the XML document.

Example

This example starts a schedule named SQL Script Library:

```
SES>start schedule --NAME='SQL Script Library'
```

The "start" operation succeeded for "[name=SQL Script Library]".

stop schedule

Stops a schedule from initiating a crawl, or stops the crawler if it has already started.

Syntax

```
stop schedule --NAME=object_name
```

or

```
stop schedule -n object_name
```

Parameters

object_name

Content of a <search:name> element in the XML document.

Example

This example stops a schedule named My File Source:

```
SES>stop schedule --NAME="My File Source"
```

The "stop" operation succeeded for "[name=My File Source]".

update altWord

Changes the properties of an alternate word from an XML file.

See Also

[updateAll altWord](#)

Syntax

```
update altWord --KEYWORD=keyword --ALT_KEYWORD=alt_keyword object_key --INPUT_
FILE=xml_filename --UPDATE_METHOD=method
```

or

```
update altWord --KEYWORD=keyword --ALT_KEYWORD=alt_keyword -i xml_filename -a
method
```

Parameters

keyword

Content of a `<search:keyword>` element in the XML document.

alt_keyword

Content of a `<search:altKeyword>` element in the XML document.

xml_filename

Path to the XML document that configures the object. See [altWord](#) on page 2-12.

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

Example

This example overwrites the parameter settings for RAC:

```
SES>update altWord --KEYWORD=rac --ALT_KEYWORD="Real Application Clusters"
--INPUT_FILE=altwords.xml --UPDATE_METHOD=overwrite
```

The object "[keyword=rac, altKeyword=Real Application Clusters]" was successfully updated.

update crawlerSettings

Sets one or more global crawler parameters from an XML description.

Syntax

```
update crawlerSettings --UPDATE_METHOD=method --INPUT_FILE=xml_filename
```

or

```
update crawlerSettings -a method -i xml_filename
```

Parameters

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

xml_filename

Path to the XML document that configures the object. See [crawlerSettings](#) on page 2-14.

Example

This example updates the crawler settings:

```
SES>update crawlerSettings --INPUT_FILE=crawler.xml --UPDATE_METHOD=overwrite
```

The object "crawlerSettings" was successfully updated.

update docServiceInstance

Sets one or more parameters of a document service instance from an XML description.

See Also

[updateAll docServiceInstance](#)

Syntax

```
update docServiceInstance --NAME=object_name --INPUT_FILE=xml_filename --UPDATE_
METHOD=method [--ENCRYPT_KEY=key]
```

or

```
update docServiceInstance -n object_name -i xml_filename -a method [-e key]
```

Parameters

object_name

Content of a <search:name> element in the XML document.

xml_filename

Path to the XML document that configures the object. See [docServiceInstance](#) on page 2-18.

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

key

Encryption key for passwords in *xml_filename*. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example updates a the default summarizer document service instance:

```
SES>update docServiceInstance --NAME="Default summarizer service instance"
--UPDATE_METHOD=overwrite --INPUT_FILE=docserviceinstance.xml --ENCRYPT_
KEY=key2encrypt
```

The object "[name=Default summarizer service instance]" was successfully updated.

update docServicePipeline

Sets one or more parameters of a document service pipeline from an XML description.

See Also

[updateAll docServicePipeline](#)

Syntax

```
update docServicePipeline --UPDATE_METHOD=method --INPUT_FILE=xml_filename
```

or

```
update docServicePipeline -a method -i xml_filename
```

Parameters

method

Method to use when updating the properties of an object:

- **add:** Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted in the XML file.
- **remove:** Removes existing properties that are defined in the XML file.
- **overwrite:** Replaces the existing property values with the new values.

xml_filename

Path to the XML document that configures the object. See [docServicePipeline](#) on page 2-24.

Example

This example updates the default document service pipeline:

```
SES>update docServicePipeline --NAME=Default pipeline --UPDATE_METHOD=add --INPUT_FILE=docservicepipeline.xml
```

The object "[name=Default pipeline]" was successfully updated.

update globalBoundaryRules

Sets one or more global boundary rules from an XML document.

Syntax

```
update globalBoundaryRules --UPDATE_METHOD=method --INPUT_FILE=xml_filename
```

or

```
update globalBoundaryRules -a method -i xml_filename
```

Parameters

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

xml_filename

Path to the XML document that configures the object. See [globalBoundaryRules](#) on page 2-29.

Example

This example updates the global boundary rules:

```
SES>update globalBoundaryRules -a overwrite --INPUT_FILE=globalboundaryrules.xml
```

The object "globalBoundaryRules" was successfully updated.

update globalDocumentTypes

Sets one or more parameters of a global document type from an XML document.

Syntax

```
update globalDocumentTypes --UPDATE_METHOD=method --INPUT_FILE=xml_filename
```

or

```
update globalDocumentTypes -a method -i xml_filename
```

Parameters

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

xml_filename

Path to the XML document that configures the object. See [globalDocumentTypes](#) on page 2-32.

Example

This example updates the global document types:

```
SES>update globalDocumentTypes -a overwrite --INPUT_FILE=globaldocumenttypes.xml
```

The object "globalDocumentTypes" was successfully updated.

update index

Sets one or more index properties from an XML description.

Syntax

```
update index --UPDATE_METHOD=method --INPUT_FILE=xml_filename
```

or

```
update index -a method -i xml_filename
```

Parameters

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

xml_filename

Path to the XML document that configures the object. See [index](#) on page 2-38.

Example

This example updates the indexing settings:

```
SES>update index --INPUT_FILE=index.xml --UPDATE_METHOD=overwrite
```

The object "index" was successfully updated.

update indexOptimizer

Sets one or more index optimizer properties from an XML description.

Syntax

```
update indexOptimizer --UPDATE_METHOD=method --INPUT_FILE=xml_filename
```

or

```
update indexOptimizer -a method -i xml_filename
```

Parameters

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

xml_filename

Path to the XML document that configures the object. See [indexOptimizer](#) on page 2-40.

Example

This example updates the index optimization settings:

```
SES>update indexOptimizer --INPUT_FILE=indexoptimizer.xml --UPDATE_  
METHOD=overwrite
```

The object "indexOptimizer" was successfully updated.

update partitionConfig

Changes the settings of the partition configuration parameters from an XML description. You can update the configuration only under these conditions:

- Immediately after installing Oracle SES.
- Before crawling any data source.
- After dropping all data sources.

When a partition rule is in use, you cannot modify it.

Syntax

```
update partitionConfig --UPDATE_METHOD=method --INPUT_FILE=xml_filename
```

```
update partitionConfig -a method -i xml_filename
```

Parameters

method

Method to use when updating the properties of an object:

- **add**: Adds new properties.
- **remove**: Removes existing properties that are defined in the XML file.
- **overwrite**: Replaces the existing property values with the new values.

xml_filename

Path to the XML document that configures the object. See [partitionConfig](#) on page 2-44.

Example

The following example updates the partitioning configuration:

```
SES>update partitionConfig --INPUT_FILE=part.xml --UPDATE_METHOD=overwrite
```

The object "partitionConfig" was successfully updated.

update proxyLogin

Changes the properties of a proxy log-in (federation entrusted entity) from an XML description.

See Also

[updateAll proxyLogin](#)

Syntax

```
update proxyLogin --NAME=object_name --INPUT_FILE=xml_filename --UPDATE_
METHOD=method [--ENCRYPT_KEY=key]
```

or

```
update proxyLogin -n object_name -i xml_filename -a method [-e key]
```

Parameters

object_name

Content of a <search:name> element in the XML document.

xml_filename

Path to the XML document that configures the object. See [proxyLogin](#) on page 2-48.

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

key

Encryption key for passwords in *xml_filename*. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example overwrites the parameter settings for a proxy:

```
SES>update proxyLogin --NAME=this_proxy --INPUT_FILE=proxy.xml --UPDATE_
METHOD=overwrite --ENCRYPT_KEY=key2encrypt
```

The object "[name=this_proxy]" was successfully updated.

update queryConfig

Sets one or more query configuration parameters from an XML description.

Syntax

```
update queryConfig --UPDATE_METHOD=method --INPUT_FILE=xml_filename
```

or

```
update queryConfig -a method -i xml_filename
```

Parameters

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

xml_filename

Path to the XML document that configures the object. See [queryConfig](#) on page 2-50.

Example

This example updates the query settings:

```
SES>update queryConfig --INPUT_FILE=query.xml
```

The object "queryConfig" was successfully updated.

update relevanceRanking

Sets one or more relevance ranking parameters from an XML description.

Syntax

```
update relevanceRanking --UPDATE_METHOD=method --INPUT_FILE=xml_filename
```

or

```
update relevanceRanking -a method -i xml_filename
```

Parameters

method

Method to use when updating the properties of an object:

- **add**: Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted in the XML file.
- **remove**: Removes existing properties that are defined in the XML file.
- **overwrite**: Replaces the existing property values with the new values.

xml_filename

Path to the XML document that configures the object. See [relevanceRanking](#) on page 2-56.

Example

This example updates the ranking attributes:

```
SES>update relevanceRanking -a remove --INPUT_FILE=relevance.xml
```

The object "relevanceRanking" was successfully updated.

update schedule

Changes the properties of a schedule from an XML file.

See Also

[updateAll schedule](#)

Syntax

```
update schedule --NAME=object_name --INPUT_FILE=xml_filename --UPDATE_
METHOD=method
```

or

```
update creatable_type -n object_name -i xml_filename -a method
```

Parameters

object_name

Content of a `<search:name>` element in the XML document.

xml_filename

Path to the XML document that configures the object. See [schedule](#) on page 2-59.

method

Method to use when updating the properties of an object:

- **add**: Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted in the XML file.
- **remove**: Removes existing properties that are defined in the XML file.
- **overwrite**: Replaces the existing property values with the new values.

Example

This example adds a source to the Doc Library schedule:

```
SES>update schedule --NAME="Doc Library" --UPDATE_METHOD=add --INPUT_
FILE=schedule.xml
```

The object "[name=Doc Library]" was successfully updated.

update searchAttr

Changes the properties of a search attribute from an XML file. You can add translations of search attribute names and LOVs to the default search attributes.

See Also

[updateAll searchAttr](#)

Syntax

```
update searchAttr --NAME=object_name --INPUT_FILE=xml_filename --UPDATE_
METHOD=method
```

or

```
update searchAttr -n object_name -i xml_filename -a method
```

Parameters

object_name

Content of a `<search:name>` element in the XML document.

xml_filename

Path to the XML document that configures the object. See [searchAttr](#) on page 2-64.

method

Method to use when updating the properties of an object:

- **add**: Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted in the XML file.
- **remove**: Removes existing properties that are defined in the XML file.
- **overwrite**: Replaces the existing property values with the new values.

Example

This example overwrites the parameter settings for the Owner search attribute:

```
SES>update searchAttr --NAME=Owner --UPDATE_METHOD=overwrite --INPUT_
FILE=searchattrs.xml
```

The object "[name=Owner]" was successfully updated.

update source

Changes the properties of a source from an XML file.

See Also

[updateAll source](#)

Syntax

```
update source --NAME=object_name --INPUT_FILE=xml_filename --UPDATE_METHOD=method
[--ENCRYPT_KEY=key]
```

or

```
update source -n object_name -i xml_filename -a method [-e key]
```

Parameters

object_name

Content of a `<search:name>` element in the XML document.

xml_filename

Path to the XML document that configures the object. See [source](#) on page 2-67.

method

Method to use when updating the properties of an object:

- **add**: Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted in the XML file.
- **remove**: Removes existing properties that are defined in the XML file.
- **overwrite**: Replaces the existing property values with the new values.

key

Encryption key for passwords in *xml_filename*. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example updates the Doc Library source with the changes in sources.xml:

```
SES>update source --NAME="Doc Library" --UPDATE_METHOD=overwrite --INPUT_
FILE=sources.xml --ENCRYPT_KEY=key2encrypt
```

The object "[name=Doc Library]" was successfully updated.

update sourceGroup

Changes the properties of a source group from an XML file.

See Also

[updateAll sourceGroup](#)

Syntax

```
update sourceGroup --NAME=object_name --INPUT_FILE=xml_filename --UPDATE_
METHOD=method
```

or

```
update sourceGroup -n object_name -i xml_filename -a method
```

Parameters

object_name

Content of a `<search:name>` element in the XML document.

xml_filename

Path to the XML document that configures the object. See [sourceGroup](#) on page 2-92.

method

Method to use when updating the properties of an object:

- **add**: Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted in the XML file.
- **remove**: Removes existing properties that are defined in the XML file.
- **overwrite**: Replaces the existing property values with the new values.

Example

This example updates the Libraries source group:

```
SES>update sourceGroup --NAME=Libraries --UPDATE_METHOD=overwrite --INPUT_
FILE=sourcegroups.xml
```

The object "[name=Libraries]" was successfully updated.

update storageArea

Changes the properties of a storage area from an XML file.

See Also

[updateAll storageArea](#)

Syntax

```
update storageArea --NAME=object_name --INPUT_FILE=xml_filename --UPDATE_
METHOD=method
```

or

```
update storageArea -n object_name -i xml_filename -a method
```

Parameters

object_name

Content of a <search:name> element in the XML document.

xml_filename

Path to the XML document that configures the object. See [storageArea](#) on page 2-98.

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

Example

This example updates the parameter settings for the OES_ASSM2 storage area:

```
SES>update storageArea --NAME=OES_ASSM2 --UPDATE_METHOD=overwrite --INPUT_
FILE=storage.xml
```

The object "[name=OES_ASSM2]" was successfully updated.

update suggLink

Changes the properties of a suggested link from an XML file.

See Also

[updateAll suggLink](#)

Syntax

```
update suggLink --KEYWORD=keyword --LINK_URL=url --INPUT_FILE=xml_filename
--UPDATE_METHOD=method
```

or

```
update suggLink --KEYWORD=keyword --LINK_URL=url -i xml_filename -a method
```

Parameters

keyword

Content of the `search:keyword` element in the XML document.

url

Content of the `search:linkUrl` element in the XML document.

xml_filename

Path to the XML document that configures the object. See [suggLink](#) on page 2-100.

method

Method to use when updating the properties of an object:

- `overwrite`: Replaces the existing property values with the new values.

Example

This example updates the suggested link for oracle:

```
SES>update suggLink --KEYWORD=oracle --LINK_URL=http://www.oracle.com --UPDATE_
METHOD=overwrite --INPUT_FILE=sugglinks.xml
```

The object "[keyword=oracle, linkUrl=http://www.oracle.com]" was successfully updated.

update thesaurus

Changes the properties of a thesaurus from an XML file.

Syntax

```
update thesaurus --NAME=DEFAULT --INPUT_FILE=xml_filename --UPDATE_METHOD=method
```

or

```
update thesaurus -n DEFAULT -i xml_filename -a method
```

Parameters

xml_filename

Path to the XML document that configures the object. See [thesaurus](#) on page 2-102.

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

Example

This example updates the default thesaurus:

```
SES>update thesaurus --NAME=DEFAULT --UPDATE_METHOD=overwrite --INPUT_  
FILE=thesaurus_update.xml
```

The object "[name=DEFAULT]" was successfully updated.

updateAll altWord

Sets one or more parameters of all alternate words described in an XML document.

See Also

[update altWord](#)

Syntax

```
updateAll altWord --INPUT_FILE=xml_filename --UPDATE_METHOD=method [--NOT_FOUND_METHOD=action]
```

or

```
updateAll altWord -i xml_filename -a method [-t action]
```

Parameters

xml_filename

Path to the XML document that configures the object. See [altWord](#) on page 2-12.

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

action

Action to take when an object does not exist:

- **create**: A new object is created from the XML description and processing continues.
- **error**: The command fails with an error. (Default)
- **ignore**: The new description is ignored and processing continues.

Example

This example updates the alternate word list by adding a new altWord object in altword2.xml:

```
SES>updateAll altWord --INPUT_FILE=altword2.xml --UPDATE_METHOD=overwrite --NOT_FOUND_METHOD=create
```

```
updateAll operation succeeded for type "altWord".
```

```
1 object(s) with status NOT_FOUND_CREATED
```

updateAll docServiceInstance

Sets one or more parameters of all document service instances described in an XML document.

See Also

[update docServiceInstance](#)

Syntax

```
updateAll docServiceInstance --INPUT_FILE=xml_filename --UPDATE_METHOD=method
[--NOT_FOUND_METHOD=action] [--ENCRYPT_KEY=key]
```

or

```
updateAll docServiceInstance -i xml_filename -a method [-t action] [-e key]
```

Parameters

xml_filename

Path to the XML document that configures the object. See [docServiceInstance](#) on page 2-18.

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

action

Action to take when an object does not exist:

- **create**: A new object is created from the XML description and processing continues.
- **error**: The command fails with an error. (Default)
- **ignore**: The new description is ignored and processing continues

key

Encryption key for passwords in *xml_filename*. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example updates two document service instances:

```
SES>updateAll docServiceInstance --UPDATE_METHOD=overwrite --NOT_FOUND_
METHOD=create --INPUT_FILE=docserviceinstance.xml --ENCRYPT_KEY=key2encrypt
```

```
updateAll operation succeeded for type "docServiceInstance".
```

```
2 object(s) with status UPDATE_SUCCEEDED
```

updateAll docServicePipeline

Sets one or more parameters of all document services pipelines described in an XML document.

See Also

[update docServicePipeline](#)

Syntax

```
updateAll docServicePipeline --INPUT_FILE=xml_filename --UPDATE_METHOD=method
[--NOT_FOUND_METHOD=action]
```

or

```
updateAll docServicePipeline -i xml_filename -a method [-t action]
```

Parameters

xml_filename

Path to the XML document that configures the object. See [docServicePipeline](#) on page 2-24.

method

Method to use when updating the properties of an object:

- **add**: Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted in the XML file. It also appends new service instances described in the XML to the end of the execution list, so that the new instances are executed last.
- **remove**: Removes existing properties that are defined in the XML file.
- **overwrite**: Replaces the existing property values with the new values.

action

Action to take when an object does not exist:

- **create**: A new object is created from the XML description and processing continues.
- **error**: The command fails with an error. (Default)
- **ignore**: The new description is ignored and processing continues

Example

This example updates two document service pipelines:

```
updateAll docServicePipeline --UPDATE_METHOD=remove --NOT_FOUND_METHOD=create
--INPUT_FILE=docservicepipeline.xml
```

```
updateAll operation succeeded for type "docServicePipeline".
```

```
2 object(s) with status UPDATE_SUCCEEDED
```

updateAll proxyLogin

Sets one or more parameters for all proxy log-ins (federated trusted entities) described in an XML document.

See Also

[update proxyLogin](#)

Syntax

```
updateAll proxyLogin --INPUT_FILE=xml_filename --UPDATE_METHOD=method [--NOT_FOUND_METHOD=action] [--ENCRYPT_KEY=key]
```

or

```
updateAll proxyLogin -i xml_filename -a method [-t action] [-e key]
```

Parameters

xml_filename

Path to the XML document that configures the object. See [proxyLogin](#) on page 2-48.

method

Method to use when updating the properties of an object:

- **add**: Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted in the XML file.
- **remove**: Removes existing properties that are defined in the XML file.
- **overwrite**: Replaces the existing property values with the new values.

action

Action to take when an object does not exist:

- **create**: A new object is created from the XML description and processing continues.
- **error**: The command fails with an error. (Default)
- **ignore**: The new description is ignored and processing continues

key

Encryption key for passwords in *xml_filename*. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

Example

This example updates all proxy log-ins described in proxy.xml:

```
SES>updateAll proxyLogin --INPUT_FILE=proxy.xml --UPDATE_METHOD=overwrite
--ENCRYPT_KEY=key2encrypt
```

```
updateAll operation succeeded for type "proxyLogin".
```

```
3 object(s) with status UPDATE_SUCCEEDED
```

updateAll schedule

Sets one or more parameters of all schedules described in an XML document.

See Also

[update schedule](#)

Syntax

```
updateAll schedule --INPUT_FILE=xml_filename --UPDATE_METHOD=method [--NOT_FOUND_METHOD=action]
```

or

```
updateAll schedule -i xml_filename -a method [-t action]
```

Parameters

xml_filename

Path to the XML document that configures the object. See [schedule](#) on page 2-59.

method

Method to use when updating the properties of an object:

- **add**: Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted in the XML file.
- **remove**: Removes existing properties that are defined in the XML file.
- **overwrite**: Replaces the existing property values with the new values.

action

Action to take when an object does not exist:

- **create**: A new object is created from the XML description and processing continues.
- **error**: The command fails with an error. (Default)
- **ignore**: The new description is ignored and processing continues

Example

This example updates the schedules with the XML document in `schedule_rev1.xml`:

```
SES>updateAll schedule --UPDATE_METHOD=add --NOT_FOUND_METHOD=create --INPUT_FILE=schedule_rev1.xml
```

```
updateAll operation succeeded for type "schedule".
```

```
1 object(s) with status UPDATE_SUCCEEDED
```


updateAll searchAttr

Sets one or more parameters of all search attributes described in an XML document. You can add LOVs to the default search attributes.

See Also

[update searchAttr](#)

Syntax

```
updateAll searchAttr --INPUT_FILE=xml_filename --UPDATE_METHOD=method [--NOT_FOUND_METHOD=action]
```

or

```
updateAll searchAttr -i xml_filename -a method [-e key] [-t action]
```

Parameters

xml_filename

Path to the XML document that configures the object. See [searchAttr](#) on page 2-64.

method

Method to use when updating the properties of an object:

- **add**: Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted in the XML file.
- **remove**: Removes existing properties that are defined in the XML file.
- **overwrite**: Replaces the existing property values with the new values.

action

Action to take when an object does not exist:

- **create**: A new object is created from the XML description and processing continues.
- **error**: The command fails with an error. (Default)
- **ignore**: The new description is ignored and processing continues

Example

This example updates a search attribute using the description in searchattrs_update.xml:

```
SES>updateAll searchAttr --UPDATE_METHOD=add --NOT_FOUND_METHOD=create --INPUT_FILE=searchattrs_update.xml
```

```
updateAll operation succeeded for type "searchAttr".
```

```
1 object(s) with status UPDATE_SUCCEEDED
```

updateAll source

Sets one or more parameters of all sources described in an XML document.

See Also

[update source](#)

Syntax

```
updateAll source --INPUT_FILE=xml_filename --UPDATE_METHOD=method [--NOT_FOUND_METHOD=action] [--ENCRYPT_KEY=key]
```

or

```
updateAll source -i xml_filename -a method [-t action] [-e key]
```

Parameters

xml_filename

Path to the XML document that configures the object. See [source](#) on page 2-67.

method

Method to use when updating the properties of an object:

- **add**: Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted in the XML file.
- **remove**: Removes existing properties that are defined in the XML file.
- **overwrite**: Replaces the existing property values with the new values.

key

Encryption key for passwords in *xml_filename*. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid. If you omit this option, you are prompted for the key.

action

Action to take when an object does not exist:

- **create**: A new object is created from the XML description and processing continues.
- **error**: The command fails with an error. (Default)
- **ignore**: The new description is ignored and processing continues.

Example

This example creates a new source described in `sources_update.xml`:

```
SES>updateAll source --UPDATE_METHOD=add --NOT_FOUND_METHOD=create --INPUT_FILE=sources_update.xml --ENCRYPT_KEY=key2encrypt
```

```
updateAll operation succeeded for type "source".
```

```
1 object(s) with status NOT_FOUND_CREATED
```

updateAll sourceGroup

Sets one or more parameters of all source groups described in an XML document.

See Also

[update sourceGroup](#)

Syntax

```
updateAll sourceGroup --INPUT_FILE=xml_filename --UPDATE_METHOD=method [--NOT_FOUND_METHOD=action]
```

or

```
updateAll sourceGroup -i xml_filename -a method [-t action]
```

Parameters

xml_filename

Path to the XML document that configures the object. See [sourceGroup](#) on page 2-92.

method

Method to use when updating the properties of an object:

- **add**: Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted in the XML file.
- **remove**: Removes existing properties that are defined in the XML file.
- **overwrite**: Replaces the existing property values with the new values.

action

Action to take when an object does not exist:

- **create**: A new object is created from the XML description and processing continues.
- **error**: The command fails with an error. (Default)
- **ignore**: The new description is ignored and processing continues

Example

This example updates two source groups:

```
SES>updateAll sourceGroup --UPDATE_METHOD=add --NOT_FOUND_METHOD=ignore --INPUT_FILE=sourcegroups_update.xml
```

```
updateAll operation succeeded for type "sourceGroup".
```

```
2 object(s) with status UPDATE_SUCCEEDED
2 object(s) with status NOT_FOUND_IGNORED
```

updateAll storageArea

Sets one or more properties of all storage areas described in an XML document.

Syntax

```
updateAll storageArea --INPUT_FILE=xml_filename --UPDATE_METHOD=method [--NOT_FOUND_METHOD=action]
```

or

```
updateAll storageArea -n object_name -i xml_filename -a method [-t action]
```

Parameters

xml_filename

Path to the XML document that configures the object. See [storageArea](#) on page 2-98.

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

action

Action to take when an object does not exist:

- **create**: A new object is created from the XML description and processing continues.
- **error**: The command fails with an error. (Default)
- **ignore**: The new description is ignored and processing continues

Example

This example creates a storage area and updates the parameter settings of another:

```
SES> updateAll storageArea --UPDATE_METHOD=remove --NOT_FOUND_METHOD=create  
--INPUT_FILE=storage.xml
```

```
updateAll operation succeeded for type "storageArea".
```

```
1 object(s) with status UPDATE_SUCCEEDED  
1 object(s) with status NOT_FOUND_CREATED
```

updateAll suggLink

Sets one or more parameters all suggested links described in an XML document.

See Also

[update suggLink](#)

Syntax

```
updateAll suggLink --INPUT_FILE=xml_filename --UPDATE_METHOD=method [--NOT_FOUND_METHOD=action]
```

or

```
updateAll suggLink -i xml_filename -a method [-t action]
```

Parameters

xml_filename

Path to the XML document that configures the object. See [suggLink](#) on page 2-100.

method

Method to use when updating the properties of an object:

- **overwrite**: Replaces the existing property values with the new values.

action

Action to take when an object does not exist:

- **create**: A new object is created from the XML description and processing continues.
- **error**: The command fails with an error. (Default)
- **ignore**: The new description is ignored and processing continues

Example

This example updates one suggested link and creates two more:

```
SES>updateAll suggLink --UPDATE_METHOD=overwrite --NOT_FOUND_METHOD=create  
--INPUT_FILE=sugglinks_update.xml
```

```
updateAll operation succeeded for type "suggLink".
```

```
1 object(s) with status UPDATE_SUCCEEDED  
2 object(s) with status NOT_FOUND_CREATED
```

Web Service Operations

This chapter describes the SOAP messages for the Oracle SES Web service. It contains this topic:

- [Alphabetic List of Web Service Operations](#)

Alphabetic List of Web Service Operations

A C D E G S U

A

[activate](#)

C

[create](#)
[createAll](#)

D

[deactivate](#)
[delete](#)
[deleteAll](#)
[deleteList](#)

E

[export](#)
[exportAll](#)
[exportList](#)

G

[getAllObjectKeys](#)
[getAPIVersion](#)
[getAllStates](#)
[getState](#)
[getStateList](#)

S

[start](#)
[stop](#)

U

[update](#)
[updateAll](#)

activate

Activates an administrative object. Objects that control the periodic execution of an activity must also be started: [indexOptimizer](#) and [schedule](#).

See Also

[start](#)

SOAP Message

```
<activate xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">
    <objectKey xmlns="">
      <adminKeyPairs>
        <keyName>
        <keyValue>
      </adminKeyPairs>
    </objectKey>
    <objectXML xmlns="">
    <decryptionKey xmlns="">
    <credentials xmlns="">
      <password>
      <userName>
    </credentials>
    <locale xmlns="">
  </objectType>
</activate>
```

Element Descriptions

<activate xmlns="http://search.oracle.com/Admin">

Describes activation of an administrative object. It contains these elements:

```
<objectType>
<objectKey>
<objectXML>
<decryptionKey>
<credentials>
<locale>
```

<objectType xmlns="">

Contains one of these object types:

```
identityPlugin
indexOptimizer
schedule
```

<objectKey xmlns="">

Describes the object key for a creatable object type:

```
identityPlugin
schedule
```

This element contains one or more `<adminKeyPairs>` elements.

<adminKeyPairs>

Contains these elements:

```
<keyName>
<keyValue>
```

<keyName>

Contains the case-sensitive key name of the object type, such as `name`.

<keyValue>

Contains the value that uniquely describes the object, such as Web Site Schedule.

<objectXML xmlns="">

Contains an XML document that describes the object. See [Chapter 2, "Administration Object Types."](#)

Use escape codes for these symbols in the embedded XML:

Symbol	Escape Code
<	<
>	>
"	"

<decryptionKey xmlns="">

Contains a decryption key for `identityPlugin` objects.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
<userName>
```

<password>

Contains the password for `<userName>`.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault
```

Example

This example activates clustering.

Note: The clustering object used in the example is disabled in Oracle Fusion Applications.

```
<activate xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">clustering</objectType>
</activate>
```

This is the service response for a successful operation:

```
<ns2:activateResponse xmlns:ns2="http://search.oracle.com/Admin" />
```

create

Creates an administrative object from an XML description.

See Also

[createAll](#)

SOAP Message

```
<create xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">
    <objectKey xmlns="">
      <adminKeyPairs>
        <keyName>
        <keyValue>
      </adminKeyPairs>
    </objectKey>
    <objectXML xmlns="">
    <decryptionKey xmlns="">
    <credentials xmlns="">
      <password>
      <userName>
    </credentials>
    <locale xmlns="">
```

Element Descriptions

<create xmlns="http://search.oracle.com/Admin">

Describes creation of an administrative object. It contains these elements:

```
<creatableType>
<objectKey>
<objectXML>
<decryptionKey>
<credentials>
<attachments>
<locale>
```

<creatableType xmlns="">

Contains a creatable type:

```
altWord
boostedUrl
docServiceInstance
docServicePipeline
facetTree
proxyLogin
schedule
searchAttr
source
sourceGroup
storageArea
suggLink
thesaurus
```

<objectKey xmlns="">

Describes the object key for the object. This element contains an `<adminKeyPairs>` element.

<adminKeyPairs>

Contains these elements:

```
<keyName>
<keyValue>
```

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains the value that uniquely describes the object, such as Web Site Schedule.

<objectXML xmlns="">

Contains an XML document that describes the object. See [Chapter 2, "Administration Object Types."](#)

Use escape codes for these symbols in the embedded XML:

Symbol	Escape Code
<	<
>	>
"	"

<decryptionKey xmlns="">

Contains a decryption key for these object types:

```
docServiceInstance
identityPlugin
proxyLogin
source
```

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
```

Example

This example creates an alternate word pair.

```
<create xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">altWord</creatableType>
  <objectKey xmlns="">
    <adminKeyPairs>
      <keyName>keyword</keyName>
      <keyValue>oses</keyValue>
    </adminKeyPairs>
    <adminKeyPairs>
      <keyName>altKeyword</keyName>
      <keyValue>Oracle Secure Enterprise Search</keyValue>
    </adminKeyPairs>
  </objectKey>
  <objectXML xmlns="">

    <!-- XML object description appears here-->

  </objectXML>
</create>
```

This is the service response for a successful operation:

```
<ns2:createResponse xmlns:ns2="http://search.oracle.com/Admin" />
```

createAll

Creates all of the administrative objects of a specified type in an XML description.

See Also

[create](#)

SOAP Message

```
<createAll xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">
    <objectXML xmlns="">
      <decryptionKey xmlns="">
        <credentials xmlns="">
          <password>
            <userName>
          <controls xmlns="">
            <controlName>
              <controlValue>
            <locale xmlns="">
```

Element Descriptions

<createAll xmlns="http://search.oracle.com/Admin">

Describes creation of one or more administrative objects. It contains these elements:

```
<creatableType>
<objectXML>
<decryptionKey>
<credentials>
<attachments>
<controls>
<locale>
```

<creatableType xmlns="">

Contains a creatable type:

```
altWord
boostedUrl
docServiceInstance
docServicePipeline
facetTree
proxyLogin
schedule
searchAttr
source
sourceGroup
storageArea
suggLink
```

<objectXML xmlns="">

Contains an XML document that describes the objects. See [Chapter 2, "Administration Object Types."](#)

Use escape codes for these symbols in the embedded XML:

Symbol	Escape Code
<	<
>	>
"	"

<decryptionKey xmlns="">

Contains a decryption key for these object types:

```
identityPlugin
proxyLogin
source
```

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<controls xmlns="">

Specifies an operation control. It contains these elements:

```
<controlName>
<controlValue>
```

<controlName>

Specifies an action for an error condition:

- DUPE_METHOD: Controls the action to take when an object already exists. For all creatable types.
- IGNORE_INVALID_STATE: Controls whether processing continues when an object cannot be overwritten because it is in an invalid state. This control is used only when DUPE_METHOD is set to overwrite. For clusterTree, identityPlugin, and schedule only.

<controlValue>

For DUPE_METHOD:

- error: The operation fails with an error. (Default)
- ignore: The existing object description is kept.
- overwrite: The new description replaces the existing object description

For IGNORE_INVALID_STATE:

- true: Continue processing with the next object.
- false: Stop processing with an error and roll back all changes. (Default)

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault
```

Example

This example creates all of the alternate word pairs defined in the object XML (omitted):

```
<createAll xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">altWord</creatableType>
  <objectXML xmlns="">

    <!-- XML object descriptions appear here-->

  </objectXML>
  <controls xmlns="">
    <controlName>DUPE_METHOD</controlName>
    <controlValue>overwrite</controlValue>
  </controls>
  <credentials xmlns="">
    <password>password</password>
    <userName>admin username</userName>
  </credentials>
</createAll>
```

The response shows that three alternate word pairs were created successfully.

```
<ns2:createAllResponse xmlns:ns2="http://search.oracle.com/Admin">
  <statusList>
    <objectKey>
      <adminKeyPairs>
        <keyName>keyword</keyName>
        <keyValue>oses</keyValue>
      </adminKeyPairs>
      <adminKeyPairs>
        <keyName>altKeyword</keyName>
        <keyValue>Oracle Secure Enterprise Search</keyValue>
      </adminKeyPairs>
    </objectKey>
    <objectType>altWord</objectType>
    <statusCode>CREATE_SUCCEEDED</statusCode>
  </statusList>
  <statusList>
    <objectKey>
      <adminKeyPairs>
        <keyName>keyword</keyName>
        <keyValue>text</keyValue>
      </adminKeyPairs>
      <adminKeyPairs>
```



```
        <keyName>altKeyword</keyName>
        <keyValue>Oracle Text</keyValue>
    </adminKeyPairs>
</objectKey>
<objectType>altWord</objectType>
<statusCode>CREATE_SUCCEEDED</statusCode>
</statusList>
<statusList>
<objectKey>
    <adminKeyPairs>
        <keyName>keyword</keyName>
        <keyValue>rac</keyValue>
    </adminKeyPairs>
    <adminKeyPairs>
        <keyName>altKeyword</keyName>
        <keyValue>Real Application Clusters</keyValue>
    </adminKeyPairs>
</objectKey>
<objectType>altWord</objectType>
<statusCode>CREATE_SUCCEEDED</statusCode>
</statusList>
</ns2:createAllResponse>
```

deactivate

Deactivates an administrative object.

SOAP Message

```
<deactivate xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">
    <objectKey xmlns="">
      <adminKeyPairs>
        <keyName>
        <keyValue>
      <credentials xmlns="">
        <password>
        <userName>
      <locale xmlns="">
```

Element Descriptions

<deactivate xmlns="http://search.oracle.com/Admin">

Describes activation of an administrative object. It contains these elements:

```
<objectType>
<objectKey>
<credentials>
<locale>
```

<objectType xmlns="">

Contains one of these object types:

```
identityPlugin
indexOptimizer
schedule
```

<objectKey xmlns="">

Describes the object key for a creatable object type. See [Chapter 2, "Administration Object Types,"](#) for format of the object keys for these object types:

```
identityPlugin
schedule
```

This element contains one or more <adminKeyPairs> elements.

<adminKeyPairs>

Contains these elements:

```
<keyName>
<keyValue>
```

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains the value of <keyName>, such as Web Site Schedule for the name of a schedule.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault
```

Example

This example deactivates the Oracle Doc Library schedule. Any error messages are returned in Italian.

```
<deactivate xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">schedule</objectType>
  <objectKey xmlns="">
    <adminKeyPairs>
      <keyName>name</keyName>
      <keyValue>Oracle Doc Library</keyValue>
    </adminKeyPairs>
  </objectKey>
  <locale xmlns="">it</locale>
</deactivate>
```

This is the service response for a successful operation:

```
<ns2:deactivateResponse xmlns:ns2="http://search.oracle.com/Admin" />
```

delete

Deletes an administrative object.

See Also

[deleteAll](#), [deleteList](#)

SOAP Message

```
<delete xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">
    <objectKey xmlns="">
      <adminKeyPairs>
        <keyName>
        <keyValue>
      </adminKeyPairs>
    </objectKey>
    <credentials xmlns="">
      <password>
      <userName>
    </credentials>
    <locale xmlns="">
```

Element Descriptions

<delete xmlns="http://search.oracle.com/Admin">

Describes deletion of an administrative object. It contains these elements:

- creatableType
- objectKey
- credentials
- locale

<creatableType xmlns="">

Contains one of these creatable types:

- altWord
- boostedUrl
- docServiceInstance
- docServicePipeline
- facetTree
- proxyLogin
- schedule
- searchAttr
- source
- sourceGroup
- storageArea
- suggLink
- thesaurus

<objectKey xmlns="">

Describes the object key for the object. This element contains one or more `<adminKeyPairs>` elements.

<adminKeyPairs>

Contains these elements:

- <keyName>
- <keyValue>

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains the value that uniquely describes the object, such as Web Site Schedule.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
```

```
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault
```

Example

This example deletes a proxy log-in named `this_proxy`:

```
<delete xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">proxyLogin</creatableType>
  <objectKey xmlns="">
    <adminKeyPairs>
      <keyName>name</keyName>
      <keyValue>this_proxy</keyValue>
    </adminKeyPairs>
  </objectKey>
</delete>
```

This is the service response for a successful operation:

```
<ns2:deleteResponse xmlns:ns2="http://search.oracle.com/Admin" />
```

deleteAll

Deletes all of the administrative objects of a specified type.

See Also

[delete](#), [deleteList](#)

SOAP Message

```
<deleteAll xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">
    <objectKeyPattern xmlns="">
      <adminKeyPairs>
        <keyName>
        <keyValue>
      </adminKeyPairs>
    </objectKeyPattern>
    <credentials xmlns="">
      <password>
      <userName>
    </credentials>
    <controls xmlns="">
      <controlName>
      <controlValue>
    </controls>
    <locale xmlns="">
```

Element Descriptions

<deleteAll xmlns="http://search.oracle.com/Admin">

Describes deletion of administrative objects. It contains these elements:

```
<creatableType>
<objectKeyPattern>
<credentials>
<controls>
<locale>
```

<creatableType xmlns="">

Contains one of these creatable types:

```
altWord
boostedUrl
docServiceInstance
docServicePipeline
facetTree
proxyLogin
schedule
searchAttr
source
sourceGroup
storageArea
suggLink
```

<objectKeyPattern xmlns="">

An object key that matches the objects to process. It contains one or more <adminKeyPairs> elements.

<adminKeyPairs>

Contains these elements:

```
<keyName>
```

<keyValue>

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains a case-sensitive value that matches the object key of one or more objects. It can include wildcard characters:

- A percent sign (%) matches zero or more characters. In a multibyte character set, it matches zero or more bytes.
- An underscore (_) matches exactly one character. In a multibyte character set, it matches one byte.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

<password>

<userName>

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<controls xmlns="">

Describes an operation control. It contains these elements:

<controlName>

<controlValue>

<controlName>

Contains these control:

IGNORE_INVALID_STATE: Controls whether processing continues when an object cannot be deleted because it is in an invalid state. For clusterTree, identityPlugin, and schedule only.

<controlValue>

For IGNORE_INVALID_STATE:

- true: Continue processing with the next object.
- false: Stop processing with an error and roll back all changes. (Default)

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

AdminAPIRuntimeFault

CreatableAdminObjectFault

DependentObjectFault

```
InvalidInputFault
InvalidStateFault
```

Example

This example deletes all schedules that match the string `My%`.

```
<deleteAll xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">schedule</creatableType>
  <objectKeyPattern xmlns="">
    <adminKeyPairs>
      <keyName>name</keyName>
      <keyValue>My%</keyValue>
    </adminKeyPairs>
  </objectKeyPattern>
</deleteAll>
```

This response confirms that the schedule named `My Mail` was successfully deleted:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:deleteAllResponse xmlns:ns2="http://search.oracle.com/Admin">
      <statusList>
        <objectKey>
          <adminKeyPairs>
            <keyName>name</keyName>
            <keyValue>My Mail</keyValue>
          </adminKeyPairs>
        </objectKey>
        <objectType>schedule</objectType>
        <statusCode>DELETE_SUCCEEDED</statusCode>
      </statusList>
    </ns2:deleteAllResponse>
  </S:Body>
</S:Envelope>
```


deleteList

Deletes a list of administrative objects of a specified type.

See Also

[delete](#), [deleteAll](#)

SOAP Message

```
<deleteList xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">
    <objectKeys xmlns="">
      <adminKeyPairs>
        <keyName>
        <keyValue>
      <credentials xmlns="">
        <password>
        <userName>
      <controls xmlns="">
        <controlName>
        <controlValue>
      <locale xmlns="">
```

Element Descriptions

<deleteList xmlns="http://search.oracle.com/Admin">

Describes the deletion of one or more objects. It contains these elements:

```
<creatableType>
<objectKeys>
<credentials>
<controls>
<locale>
```

<creatableType xmlns="">

Contains one of these creatable types:

```
altWord
boostedUrl
docServiceInstance
docServicePipeline
facetTree
proxyLogin
schedule
searchAttr
source
sourceGroup
storageArea
suggLink
```

<objectKeys xmlns="">

Describes the key for an object. One or more `<objectKeys>` elements compose the list of objects to delete. This element contains one or more `<adminKeyPairs>` elements.

<adminKeyPairs>

Contains these elements:

```
<keyName>
```

<keyValue>

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains the value that uniquely describes the object, such as Web Site Schedule.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

<password>

<userName>

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<controls xmlns="">

Describes an operation control. It contains these elements:

<controlName>

<controlValue>

<controlName>

IGNORE_NOT_FOUND: Controls the resulting action when an object in the list does not exist.

IGNORE_INVALID_STATE: Controls whether processing continues when an object cannot be deleted because it is in an invalid state. For `identityPlugin` and `schedule` only.

<controlValue>

For IGNORE_NOT_FOUND:

- true: The object is skipped and processing continues.
- false: Processing stops with an error. (Default)

For IGNORE_INVALID_STATE:

- true: Continue processing with the next object.
- false: Stop processing with an error and roll back all changes. (Default)

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault

Example

This example deletes a list of three proxy log-ins:

```
<deleteList xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">proxyLogin</creatableType>
  <objectKeys>
    <adminKeyPairs>
      <keyName>name</keyName>
      <keyValue>this_proxy</keyValue>
    </adminKeyPairs>
  </objectKeys>
  <objectKeys xmlns="">
    <adminKeyPairs>
      <keyName>name</keyName>
      <keyValue>some_proxy</keyValue>
    </adminKeyPairs>
  </objectKeys>
  <objectKeys>
    <adminKeyPairs>
      <keyName>name</keyName>
      <keyValue>that_proxy</keyValue>
    </adminKeyPairs>
  </objectKeys>
  <controls xmlns="">
    <controlName>IGNORE_NOT_FOUND</controlName>
    <controlValue>>true</controlValue>
  </controls>
</deleteList>
```

The service response indicates that `this_proxy` and `that_proxy` were deleted successfully. Processing continued after `some_proxy` was not found.

```
<ns2:deleteListResponse xmlns:ns2="http://search.oracle.com/Admin">
  <statusList>
    <objectKey>
      <adminKeyPairs>
        <keyName>name</keyName>
        <keyValue>this_proxy</keyValue>
      </adminKeyPairs>
    </objectKey>
    <objectType>proxyLogin</objectType>
    <statusCode>DELETE_SUCCEEDED</statusCode>
  </statusList>
  <statusList>
    <objectKey>
      <adminKeyPairs>
        <keyName>name</keyName>
        <keyValue>some_proxy</keyValue>
      </adminKeyPairs>
    </objectKey>
    <objectType>proxyLogin</objectType>
    <statusCode>NOT_FOUND_IGNORED</statusCode>
  </statusList>
  <statusList>
    <objectKey>
      <adminKeyPairs>
        <keyName>name</keyName>
        <keyValue>that_proxy</keyValue>
      </adminKeyPairs>
    </objectKey>
```

```
<objectType>proxyLogin</objectType>  
<statusCode>DELETE_SUCCEEDED</statusCode>  
</statusList>  
</ns2:deleteListResponse>
```

export

Returns the XML description of an object.

See Also

[exportAll](#), [exportList](#)

SOAP Message

```
<export xmlns="http://search.oracle.com/Admin"
  <objectType xmlns=""
  <objectKey xmlns=""
    <adminKeyPairs>
      <keyName>
      <keyValue>
    <encryptionKey xmlns=""
  <credentials xmlns=""
    <password>
    <userName>
  <locale xmlns="">
```

Element Descriptions

<export xmlns="http://search.oracle.com/Admin"

Describes the export of an administrative object. See [Table 1–2, "Universal Objects"](#) and [Table 1–3, "Creatable Object Types"](#). This element contains these child elements:

```
<objectType>
<objectKey>
<encryptionKey>
<credentials>
<locale>
```

<objectType xmlns="">

Contains an administration object type. See [Table 1–2, "Universal Objects"](#) and [Table 1–3, "Creatable Object Types"](#).

<objectKey xmlns="">

Describes the object key for the object. This element contains one or more `<adminKeyPairs>` elements.

<adminKeyPairs>

Contains these elements:

```
<keyName>
<keyValue>
```

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains the value that uniquely describes the object, such as Web Site Schedule.

<encryptionKey xmlns="">

The encryption key for passwords in the XML description of `identityPlugin`, `proxyLogin`, and `source` objects. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault
```

Example

This example exports the XML description of this_proxy proxy log-in:

```
<export xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">proxyLogin</objectType>
  <objectKey xmlns="">
    <adminKeyPairs>
      <keyName>name</keyName>
      <keyValue>this_proxy</keyValue>
    </adminKeyPairs>
  </objectKey>
  <encryptionKey xmlns="">key2encrypt</encryptionKey>
  <credentials xmlns="">
    <password>password</password>
    <userName>admin username</userName>
  </credentials>
</export>
```

The service response contains the XML definition:

```
<ns2:exportResponse xmlns:ns2="http://search.oracle.com/Admin">
  <objectOutput>
    <objectXML>

<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.2.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:proxyLogins>
    <search:proxyLogin>
      <search:name>this_proxy</search:name>
      <search:password encrypted="true">128b6b430...</search:password>
```

```
        <search:useIdentityPlugin>false</search:useIdentityPlugin>
    </search:proxyLogin>
</search:proxyLogins>
</search:config>

    </objectXML>
</objectOutput>
</ns2:exportResponse>
```

exportAll

Returns the XML descriptions of all objects of a specified type.

See Also

[export](#), [exportList](#)

SOAP Message

```
<exportAll xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">
    <objectKeyPattern xmlns="">
      <adminKeyPairs>
        <keyName>
        <keyValue>
      <encryptionKey xmlns="">
      <credentials xmlns="">
        <password>
        <userName>
      <locale xmlns="">
```

Element Descriptions

<exportAll xmlns="http://search.oracle.com/Admin">

Contains these elements:

```
<creatableType>
<objectKeyPattern>
<encryptionKey>
<credentials>
<locale>
```

<creatableType xmlns="">

Contains one of these creatable types:

```
altWord
boostedUrl
docServiceInstance
docServiceManager
docServicePipeline
facetTree
identityPlugin
proxyLogin
schedule
searchAttr
source
sourceGroup
sourceType
storageArea
suggLink
```

<objectKeyPattern xmlns="">

An object key that matches the objects to process. It contains one or more <adminKeyPairs> elements.

<adminKeyPairs>

Contains these elements:


```
<keyName>
<keyValue>
```

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains a value that matches the object key of one or more objects. It can include wildcard characters:

- A percent sign (%) matches zero or more characters. In a multibyte character set, it matches zero or more bytes.
- An underscore (_) matches exactly one character. In a multibyte character set, it matches one byte.

<encryptionKey xmlns="">

The encryption key for passwords in the XML description of `identityPlugin`, `proxyLogin`, and `source` objects. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
<userName>
```

<password>

Contains the password for `<userName>`.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault
```

Example

This example exports the XML descriptions of all alternate word pairs:

```
<exportAll xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">altWord</creatableType>
  <credentials xmlns="">
    <password>password</password>
    <userName>admin username</userName>
  </credentials>
</exportAll>
```

The service response contains the XML definitions of three alternate word pairs.

```
<ns2:exportAllResponse xmlns:ns2="http://search.oracle.com/Admin">
  <objectOutput>
    <objectXML>

<?xml version="1.0" encoding="UTF-8"?>
<search:config productVersion="11.2.2.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:altWords>
    <search:altWord>
      <search:keyword>oses</search:keyword>
      <search:altKeyword>Oracle Secure Enterprise Search</search:altKeyword>
      <search:autoExpand>true</search:autoExpand>
    </search:altWord>
    <search:altWord>
      <search:keyword>rac</search:keyword>
      <search:altKeyword>Real Application Clusters</search:altKeyword>
      <search:autoExpand>>false</search:autoExpand>
    </search:altWord>
    <search:altWord>
      <search:keyword>text</search:keyword>
      <search:altKeyword>Oracle Text</search:altKeyword>
      <search:autoExpand>>false</search:autoExpand>
    </search:altWord>
  </search:altWords>
</search:config>

    </objectXML>
  </objectOutput>
</ns2:exportAllResponse>
```

exportList

Returns the XML descriptions of a list of objects of a specified type.

See Also

[export](#), [exportAll](#)

SOAP Message

```
<exportList xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">
    <objectKeys xmlns="">
      <adminKeyPairs>
        <keyName>
        <keyValue>
      <encryptionKey xmlns="">
    <credentials xmlns="">
      <password>
      <userName>
    <controls xmlns="">
      <controlName>
      <controlValue>
    <locale xmlns="">
```

Element Descriptions

<exportList xmlns="http://search.oracle.com/Admin">

Describes a list of objects for export. It contains these elements:

```
<creatableType>
<objectKeys>
<encryptionKey>
<credentials>
<controls>
<locale>
```

<creatableType xmlns="">

Contains a creatable object type:

```
altWord
boostedUrl
docServiceInstance
docServiceManager
docServicePipeline
facetTree
identityPlugin
proxyLogin
schedule
searchAttr
source
sourceGroup
sourceType
storageArea
suggLink
```

<objectKeys xmlns="">

Describes the key for an object. One or more <objectKeys> elements compose the list of objects to export. This element contains one or more <adminKeyPairs> elements.

<adminKeyPairs>

Contains these elements:

<keyName>
<keyValue>

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains the value that uniquely describes the object, such as Web Site Schedule.

<encryptionKey xmlns="">

The encryption key for passwords in the XML description of `identityPlugin`, `proxyLogin`, and `source` objects. The key must be at least eight ASCII characters long and include at least one letter and one number. Multibyte characters are invalid.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

<password>
<userName>

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<controls xmlns="">

Describes an operation control. It contains these elements:

<controlName>
<controlValue>

<controlName>

IGNORE_NOT_FOUND: Controls the resulting action when an object in the list does not exist.

<controlValue>

For IGNORE_NOT_FOUND:

- true: The object is skipped and processing continues.
- false: Processing stops with an error. (Default)

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault
```

Example

This example requests the XML descriptions of three proxy log-ins: `this_proxy`, `some_proxy`, and `that_proxy`.

```
<exportList xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">proxyLogin</creatableType>
  <objectKeys xmlns="">
    <adminKeyPairs>
      <keyName>name</keyName>
      <keyValue>this_proxy</keyValue>
    </adminKeyPairs>
  </objectKeys>
  <objectKeys xmlns="">
    <adminKeyPairs>
      <keyName>name</keyName>
      <keyValue>some_proxy</keyValue>
    </adminKeyPairs>
  </objectKeys>
  <objectKeys xmlns="">
    <adminKeyPairs>
      <keyName>name</keyName>
      <keyValue>that_proxy</keyValue>
    </adminKeyPairs>
  </objectKeys>
  <encryptionKey xmlns="">key2encrypt</encryptionKey>
  <controls xmlns="">
    <controlName>IGNORE_NOT_FOUND</controlName>
    <controlValue>true</controlValue>
  </controls>
</exportList>
```

The following response provides the XML descriptions of `this_proxy` and `that_proxy`. It ignored the request for `some_proxy`, which did not exist.

```
<ns2:exportListResponse xmlns:ns2="http://search.oracle.com/Admin">
  <objectOutput>
    <objectXML><?xml version="1.0" encoding="UTF-8"?>
      <search:config productVersion="11.2.2.0.0"
xmlns:search="http://xmlns.oracle.com/search">
        <search:proxyLogins>
          <search:proxyLogin>
            <search:name>this_proxy</search:name>
            <search:password encrypted="true">128b6b43...</search:password>
            <search:useIdentityPlugin>>false</search:useIdentityPlugin>
          </search:proxyLogin>
          <search:proxyLogin>
            <search:name>that_proxy</search:name>
            <search:password encrypted="true">a625ca28...</search:password>
            <search:useIdentityPlugin>>false</search:useIdentityPlugin>
          </search:proxyLogin>
        </search:proxyLogins>
      </search:config>
```

```
</objectXML>  
</objectOutput>  
</ns2:exportListResponse>
```

getAllObjectKeys

Returns the object keys for a specified object type.

SOAP Message

```
<getAllObjectKeys xmlns="http://search.oracle.com/Admin">>
  <creatableType xmlns="">
  <objectKeyPattern xmlns="">
    <adminKeyPairs>
      <keyName>
      <keyValue>
    <credentials xmlns="">
      <password>
      <userName>
    <locale xmlns="">
```

Element Descriptions

<getAllObjectKeys xmlns="http://search.oracle.com/Admin">>

Contains these elements:

```
<creatableType>
<objectKeyPattern>
<credentials>
<locale>
```

<creatableType xmlns="">

Contains a creatable object type. See [Table 1-3, "Creatable Object Types"](#).

<objectKeyPattern xmlns="">

An object key that matches the objects to process. It contains one or more `<adminKeyPairs>` elements.

<adminKeyPairs>

Contains these elements:

```
<keyName>
<keyValue>
```

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains a value that matches the object key of one or more objects. It can include wildcard characters:

- A percent sign (%) matches zero or more characters. In a multibyte character set, it matches zero or more bytes.
- An underscore (_) matches exactly one character. In a multibyte character set, it matches one byte.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

Example

This example requests all suggested links with a keyword that begins with data:

```
<getAllObjectKeys xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns=""> suggLink </creatableType>
  <objectKeyPattern xmlns="">
    <adminKeyPairs>
      <keyName>keyword</keyName>
      <keyValue>data%</keyValue>
    </adminKeyPairs>
  </objectKeyPattern>
</getAllObjectKeys>
```

The service response provides the object keys for the suggested link with the keyword database:

```
<ns2:getAllObjectKeysResponse xmlns:ns2="http://search.oracle.com/Admin">
  <objectKeyList>
    <adminKeyPairs>
      <keyName>keyword</keyName>
      <keyValue>database</keyValue>
    </adminKeyPairs>
    <adminKeyPairs>
      <keyName>linkUrl</keyName>
      <keyValue>
        http://www.oracle.com/technetwork/database/enterprise-edition/overview/index.html
      </keyValue>
    </adminKeyPairs>
  </objectKeyList>
</ns2:getAllObjectKeysResponse>
```


getAPIVersion

Returns the version number of the Oracle SES Administration API.

SOAP Message

```
<getAPIVersion xmlns="http://search.oracle.com/Admin">
  <credentials xmlns="">
    <password>
    <userName>
  </credentials>
  <locale xmlns="">
```

Element Descriptions

<getAPIVersion xmlns="http://search.oracle.com/Admin">

Contains these elements:

```
<credentials>
<locale>
```

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
InvalidInputFault
```

Example

This example requests the version number of the API:

```
<getAPIVersion xmlns="http://search.oracle.com/Admin"/>
```

The service response contains the version number:

```
<ns2:getAPIVersionResponse xmlns:ns2="http://search.oracle.com/Admin">
  <return>11.2.2.0.0</return>
</ns2:getAPIVersionResponse>

<ns2:getAPIVersionResponse xmlns:ns2="http://search.oracle.com/Admin">
```

```
<version>11.2.2.0.0</version>  
</ns2:getAPIVersionResponse>
```

getAllStates

Returns the current state of all objects of a specified type as an XML document.

See Also

[getState](#), [getStateList](#)

SOAP Message

```
<getAllStates xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">
    <stateProperties xmlns="">
      <objectKeyPattern xmlns="">
        <adminKeyPairs>
          <keyName>
            <keyValue>
          <credentials xmlns="">
            <password>
            <userName>
          <locale xmlns="">
```

Element Descriptions

<getAllStates xmlns="http://search.oracle.com/Admin">

Contains these elements:

```
<creatableType>
<stateProperties>
<objectKeyPattern>
<credentials>
<locale>
```

<creatableType xmlns="">

Contains one of these creatable types:

```
identityPlugin
schedule
```

<stateProperties xmlns="">

Contains a state property of the object. The response is limited to the properties listed in the `<stateProperties>` elements. By default, the response contains the current state of all properties. See [Table 1-4, "Administrative Objects With State Properties"](#).

<objectKeyPattern xmlns="">

An object key that matches the objects to process. It contains one or more `<adminKeyPairs>` elements.

<adminKeyPairs>

Contains these elements:

```
<keyName>
<keyValue>
```

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains a value that matches the object key of one or more objects. It can include wildcard characters:

- A percent sign (%) matches zero or more characters. In a multibyte character set, it matches zero or more bytes.
- An underscore (_) matches exactly one character. In a multibyte character set, it matches one byte.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>  
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault  
CreatableAdminObjectFault  
DependentObjectFault  
InvalidInputFault  
InvalidStateFault
```

Example

This example requests the status and next crawl time for schedules with a name beginning with Ora. Any error messages are returned in Spanish.

```
<getAllStates xmlns="http://search.oracle.com/Admin">  
  <creatableType xmlns="">schedule</creatableType>  
  <stateProperties xmlns="">status</stateProperties>  
  <stateProperties xmlns="">nextCrawl</stateProperties>  
  <objectKeyPattern xmlns="">  
    <adminKeyPairs>  
      <keyName>name</keyName>  
      <keyValue>Ora%</keyValue>  
    </adminKeyPairs>  
  </objectKeyPattern>  
  <locale xmlns="">es</locale>  
</getAllStates>
```

The service response describes a schedule named Oracle Doc Library. Its status is SCHEDULED, and the next crawl is Thu, 15 Oct 2009 08:00:00 GMT.

```
<ns2:getAllStatesResponse xmlns:ns2="http://search.oracle.com/Admin">
```

```
<objectStateXML>
  <objectXML>

  <?xml version="1.0" encoding="UTF-8"?>
  <search:state productVersion="11.2.2.0.0"
  xmlns:search="http://xmlns.oracle.com/search">
    <search:objectStates>
      <search:objectState>
        <search:objectType>schedule</search:objectType>
        <search:objectKey>
          <search:keyPairs>
            <search:keyPair>
              <search:name>name</search:name>
              <search:value>Oracle Doc Library</search:value>
            </search:keyPair>
          </search:keyPairs>
        </search:objectKey>
        <search:stateProperties>
          <search:stateProperty>
            <search:propertyName>status</search:propertyName>
            <search:propertyValues>
              <search:propertyValue>
                <search:value>SCHEDULED</search:value>
              </search:propertyValue>
            </search:propertyValues>
          </search:stateProperty>
          <search:stateProperty>
            <search:propertyName>nextCrawl</search:propertyName>
            <search:propertyValues>
              <search:propertyValue>
                <search:value>Thu, 15 Oct 2009 08:00:00 GMT</search:value>
              </search:propertyValue>
            </search:propertyValues>
          </search:stateProperty>
        </search:stateProperties>
      </search:objectState>
    </search:objectStates>
  </search:state>

  </objectXML>
</objectStateXML>
</ns2:getAllStatesResponse>
```

getState

Returns the current state of an object as an XML document.

See Also

[getAllStates](#), [getStateList](#)

SOAP Message

```
<getState xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">
    <objectKey xmlns="">
      <adminKeyPairs>
        <keyName>
        <keyValue>
      <stateProperties xmlns="">
      <credentials xmlns="">
        <password>
        <userName>
      <locale xmlns="">
```

Element Descriptions

<getState xmlns="http://search.oracle.com/Admin">

Contains these elements:

```
<objectType>
<objectKey>
<stateProperties>
<credentials>
<locale>
```

<objectType xmlns="">

Contains one of these object types:

```
identityPlugin
index
indexOptimizer
partitionConfig
schedule
```

<objectKey xmlns="">

Describes the object key for a creatable object. This element contains one or more `<adminKeyPairs>` elements.

<adminKeyPairs>

Contains these elements:

```
<keyName>
<keyValue>
```

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains the value that uniquely describes the object, such as Web Site Schedule.

<stateProperties xmlns="">

Contains a state property of the object. The response is limited to the properties listed in the <stateProperties> elements. By default, the response contains the current state of all properties. See [Table 1-4, "Administrative Objects With State Properties"](#).

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault
```

Example

This example requests the current state of the index:

```
<getState xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">index</objectType>
</getState>
```

The service response shows that the index has an estimated fragmentation of 1.5%.

```
<ns2:getStateResponse xmlns:ns2="http://search.oracle.com/Admin">
  <objectStateXML>
    <objectXML>

<?xml version="1.0" encoding="UTF-8"?>
<search:state productVersion="11.2.2.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:objectStates>
    <search:objectState>
      <search:objectType>index</search:objectType>
      <search:stateProperties>
        <search:stateProperty>
          <search:propertyName>estimatedFragmentation</search:propertyName>
          <search:propertyValues>
            <search:propertyValue>
              <search:value>1.5</search:value>
```

```
        </search:propertyValue>
      </search:propertyValues>
    </search:stateProperty>
  </search:stateProperties>
</search:objectState>
</search:objectStates>
</search:state>

  </objectXML>
</objectStateXML>
</ns2:getStateResponse>
```


getStateList

Returns the current state of a list of objects of the same type.

See Also

[getAllStates](#), [getState](#)

SOAP Message

```
<getStateList xmlns="http://search.oracle.com/Admin">
  <creatableType>
    <objectKeys>
      <adminKeyPairs>
        <keyName>
        <keyValue>
      <stateProperties>
    <credentials>
      <password>
      <userName>
    <locale xmlns="">
```

Element Descriptions

<getStateList xmlns="http://search.oracle.com/Admin">

Contains these elements:

```
<creatableType>
<objectKeys>
<stateProperties>
<credentials>
<locale>
```

<creatableType>

Contains one of these creatable types:

```
identityPlugin
schedule
```

<objectKeys>

Describes the key for an object. One or more `<objectKeys>` elements compose the list of objects. This element contains one or more `<adminKeyPairs>` elements.

<adminKeyPairs>

Contains these elements:

```
<keyName>
<keyValue>
```

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains the value that uniquely describes the object, such as Web Site Schedule.

<stateProperties>

Contains a state property of the object. The response is limited to the properties listed in the <stateProperties> elements. By default, the response contains the current state of all properties. See [Table 1-4, "Administrative Objects With State Properties"](#).

<credentials>

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>  
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault  
CreatableAdminObjectFault  
DependentObjectFault  
InvalidInputFault  
InvalidStateFault
```

Example

This example requests the next crawl time for the Oracle Doc Library and SQL Script Library schedules:

```
<getStateList xmlns="http://search.oracle.com/Admin">  
  <creatableType xmlns="">schedule</creatableType>  
  <stateProperties xmlns="">nextCrawl</stateProperties>  
  <objectKeys xmlns="">  
    <adminKeyPairs>  
      <keyName>name</keyName>  
      <keyValue>Oracle Doc Library</keyValue>  
    </adminKeyPairs>  
  </objectKeys>  
  <objectKeys xmlns="">  
    <adminKeyPairs>  
      <keyName>name</keyName>  
      <keyValue>SQL Script Library</keyValue>  
    </adminKeyPairs>  
  </objectKeys>  
  <credentials xmlns="">  
    <password>password</password>  
    <userName>admin username</userName>  
  </credentials>  
</getStateList>
```

The service response provides the next scheduled crawl times:

```

<ns2:getStateListResponse xmlns:ns2="http://search.oracle.com/Admin">
  <objectStateXML>
    <objectXML>

<?xml version="1.0" encoding="UTF-8"?>
<search:state productVersion="11.2.2.0.0"
xmlns:search="http://xmlns.oracle.com/search">
  <search:objectStates>
    <search:objectState>
      <search:objectType>schedule</search:objectType>
      <search:objectKey>
        <search:keyPairs>
          <search:keyPair>
            <search:name>name</search:name>
            <search:value>Oracle Doc Library</search:value>
          </search:keyPair>
        </search:keyPairs>
      </search:objectKey>
      <search:stateProperties>
        <search:stateProperty>
          <search:propertyName>nextCrawl</search:propertyName>
          <search:propertyValues>
            <search:propertyValue>
              <search:value>Thu, 15 Oct 2009 08:00:00 GMT</search:value>
            </search:propertyValue>
          </search:propertyValues>
        </search:stateProperty>
      </search:stateProperties>
    </search:objectState>
    <search:objectState>
      <search:objectType>schedule</search:objectType>
      <search:objectKey>
        <search:keyPairs>
          <search:keyPair>
            <search:name>name</search:name>
            <search:value>SQL Script Library</search:value>
          </search:keyPair>
        </search:keyPairs>
      </search:objectKey>
      <search:stateProperties>
        <search:stateProperty>
          <search:propertyName>nextCrawl</search:propertyName>
          <search:propertyValues>
            <search:propertyValue>
              <search:value>Wed, 07 Oct 2009 06:00:00 GMT</search:value>
            </search:propertyValue>
          </search:propertyValues>
        </search:stateProperty>
      </search:stateProperties>
    </search:objectState>
  </search:objectStates>
</search:state>

    </objectXML>
  </objectStateXML>
</ns2:getStateListResponse>

```

start

Starts an administrative object.

SOAP Message

```
<start xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">
    <objectKey xmlns="">
      <adminKeyPairs>
        <keyName>
          <keyValue>
        <credentials xmlns="">
          <password>
          <userName>
        <locale xmlns="">
```

Element Descriptions

<start xmlns="http://search.oracle.com/Admin">

Describes creation of an administrative object. It contains these elements:

```
<objectType>
<objectKey>
<objectXML>
<credentials>
<locale>
```

<objectType xmlns="">

Contains one of these types:

```
indexOptimizer
schedule
```

<objectKey xmlns="">

Describes the object key for the object. This element contains one or more `<adminKeyPairs>` elements.

<adminKeyPairs>

Contains these elements:

```
<keyName>
<keyValue>
```

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains the value that uniquely describes the object, such as Web Site Schedule.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault
```

Example

This example starts the index optimizer:

```
<start xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">indexOptimizer</objectType>
</start>
```

This is the service response for a successful operation:

```
<ns2:startResponse xmlns:ns2="http://search.oracle.com/Admin" />
```

The next example starts the Oracle Doc Library schedule:

```
<start xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">schedule</objectType>
  <objectKey xmlns="">
    <adminKeyPairs>
      <keyName>name</keyName>
      <keyValue>Oracle Doc Library</keyValue>
    </adminKeyPairs>
  </objectKey>
</start>
```

stop

Stops an administrative object.

SOAP Message

```
<stop xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">
    <objectKey xmlns="">
      <adminKeyPairs>
        <keyName>
          <keyValue>
        <credentials xmlns="">
          <password>
          <userName>
        <locale xmlns="">
```

Element Descriptions

<stop xmlns="http://search.oracle.com/Admin">

Describes creation of an administrative object. It contains these elements:

```
<objectType>
<objectKey>
<objectXML>
<credentials>
<locale>
```

<objectType xmlns="">

Contains this object type:

```
schedule
```

<objectKey xmlns="">

Describes the object key for the object. This element contains one or more `<adminKeyPairs>` elements.

<adminKeyPairs>

Contains these elements:

```
<keyName>
<keyValue>
```

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains the value that uniquely describes the object, such as Web Site Schedule.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault
```

Example

This example stops the Oracle Doc Library schedule:

```
<stop xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">schedule</objectType>
  <objectKey xmlns="">
    <adminKeyPairs>
      <keyName>name</keyName>
      <keyValue>Oracle Doc Library</keyValue>
    </adminKeyPairs>
  </objectKey>
</credentials>
</stop>
```

This is the service response for a successful operation:

```
<ns2:stopResponse xmlns:ns2="http://search.oracle.com/Admin" />
```

update

Sets the properties of an administrative object.

See Also

[updateAll](#)

SOAP Message

```
<update xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">
    <objectKey xmlns="">
      <adminKeyPairs>
        <keyName>
          <keyValue>
        </keyName>
      </adminKeyPairs>
    </objectKey>
    <objectXML xmlns="">
    </objectXML>
    <decryptionKey xmlns="">
    </decryptionKey>
    <credentials xmlns="">
      <password>
      <userName>
    </credentials>
    <controls xmlns="">
      <controlName>
      <controlValue>
    </controls>
    <locale xmlns="">
    </locale>
  </objectType>
</update>
```

Element Descriptions

<update xmlns="http://search.oracle.com/Admin">

Describes the update of an administrative object. It contains these elements:

```
<objectType>
<objectKey>
<objectXML>
<objectXML>
<decryptionKey>
<credentials>
<attachments>
<controls>
<locale>
```

<objectType xmlns="">

Contains one of these types:

```
altWord
boostedUrl
crawlerSettings
docServiceInstance
docServicePipeline
facetTree
globalBoundaryRules
globalDocumentTypes
index
indexOptimizer
partitionConfig
proxyLogin
queryConfig
relevanceRanking
schedule
```


searchAttr
 source
 sourceGroup
 storageArea
 suggLink
 thesaurus

<objectKey xmlns="">

Describes the object key for a creatable object. This element contains one or more <adminKeyPairs> elements.

<adminKeyPairs>

Contains these elements:

<keyName>
 <keyValue>

<keyName>

Contains the case-sensitive key name of the object type, such as name.

<keyValue>

Contains the value that uniquely describes the object, such as Web Site Schedule.

<objectXML xmlns="">

Contains an XML document that describes the object. See [Chapter 2, "Administration Object Types."](#)

Use escape codes for these symbols in the embedded XML:

Symbol	Escape Code
<	<
>	>
"	"

<decryptionKey xmlns="">

Contains a decryption key for proxyLogin and source objects.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

<password>
 <userName>

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<controls xmlns="">

Specifies an operation control. It contains these elements:

<controlName>
 <controlValue>

<controlName>

UPDATE_METHOD: Controls the method used to update the properties of an object. (Required)

<controlValue>

For UPDATE_METHOD:

- `overwrite`: Replaces the existing property values with the new values.
- `add`: Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted from the XML document. For `clusterTree`, `resultList`, `schedule`, `searchAttr`, `source`, `sourceGroup`, and `sourceType`.
- `remove`: Removes existing properties. For `clusterTree`, `resultList`, `schedule`, `searchAttr`, `source`, `sourceGroup`, and `sourceType`.

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault
```

Notes

After updating a skin bundle, restart the middle tier.

Example

This example updates the crawler settings. The input XML document is omitted from the example.

```
<update xmlns="http://search.oracle.com/Admin">
  <objectType xmlns="">crawlerSettings</objectType>
  <objectXML xmlns="">

    <!-- XML object description appears here-->

  </objectXML>
  <controls xmlns="">
    <controlName>UPDATE_METHOD</controlName>
    <controlValue>overwrite</controlValue>
  </controls>
</update>
```

The following is the service response to a successful update:

```
<ns2:updateResponse xmlns:ns2="http://search.oracle.com/Admin" />
```

updateAll

Updates all objects of a given type that are described in the XML.

See Also

[update](#)

SOAP Message

```
<updateAll xmlns="http://search.oracle.com/Admin">
  <creatableType>
    <objectXML xmlns="">
      <decryptionKey xmlns="">
        <credentials xmlns="">
          <password>
            <userName>
          <controls xmlns="">
            <controlName>
              <controlValue>
            <locale xmlns="">
```

Element Descriptions

<updateAll xmlns="http://search.oracle.com/Admin">

Describes creation of an administrative object. It contains these elements:

```
<creatableType>
<objectKey>
<objectXML>
<decryptionKey>
<credentials>
<attachments>
<controls>
<locale>
```

<creatableType>

Contains one of these types:

```
altWord
boostedUrl
docServiceInstance
docServicePipeline
facetTree
proxyLogin
schedule
searchAttr
source
sourceGroup
suggLink
```

<objectXML xmlns="">

Contains an XML document that describes the object. See [Chapter 2, "Administration Object Types."](#)

Use escape codes for these symbols in the embedded XML:

Symbol	Escape Code
<	<
>	>
"	"

<decryptionKey xmlns="">

Contains a decryption key for proxyLogin and source objects.

<credentials xmlns="">

Provides the credentials for the Oracle SES administrator. Credentials are required only when the session is stateless. See ["Providing Credentials"](#) on page 1-5.

This element contains these child elements:

```
<password>
<userName>
```

<password>

Contains the password for <userName>.

<userName>

Contains the user name of the Oracle SES administrator.

<controls xmlns="">

Specifies an operation control. It contains these elements:

```
<controlName>
<controlValue>
```

<controlName>

UPDATE_METHOD: Controls the method used to update the properties of an object.

NOT_FOUND_METHOD: Controls the action to take when an object does not exist.

IGNORE_INVALID_STATE: Controls whether processing continues when an object cannot be overwritten because it is in an invalid state. For clusterTree, schedule, and storageArea objects. This option is used only when UPDATE_METHOD is OVERWRITE.

<controlValue>

For UPDATE_METHOD:

- **overwrite:** Replaces the existing property values with the new values.
- **add:** Adds new properties and overwrites existing properties, but does not delete existing properties that are omitted from the XML document. For clusterTree, schedule, searchAttr, source, sourceGroup, sourceType, and storageArea.
- **remove:** Removes existing properties. For clusterTree, resultList, schedule, searchAttr, source, sourceGroup, sourceType, and storageArea.

For NOT_FOUND_METHOD:

- **create:** Creates a new object from the XML description and continue processing.
- **error:** Processing stops with an error. (Default)
- **ignore:** Ignore the new description and continue processing.

For IGNORE_INVALID_STATE:

- **true:** Continue processing with the next object.

- false: Stop processing with an error and roll back all changes. (Default)

<locale xmlns="">

Sets the language for error messages. See [Table 2-2, "Product Languages"](#) for a list of valid codes.

If you omit this element or enter an invalid code, then Oracle SES uses the default locale of the system where it is running.

SOAP Faults

```
AdminAPIRuntimeFault
CreatableAdminObjectFault
DependentObjectFault
InvalidInputFault
InvalidStateFault
```

Notes

After updating a skin bundle, restart the middle tier.

Example

This example updates all of the altWord objects described in the <objectXML> element. The content of this element is not shown.

```
<updateAll xmlns="http://search.oracle.com/Admin">
  <creatableType xmlns="">altWord</creatableType>
  <objectXML xmlns="">

    <!-- XML object descriptions appear here-->

  </objectXML>
  <controls xmlns="">
    <controlName>UPDATE_METHOD</controlName>
    <controlValue>OVERWRITE</controlValue>
  </controls>
  <controls xmlns="">
    <controlName>NOT_FOUND_METHOD</controlName>
    <controlValue>CREATE</controlValue>
  </controls>
</updateAll>
```

The service response shows that two alternate keywords were updated and one was created.

```
<ns2:updateAllResponse xmlns:ns2="http://search.oracle.com/Admin">
  <statusList>
    <objectKey>
      <adminKeyPairs>
        <keyName>keyword</keyName>
        <keyValue>oses</keyValue>
      </adminKeyPairs>
      <adminKeyPairs>
        <keyName>altKeyword</keyName>
        <keyValue>Oracle Secure Enterprise Search</keyValue>
      </adminKeyPairs>
    </objectKey>
    <objectType>altWord</objectType>
    <statusCode>UPDATE_SUCCEEDED</statusCode>
  </statusList>
```

```
<statusList>
  <objectKey>
    <adminKeyPairs>
      <keyName>keyword</keyName>
      <keyValue>rac</keyValue>
    </adminKeyPairs>
    <adminKeyPairs>
      <keyName>altKeyword</keyName>
      <keyValue>Real Application Clusters</keyValue>
    </adminKeyPairs>
  </objectKey>
  <objectType>altWord</objectType>
  <statusCode>NOT_FOUND_CREATED</statusCode>
</statusList>
<statusList>
  <objectKey>
    <adminKeyPairs>
      <keyName>keyword</keyName>
      <keyValue>text</keyValue>
    </adminKeyPairs>
    <adminKeyPairs>
      <keyName>altKeyword</keyName>
      <keyValue>Oracle Text</keyValue>
    </adminKeyPairs>
  </objectKey>
  <objectType>altWord</objectType>
  <statusCode>UPDATE_SUCCEEDED</statusCode>
</statusList>
</ns2:updateAllResponse>
```

Java Example

This appendix contains a programming example of the Web Services Java client. It contains these topics:

- [Java Source Code Example](#)
- [Shell Script Example](#)

See Also:

- ["Using the Web Services Java Client"](#) on page 1-5
- *Oracle Secure Enterprise Search Java API Reference*

Java Source Code Example

The following source code is an example named `CreateWebSource.java`. If you want, you can copy and paste this example into a file on your Oracle SES host.

This example uses a stateless Administration API client to do the following:

1. Create a Web source named `web1`.
2. Export `web1` to show the full definition.
3. Create a source group named `Web` containing `web1`.
4. Create and start a schedule named `schedule1` for `web1`.
5. Print the status of `schedule1` after 30 seconds.

`CreateWebSource.java` obtains values for these variables from the command-line arguments:

- `webServiceURL`
- `userName`
- `password`
- `webSourceURL`

For more information about these arguments, see ["Shell Script Example"](#) on page A-5.

```
import oracle.search.admin.api.ws.client.AdminAPIRuntimeFault;
import oracle.search.admin.api.ws.client.AdminAPIRuntimeFault_Exception;
import oracle.search.admin.api.ws.client.AdminKeyPair;
import oracle.search.admin.api.ws.client.AdminPortType;
import oracle.search.admin.api.ws.client.AdminService;
import oracle.search.admin.api.ws.client.Credentials;
import oracle.search.admin.api.ws.client.ObjectKey;
import oracle.search.admin.api.ws.client.ObjectOutput;
```

```
import java.util.List;
import java.net.URL;

import javax.xml.ws.BindingProvider;
import javax.xml.namespace.QName;

public class AdminWebServiceExample2
{
    public static void main(String[] args) throws Exception
    {
        System.out.println( " " );

        try
        {
            if ( args == null || args.length != 4 )
            {
                System.out.println(
                    "Usage:\n AdminWebServiceExample <webServiceURL> <userName> <password>
<webSourceURL>"
                );
            }
            else
            {
                // Get web service URL from command line arguments
                String webServiceURL = args[0];
                System.out.println( "Using web service URL \"" + webServiceURL + "\"\n" );

                // Get username and password
                String userName = args[1];
                String password = args[2];

                // Get stateless web service client
                AdminPortType adminPort =
                    getStatelessWebServiceClient( webServiceURL );

                // Create Credentials object for operations
                Credentials credentials = new Credentials();
                credentials.setUserName( userName );
                credentials.setPassword( password );

                // 1. Create a simple web source
                String webSourceURL = args[3];
                String webSourceXML =
                "<?xml version=\"1.0\" encoding=\"UTF-8\"?>" +
                "<search:config productVersion=\"11.2.1.0.0\" " +
                "xmlns:search=\"http://xmlns.oracle.com/search\">" +
                "  <search:sources>" +
                "    <search:webSource>" +
                "      <search:name>web1</search:name>" +
                "      <search:startingUrls>" +
                "        <search:startingUrl>" +
                "          <search:url>" + webSourceURL + "</search:url>" +
                "        </search:startingUrl>" +
                "      </search:startingUrls>" +
                "    </search:webSource>" +
                "  </search:sources>" +
                "</search:config>";

                adminPort.createAll(
```



```

        "source",
        webSourceXML,
        "password",
        credentials,
        null,
        null,
        "en"
    );

    // 2. Export all sources to show the full definition
    ObjectOutput oo = adminPort.exportAll(
        "source",
        null,
        "password",
        credentials,
        null,
        "en"
    );
    System.out.println("Web Source XML = \n" + oo.getObjectXML() );

    // 3. Create a source group for the source
    String sourceGroupXML =
"<?xml version=\"1.0\" encoding=\"UTF-8\"?>" +
"<search:config productVersion=\"11.2.1.0.0\" "
xmlns:search=\"http://xmlns.oracle.com/search\">" +
"  <search:sourceGroups>" +
"    <search:sourceGroup>" +
"      <search:name>Web</search:name>" +
"      <search:assignedSources>" +
"        <search:assignedSource>web1</search:assignedSource>" +
"      </search:assignedSources>" +
"    </search:sourceGroup>" +
"  </search:sourceGroups>" +
"</search:config>";

    adminPort.createAll(
        "sourceGroup",
        sourceGroupXML,
        null,
        credentials,
        null,
        null,
        "en"
    );

    System.out.println("Created source group...");

    // 4. Create a schedule for the web source
    String scheduleXML =
"<?xml version=\"1.0\" encoding=\"UTF-8\"?>" +
"<search:config productVersion=\"11.2.1.0.0\" "
xmlns:search=\"http://xmlns.oracle.com/search\">" +
"  <search:schedules>" +
"    <search:schedule>" +
"      <search:name>schedule1</search:name>" +
"      <search:crawlingMode>ACCEPT_ALL</search:crawlingMode>" +
"      <search:recrawlPolicy>PROCESS_CHANGED</search:recrawlPolicy>" +
"      <search:frequency>" +
"        <search:manual/>" +
"      </search:frequency>" +

```

```
"    <search:assignedSources>" +
"    <search:assignedSource>web1</search:assignedSource>" +
"    </search:assignedSources>" +
"    </search:schedule>" +
"  </search:schedules>" +
"</search:config>";

    adminPort.createAll(
        "schedule",
        scheduleXML,
        null,
        credentials,
        null,
        null,
        "en"
    );

    System.out.println("Created schedule...");

    // 5. Start the schedule

    // Create object key for schedule name
    ObjectKey objectKey = new ObjectKey();
    AdminKeyPair keyPair = new AdminKeyPair();
    keyPair.setKeyName( "name" ); // schedules identified by name
    keyPair.setKeyValue( "schedule1" ); // schedule name
    objectKey.getAdminKeyPairs().add( keyPair );

    adminPort.start(
        "schedule",
        objectKey,
        null,
        null,
        credentials,
        null,
        null,
        "en"
    );

    System.out.println("Started schedule...");
    System.out.println("Waiting 30 seconds to get status...");
    Thread.sleep( 30000 );

    // 6. Use object key above to get schedule state
    oo = adminPort.getState(
        "schedule",
        objectKey,
        null, // request all state properties
        credentials,
        null,
        "en"
    );

    System.out.println("Schedule state XML = " + oo.getObjectXML() );
}
}
catch (AdminAPIRuntimeFault_Exception e)
{
    AdminAPIRuntimeFault runtimeFault = e.getFaultInfo();
    System.out.println("Caught AdminAPIRuntimeFault");
}
```

```

        System.out.println(" message      = " + runtimeFault.getMessage() );
        System.out.println(" errorCode    = " + runtimeFault.getErrorCode() );
        System.out.println(" causeMessage = " + runtimeFault.getCauseMessage() );
        System.out.println(" stackTrace  = " );
        e.printStackTrace( System.out );
        System.out.println(" causeStackTrace = \n" +
runtimeFault.getCauseStackTrace() );
    }
    catch (Throwable t)
    {
        System.out.println("Caught unexpected run-time exception");
        System.out.println(" message    = " + t.getMessage() );
        System.out.println(" stackTrace = " );
        t.printStackTrace( System.out );
    }
}

/**
 * Initializes and returns a stateless admin web service client.
 */
private static AdminPortType getStatelessWebServiceClient(
    String webServiceURL) throws Exception
{
    AdminService adminService = new AdminService(
        new URL( webServiceURL ),
        new QName(
            "http://search.oracle.com/Admin",
            "AdminService"
        )
    );

    return adminService.getAdmin();
}
}

```

Shell Script Example

This example uses a shell script (command file) named `compileAndRun.sh` to compile and run `CreateWebSource.java`. You can use JRockit, as shown here, or any JDK 6 that contains a JAX-WS 2.1 implementation.

```

#!/bin/sh

CLASSPATH=.:ORACLE_HOME/search/lib/search_adminapi_wsclient.jar:MW_HOME/JROCKIT_
HOME/jre/lib/rt.jar

# Compile
MW_HOME/JROCKIT_HOME/bin/javac -cp $CLASSPATH CreateWebSource.java

# Run
MW_HOME/JROCKIT_HOME/jre/bin/java -cp $CLASSPATH CreateWebSource $@

```

To run the script, include these arguments on the command line:

- **webServiceURL:** The Web Service URL for the Administration API in the following format. Replace `host:port` with the appropriate values.

```
http://host:port/search/api/admin/AdminService
```

- **userName:** The administrative user (`searchsys`).

- **password:** The password for the administrative user.
- **webSourceURL:** The starting URL for crawling the Web source.

This command creates a source from the example.com Web site:

```
sh compileAndRun.sh http://host:7777/search/api/admin/AdminService searchsys  
password http://example.com/index.htm
```

Query Syntax

This appendix describes the various ways of specifying search strings for Oracle SES. Text in square brackets represents characters entered into the search.

Single term search

Entering one term finds documents that contain that term.

For example, [Washington] matches all documents that contain the word Washington anywhere in that document.

You can enter any two searchable items (including term, phrase, attribute shortcut, and proximity search) in a query with a white space separating them and the AND operator applies. The [&] operator also explicitly denotes an AND relationship.

For example, [muddy water] and [muddy & water] both return documents containing muddy and water.

Phrase search ["..."]

Put quotes around a set of words to find documents that contain that exact phrase.

Oracle SES does not apply implicit stemming expansion to a query phrase, but it can apply explicit term expansion to terms in a phrase. All operators *except* term expansion operators in a phrase are treated not as valid operators but as normal special characters.

For example, [metropolitan "dance performance"] returns documents containing metropolitan and the phrase "dance performance". Documents containing the stemming form "dance performances" are not returned. There is no implicit stemming expansion on either term. The query ["sec*re search"] returns documents with the phrase "secure search". The query ["sec^re search"] returns documents with the phrase "sec re search".

Attribute shortcut search [attribute_name:attribute_value]

Search on attributes with an attribute name, a colon (:), and then the value to be searched. Implicit stemming is applied to the attribute value term. You can specify operators as options. When no operator is specified, Oracle SES uses Contains for STRING attributes and Equals for NUMBER and DATE attributes.

For example, [DocVersion:>1] returns documents that have number attribute Docversion with a value larger than 1. The query [title:"oracle text"] returns documents with the phrase "Oracle Text" in the title attribute. The query [oracle | title:S*S] returns documents with the term Oracle or SES in the title attribute. The query [title:^oracle] has the same effect as [title:oracle]. The contains operator [^] applies only to the STRING attribute.

- Equals [=] returns documents with an attribute equaling the query with case-insensitivity. For example, [title:="oracle text"] returns documents whose title equals "Oracle Text". It applies to all three attributes.
- Less-than and narrower terms (<) return documents with an attribute value less than or earlier than the query value. For example, [DocVersion:<2] returns documents that have number attribute Docversion with a value less than 2. They apply to all three attributes.
- Less-than-or-equals (<=) applies to NUMBER and DATE attributes.
- Greater-than and broader terms (>) return documents with an attribute value greater than or later than the query value. They apply to all three attributes.
- Greater-than-or-equals (>=) applies to NUMBER and DATE attributes. For example, [price:>=10] returns documents whose price attribute value is larger than or equal to 10. The query [lastmodifieddate:>=12/23/2010] returns documents whose lastmodifieddate attribute value is on or after December 23, 2010.

Proximity search ["..."~]

A proximity search specifies the maximum distance within which multiple terms occur. A proximity search must have the search terms in double quotes. When the maximum spanning distance is not specified, Oracle SES applies a default window of 100 terms. The maximum number is 100. Entering a larger value is the same as entering 100.

For example, ["ses performance"~10] returns documents with the terms SES and performance within any 10 terms spanning windows. The query ["ses performance"~] returns documents containing the terms SES and performance within any 100 terms spanning windows.

Implicit stemming expansion is applied to each term in proximity search. Term expansion operators can be applied to terms in proximity search.

Fuzzy search [...~]

Put the fuzzy operator (~) after a single term to return documents that contain terms similar to the query term.

For example, [hallo~] returns documents containing term hello. The query [spacifi*tion~] returns documents containing the term specification.

Note: If a single term enclosed in double quotes is followed by ~, then the query is not a proximity search but a fuzzy search. The query ["performance"~] returns documents containing the term performance.

Thesaurus-based searches: synonym [~...], narrower term [<], broader term [>]

Thesaurus-based operators require that a thesaurus be loaded into Oracle SES.

Put the ~ operator at the beginning of a term to return documents that contain the original query term or a synonym for it. For example, [title:~"RAC"] returns documents with RAC or the synonym Real Application Clusters in the title. A synonym relationship is symmetric: Real Application Clusters is a synonym of RAC, and RAC is a synonym of Real Application Clusters. In attribute search, it applies only to the STRING attribute.

The query [<"Northern California"] returns documents with the thesaurus-defined narrower term San Francisco or the original phrase Northern California. The query [product:>chair] returns documents whose product attributes contain the broader

term furniture or the original term chair. Broader and narrower terms are symmetric. Specifying that furniture is a broader term of chair also implicitly specifies that chair is a narrower term of furniture.

OR (|) search

Use the OR (|) operator to connect any two searchable items.

For example, `[metropolitan | "dance performance"~]` returns documents with the term metropolitan or with the terms dance and performance in any 100 terms spanning windows. The query `[oracle | title:ses]` returns documents with the term Oracle or SES in the title attribute.

Grouping () search

Use parentheses () to group query components to change precedence of the binary logical operators AND and OR. The grouped query components must form a valid query. If the query string inside parentheses is not a valid query, then Oracle SES implicitly rewrites it to the closest valid query.

For example, `[(oracle | database) sales]` returns documents containing sales *and* containing either Oracle or database. The query `[(oracle |) sales]` returns documents containing Oracle and sales. This is because `[oracle |]` is not a valid query.

Wildcard matching [*] for multiple characters

Put the * operator in the middle or end of a term for wildcard matching. It can be applied multiple times in one term.

For example, `[ora*]` finds documents that contain words beginning with ora, such as Oracle and orator. The query `[title:a*e]` returns documents with the title containing words such as apple or ape.

Multiple character wildcard expansion could result in too many results. For example, `[a*]` could find too many results. Oracle SES throws an error to refine the queries.

The wildcard operator [*] is ineffective with the escape character [\] just before it. For example `[Pro*c]`.

Wildcard matching cannot be used with Chinese or Japanese native characters.

Wildcard matching [?] for single characters

Put the ? operator in middle or end of a term for wildcard matching for a single character. It can be applied multiple times in one term.

For example, both `[orac?e]` and `[or?cl?]` return documents containing terms that replace ? with a single character, such as Oracle.

The wildcard operator [?] is ineffective with the escape character [\] just before it.

Wildcard matching cannot be used with Chinese or Japanese native characters.

Compulsory inclusion [+] search

Put the + operator at the beginning of any searchable item (including term, phrase, attribute, and proximity search) to require the word in all matching documents. Do not put a space between the [+] and the search term.

For example, searching for `[Oracle +Applications]` only matches documents that contain the words Oracle and Applications.

When compulsory inclusion search is used with the OR (|) operator, the compulsory inclusion operator does not have any effect. For example, searching for [text | +database] returns documents containing the term text or database.

Compulsory exclusion [-] search

Put the - operator at the beginning of any searchable item (including term, phrase, attribute, and proximity search) to match only those documents that do not contain the term. It can be a single word or a phrase, but there cannot be a space between the [-] and the term.

For example, [oracle -applications] returns documents that contain Oracle but *not* applications. The query [oracle -"application server"] returns documents that contain Oracle but not the phrase "application server". The query [oracle -title:oracle] returns documents containing Oracle in the body but not in the title. The query [oracle -"application server"~] returns documents containing Oracle but not containing application and server in any 100 terms spanning window.

The compulsory exclusion query cannot be the only query. For example, the query [-oracle] raises an error. Also, the compulsory exclusion query cannot be connected with the OR [|] operator. For example, [oracle | -database] raises an error.

Filetype search [filetype:filetype]

Use [filetype:filetype] after the search term to limit results to that particular file type. A search can have only one file type. No operator is allowed in file type shortcut search.

For example, [documentation filetype:pdf] returns PDF format documents for the term documentation. The filetype shortcut must be lower case, but the file type name is case-insensitive; that is, [documentation filetype:PDF] returns the same documents.

The following file types are supported, with their corresponding MIME type:

```
ps: application/postscript
ppt: application/vnd.ms-powerpoint, application/x-mspowerpoint
doc: application/msword
xls: application/vnd.ms-excel, application/x-msexcel, application/ms-excel
txt: text/plain
html: text/html
htm: text/html
pdf: application/pdf
xml: text/xml
rtf: application/rtf
```

Site search [site:host]

Use [site:host] after the search term to limit results to that particular site.

For example, [site:www.oracle.com filetype:pdf] returns documents from www.oracle.com in PDF format. The site shortcut must be lowercase, but the host name is case-insensitive; that is, [site:www.Oracle.com filetype:pdf] returns the same documents.

Oracle SES only supports exact host matching. The query [site:*.oracle.com] does not work.

Group search [sg:source group]

Use [sg:source group] to limit results to that particular source group. All other search restrictions are valid in a group search.

For example, [sg:intranet] returns documents in the intranet source group. The sg shortcut must be lower case, but the source group name is case-insensitive; that is, [sg:IntraNet] returns the same documents.

In federated searches, the source group names are the source groups in the local (broker) node. If the local source groups contain federated sources, then Oracle SES translates the local source group name to the federated source group name by changing the query, which is then sent to federated source for results.

Error Messages

This appendix describes general error messages from the Administration API. The messages are grouped into these categories:

- [Invalid Input Errors](#)
- [Creatable Administration Object Errors](#)
- [Invalid State Errors](#)
- [Administration API Run-Time Errors](#)
- [Dependent Object Errors](#)

Note: A *propertyName* in a message uses XPath notation to identify the location of the property in the input XML.

See Also: ["Using the Message Logs"](#) on page 1-11

Invalid Input Errors

In the Web services API, these errors are `InvalidInputFault` SOAP faults. They are general input errors.

EQA-10000: An object type must be specified for operation *operationName*.

Cause: The operation did not contain an object type.

Action: Specify an object type.

EQA-10001: The operation *operationName* is not supported for object type *objectType*.

Cause: An invalid operation was specified for the object type.

Action: Use a valid operation, such as `export` instead of `exportAll`.

EQA-10002: The value *inputValue* is not a supported object type.

Cause: The operation specified an object type that is not supported by the Administration API.

Action: Verify that you entered the object type correctly.

EQA-10003: An object key must be specified for operation *operationName*.

Cause: The operation did not include an object key.

Action: Include the object key for a creatable object.

EQA-10004: Invalid object key *objectKey*. Specify *keyName1*, *keyName2*

Cause: An invalid or incomplete object key was specified.

Action: Specify the required key names and values.

EQA-10005: The object type *objectType* is not supported with the product version *version* that was specified in the input XML.

Cause: The object type specified in the input XML is not supported in the product version that was provided in the input XML. For example, an object type may not have been available in release 11.1.2, but is available in release 11.2.1. The product version is specified using the `productVersion` attribute of the `<search:config>` XML element.

Action: Specify the correct product version for the object.

EQA-10006: Specify at least one object key for operation *operationName*.

Cause: The operation required a list of object keys representing the objects to process, but no object keys were specified.

Action: Specify at least one object key.

EQA-10007: The input XML must be specified for operation *operationName*.

Cause: The operation did not include the input XML.

Action: Specify the input XML.

EQA-10008: An unexpected error occurred while reading the input XML.

Cause: An unexpected error occurred while reading the XML.

Action: Inspect the underlying exception message, the log files, or both.

EQA-10009: The input XML is not a valid XML document.

Cause: The input XML was not a well-formed XML document.

Action: Inspect the underlying exception message and correct the syntax errors in the input XML.

EQA-10010: The input XML does not conform to the XML schema.

Cause: The input XML did not conform to the XML schema.

Action: Inspect the underlying exception message and correct the input XML to conform to the schema.

EQA-10011: The object with type *universalType* was not found in the input XML.

Cause: The input XML did not contain the specified object type.

Action: Ensure that the input XML contains an object description for the universal type specified in the operation.

EQA-10012: The object with key *objectKey* and type *creatableType* was not found in the input XML.

Cause: The input XML did not contain the specified creatable object.

Action: Ensure that the input XML contains an object description for the creatable object specified in the operation.

EQA-10015: The duplicate method *duplicateMethod* is not supported for object type *objectType*.

Cause: A duplicate method was specified that is not supported for this object type.

Action: Specify a different duplicate method, or omit the duplicate method to use the default.

EQA-10016: The value *inputValue* is not a supported duplicate method.

Cause: A duplicate method was specified that is not supported for any object type.

Action: Specify a supported duplicate method, or omit the duplicate method to use the default.

EQA-10017: The update method must be specified for operation *operationName*.

Cause: The operation did not contain an update method.

Action: Specify an update method for the operation.

EQA-10018: The update method *method* is not supported for object type *objectType*.

Cause: An update method was specified that is not supported for this object type.

Action: Specify a supported update method.

EQA-10019: The value *inputValue* is not a supported update method.

Cause: A value was specified that is not a valid update method for any object type.

Action: Specify a supported update method.

EQA-10021: The "not found method" *notFoundMethod* is not supported for object type *objectType*.

Cause: A "not found method" was specified that is not supported for this object type.

Action: Specify a supported "not found method" for the object type.

EQA-10022: The value *inputValue* is not a supported "not found method."

Cause: A value was specified that is not a valid "not found method" for any object type.

Action: Specify a supported "not found method."

EQA-10024: The property *propertyName* for object type *objectType* must be specified.

Cause: The object definition did not contain a required property.

Action: Specify the property.

EQA-10025: The property *propertyName* for object type *objectType* cannot be empty.

Cause: The object definition omitted a value for a required property.

Action: Enter a value for the property in the object definition.

EQA-10026: The property *propertyName* for object type *objectType* is malformed.

Cause: A property value in the object description was not well-formed according to the expected format. For example, if the property represents a URL, the property value must be a well-formed URL.

Action: Specify a well-formed property value. Inspect the underlying exception message, the log files, or both for more information.

EQA-10027: The property *propertyName* for object type *objectType* must be between *value1* and *value2*.

Cause: The specified value of a property was outside the valid range.

Action: Specify a value within the valid range.

EQA-10028: The value *inputValue* is not supported for property *propertyName* and object type *objectType*.

Cause: The specified value of a property was not a supported value.

Action: Specify a valid value.

EQA-10029: The property *propertyName* for object type *objectType* must be an absolute path.

Cause: A file path was specified that is not an absolute path. The specified value cannot be a relative path.

Action: Specify an absolute path.

EQA-10030: The property *propertyName* for object type *objectType* cannot contain: *inputValue*

Cause: The property prohibited the use of the input value.

Action: Specify a valid value.

EQA-10031: The property *propertyName* for object type *objectType* can only contain ASCII characters.

Cause: The object definition contained invalid characters, such as multibyte characters, in a property value.

Action: Specify an ASCII value.

EQA-10032: The resource specified in property *propertyName* for object type *objectType* was not found.

Cause: A property value identified an external resource, such as a file, that was not found.

Action: Ensure that the specified resource exists.

EQA-10033: The property *propertyName* for object type *objectType* must not be empty for operation *operationName*.

Cause: The object definition omitted the value of a property that is required for this operation and object type.

Action: Specify a value for the property.

EQA-10034: The value *inputValue1* for property *propertyName1* of object type *objectType* is not valid for value *inputValue2* of property *propertyName2*.

Cause: The object definition specified a value for *propertyName1* that is invalid when *propertyName2* has a value of *inputValue2*.

Action: Specify a valid combination of values for the two properties.

EQA-10035: The properties *propertyName1* and *propertyName2* for object type *objectType* must have different values.

Cause: The object definition specified the same value for the two properties.

Action: Change one of the property values.

EQA-10036: The property *propertyName* for object type *objectType* must not start with *someWord*.

Cause: A property value began with an invalid string.

Action: Specify a valid property value.

EQA-10037: The value *inputValue* for property *propertyName* of object type *objectType* is a reserved value.

Cause: A value was specified for the property and object type that is reserved for internal use by Oracle SES.

Action: Specify a valid property value.

EQA-10038: The property *propertyName* for object type *objectType* must start with *value*.

Cause: A property name began with one or more invalid characters.

Action: Correct the name so that it begins with the specified value.

EQA-10039: The property *propertyName* for object type *objectType* must end with *value*.

Cause: A property name ended with one or more invalid characters.

Action: Correct the name so that it ends with the specified value.

EQA-10040: The property *propertyName* for object type *objectType* must not end with *inputValue*.

Cause: A property name ended with one or more invalid characters.

Action: Correct the name so that it does not end with the specified value.

EQA-10041: The property *propertyName* for object type *objectType* must be specified when property *propertyName* is specified.

Cause: The object definition did not contain a required property.

Action: Specify both properties or neither of them.

EQA-10042: The value *inputValue* for property *propertyName* of object type *objectType* is already in use.

Cause: A property value was in use by another object of the same type, and only one object of this type can have this value.

Action: Specify a different value for the property, or remove the value from the other object that is using it.

EQA-10043: The value *inputValue* for property *propertyName* of object type *objectType* contains an invalid protocol.

Cause: A property value contained an invalid protocol. For example, the protocol for a Web source starting URL must be `http` or `https`.

Action: Specify a valid protocol for the property value.

EQA-10044: The value *inputValue* for property *propertyName* of object type *objectType* contains an invalid separator.

Cause: A file URL prefix contained an invalid character for the separator.

Action: Use a slash (/) instead of a backslash (\) as the separator in a URL.

EQA-10045: At least one of the properties *propertyName1* or *propertyName2* for object type *objectType* must have the value *inputValue*.

Cause: The object definition did not contain a property with the required value.

Action: Change one of the specified properties to the required value.

EQA-10046: The value *inputValue* of property *propertyName* for object type *objectType* is not supported. The supported values are: *value1, value2 . . .* }

Cause: A property contained an unsupported value.

Action: Change the property value to a supported values.

EQA-10047: The value of property *propertyName1* for object type *objectType* must be greater than or equal to the value of property *propertyName2*.

Cause: A property value was too small.

Action: Increase the property value so that it is at least as large as the other property value.

EQA-10048: The property *propertyName* for object type *objectType* must start with an alphabetic character and may only contain alphanumeric characters and *_*, *\$*, and *#*.

Cause: A property contained one or more invalid characters.

Action: Use only valid characters for the property value

EQA-10049: The property *propertyName* for object type *objectType* must be in the format of *format*.

Cause: A property value had an invalid format.

Action: Specify the value in the specified format.

EQA-10050: The property *propertyName1* for object type *objectType* can only contain one value when property *propertyName2* has value *inputValue*.

Cause: A property contained multiple values, whereas only one value is allowed.

Action: Specify only one value for the property.

EQA-10051: Key patterns are not supported for operation *operationName* and object type *objectType*.

Cause: An invalid option was specified for this operation and object type. The operation can support key patterns for some object types, but not for the specified object type.

Action: Do not specify a key pattern for this object type.

EQA-10052: The values of properties *propertyName1* and *propertyName2* for object type *objectType* must be the same.

Cause: The object description contained two properties with different values, when they must have the same value.

Action: Change one of the property values to be the same as the other one.

EQA-10053: The value *inputValue* of property *propertyName* for object type *objectType* must be writable.

Cause: The property value was not a writable location. For example, the property may represent a file system path, such as the crawler log file directory for a `crawlerSettings` object.

Action: Ensure that you are connected to the Administration API as a user with write privileges to the specified location.

EQA-10054: The value for property *propertyName1* of object type *objectType* is not valid for value *inputValue* of property *propertyName2*.

Cause: The value for *propertyName1* is invalid when *propertyName2* has a value of *inputValue*.

Action: Specify a valid combination of values for the two properties.

EQA-10055: The value for property *propertyName* of object type *objectType* is not a directory path.

Cause: A property contained an invalid directory path.

Action: Change the property value to an existing directory path.

EQA-10056: The value of property *propertyName* for object type *objectType* cannot be changed.

Cause: A property contained a new value, but it cannot be changed after the object is created.

Action: Specify the current value of the property or omit the property from the object description.

EQA-10057: The value *inputValue* of property *propertyName* for object type *objectType* does not match the expected value *expectedValue*.

Cause: A property contained a value that did not match the expected value. This error may occur when the property must have a specific value. For example, a property containing the version number of an identity plug-in must match the version of the Java plug-in implementation.

Action: Specify the expected value for the property.

EQA-10058: The value of property *propertyName* for object type *objectType* does not match the expected value.

Cause: The property contained a list of values that did not match the expected list. For example, a property containing the security attributes for a source must match the plug-in for that source type.

Action: Correct the property value.

EQA-10059: The parameters for object type *objectType* were rejected.

Cause: The parameters for the object type were invalid. An underlying cause was included with the message.

Action: Act according to the underlying cause message.

EQA-10060: The value *propertyValue* of property *propertyName* for object type *objectType* is too long.

Cause: The property value specified for the property name was too long.

Action: Specify a shorter property value.

EQA-10062: The value of property *propertyName* for object type *objectType* cannot be: *propertyValue*

Cause: The value of the property was set to "propertyValue".

Action: Specify a different property value.

EQA-10064: The value *propertyValue* for property *propertyName* of object type *objectType* must be an existing tablespace name.

Cause: The value of the property was not the name of an existing database tablespace.

Action: Ensure that the tablespace exists before performing the API operation.

EQA-10065: The property *propertyName* for object type *objectType* is not supported with the product version *productVersion*.

Cause: A property was specified that is not supported in this release of Oracle SES, but it is supported in other releases.

Action: Remove the property from the input XML

EQA-10066: The value *propertyValue* of property *propertyName* for object type *objectType* is not a valid regular expression.

Cause: The value of the property must be a regular expression, but an invalid regular expression was specified.

Action: Correct the value so it is a valid regular expression.

EQA-10067: The object type *objectType* is not supported with the product version *productVersion*.

Cause: The object type is not supported in the release of SES that was used.

Action: Remove the object type from the input XML.

EQA-10200: The class *inputValue* does not implement the plug-in manager interface *managerInterface*.

Cause: A Java class was specified that did not implement the plug-in manager interface.

Action: Specify a Java class that implements the plug-in manager interface.

EQA-10201: The class *inputValue* implements the plug-in interface instead of the plug-in manager interface. Use the manager class name.

Cause: A Java class was specified that implements the plug-in interface instead of the plug-in manager interface.

Action: Specify a Java class that implements the plug-in manager interface.

EQA-10202: The plug-in parameters were rejected by the plug-in manager. See the log file for more information.

Cause: A plug-in manager validated the plug-in parameters, and it rejected the input values.

Action: Inspect the log file for more information.

EQA-10203: Unable to instantiate the plug-in manager class *inputValue*. Ensure that the class contains an empty constructor.

Cause: A problem occurred while loading the plug-in manager class.

Action: Ensure the class contains an empty constructor. Inspect the log file for more information.

EQA-10204: The input XML must be specified for operation *operationName* and type *objectType*.

Cause: The operation did not include the input XML, which it requires for this object type. For example, the `activate` operation requires input XML for identity plug-ins, but not for clustering.

Action: Include the input XML in the operation.

EQA-10206: The key name *keyName* is not valid for object type *objectType*.

Cause: A key name was specified that is not valid for this object type.

Action: Specify a valid key name for the object type.

EQA-10207: A value must be specified for key name *keyName*.

Cause: A key name was specified without a key value.

Action: Specify a value for the key name.

EQA-10208: The manager class *inputValue* does not provide plug-ins that implement the interface *interfaceName*.

Cause: The specified manager class did not provide plug-in instances that implement the correct interface.

Action: Correct the manager class to return plug-in instances that implement the specified interface.

EQA-10209: The security attributes were rejected by the plug-in manager *inputValue*. See the log file for more information.

Cause: The plug-in manager rejected the security attributes.

Action: Inspect the log file for more information.

EQA-10210: The object with key *objectKey* and type *creatableType* occurs more than once in the input to operation *operationName*.

Cause: An object was specified multiple times for the operation, but only one version of an object can be used as input to an operation.

Action: Remove all but one reference to the object.

EQA-10211: The object key *objectKey* occurs more than once in the key list for operation *operationName*.

Cause: An object key was specified multiple times in the key list for the operation.

Action: Remove all but one reference to the object.

EQA-10212: The value of property *propertyName* in the object with key *objectKey* and type *creatableType* could not be encrypted. See the log file for more information.

Cause: A value was specified that could not be encrypted.

Action: Inspect the log file for more information.

EQA-10213: The value of property *propertyName* in the object with type *universalType* could not be encrypted. See the log file for more information.

Cause: A value was specified that could not be encrypted.

Action: Inspect the log file for more information.

EQA-10214: The value of property *propertyName* in the object with key *objectKey* and type *creatableType* could not be decrypted. Ensure that the encryption key is correct and that the property contains an encrypted value.

Cause: A property value could not be decrypted.

Action: Ensure that the property contains a value encrypted by Oracle SES, and the decryption key is the same as the original encryption key.

EQA-10215: The value of property *propertyName* in the object with type *universalType* could not be decrypted. Ensure that the encryption key is correct and that the property contains an encrypted value.

Cause: The specified value could not be decrypted.

Action: Ensure that the property contains a value encrypted by Oracle SES, and the decryption key is the same as the original encryption key.

EQA-10216: An encryption key must be specified for operation *operationName*.

Cause: The operation did not include an encryption key.

Action: Include an encryption key in the operation.

EQA-10217: The encryption key must be at least *value* characters.

Cause: The encryption key was too short.

Action: Enter an encryption key with at least the minimum number of characters.

EQA-10218: The encryption key must contain both letters and numbers.

Cause: The encryption key contained letters or numbers, but not both as required.

Action: Enter an encryption key that contains both letters and numbers.

EQA-10219: The object type for operation *operationName* must be a stateful type.

Cause: The operation specified an object type that does not have state properties.

Action: Specify a valid operation for the object type.

EQA-10220: The value *inputValue* is not a supported state property name for object type *objectType*.

Cause: A state property was specified that is invalid for the object type.

Action: Specify a supported state property for the object type.

EQA-10221: The value *inputValue* is not a supported operation control name.

Cause: The specified control name was invalid.

Action: Specify a valid setting for the operation control.

EQA-10222: The operation control *inputValue* is not supported for operation *operationName*.

Cause: A control name was specified that is invalid for this operation.

Action: Use either valid operation control or none.

EQA-10223: The value *inputValue* is not supported for operation control *controlName*. The supported values are: *value1*, *value2*

Cause: The value of the operation control was invalid.

Action: Specify one of the listed values.

EQA-10224: An object key cannot be specified for the universal object type *universalType*.

Cause: An object key was specified for a universal object type.

Action: Omit the object key from the operation, or specify the correct object type for the key.

EQA-10225: The attachment with resource name *resourceName* for the object with key *objectKey* and type *creatableType* was not found.

Cause: The specified attachment was not found.

Action: Ensure that the resource name is correct.

EQA-10226: The attachment with resource name *resourceName* for the object with type *universalType* was not found.

Cause: The specified attachment was not found.

Action: Ensure that the resource name is correct.

EQA-10227: The attachment with resource name *resourceName* occurs more than once in the attachment list for operation *operationName*.

Cause: The attachment list referenced a resource name multiple times.

Action: Remove the duplicate entry from the attachment list.

EQA-10228: A resource name must be specified for all attachments in operation *operationName*.

Cause: An attachment was specified without a resource name.

Action: Provide a resource name for each attachment.

EQA-10229: The value *inputValue* is not a valid user for the active identity plug-in.

Cause: The specified value is not a valid user according to the active identity plug-in. For example, a property may have to be an LDAP user name corresponding to the identity plug-in, but the value specified was not.

Action: Specify the correct user name and password for the active identity plug-in.

EQA-10230: The encryption key can only contain ASCII characters.

Cause: An encryption key contained invalid characters, such as double-byte characters.

Action: Use only ASCII characters in the encryption key.

EQA-10231: A value for operation control *controlName* must be specified.

Cause: A Web service operation control that requires a value was specified, but no value was given.

Action: Specify a value for the operation control.

EQA-10232: The value *controlValue* for operation control *controlName* is invalid.

Cause: The control value specified for an operation control did not have a valid format.

Action: Ensure the value has the correct format.

EQA-10233: An error occurred while processing the encrypted property *propertyName* in the object with type *objectType*. Ensure that the product version is specified correctly in the input XML and that the property contains an encrypted value.

Cause: An error occurred while processing an encrypted value contained in the input XML. The error might be caused by using an incorrect product version for the input XML, or the "encrypted" attribute may have been set incorrectly for the XML element containing the property value.

Action: Ensure that the product version is specified correctly in the input XML and that the property contains an encrypted value.

Creatable Administration Object Errors

In the Web services API, these errors are `CreatableAdminObjectFault` SOAP faults. They apply only to creatable object types.

EQA-11000: The object with key *objectKey* and type *creatableType* was not found.

Cause: An object with the given key and type did not exist.

Action: Ensure that the object key and type are correct and the object actually exists.

EQA-11001: The object with key *objectKey* and type *creatableType* already exists.

Cause: An object with the given key and type was previously defined.

Action: Perform an update operation instead of `create` to revise the definition of an existing object. Or, in a `createAll` operation, specify `overwrite` or `ignore` for the duplicate method.

EQA-11002: The operation *operationName* is not supported for the object with key *objectKey* and type *creatableType*.

Cause: The specified operation cannot be performed on the object.

Action: If possible, use a related, supported operation for the object, such as `delete` instead of `deleteList`. Otherwise, none. The operation is not supported.

EQA-11003: The maximum number of objects allowed with type *creatableType* and value *keyValue* for key *keyName* is *maxObjects*.

Cause: The object was not created, because the maximum number of objects with the specified name and value already existed. For example, an `altWord` object can have a maximum of four alternate words with the same keyword.

Action: Delete one or more existing objects before trying to create new ones with the specified name and value.

EQA-11004: The object with key *objectKey* and type *creatableType* is not an instance of type *creatableType* that is currently supported.

Cause: The specified key and object type were valid, but the object cannot be managed through the Administration API. For example, the Administration API can manage sources but cannot manage all source types.

Action: Use a method of managing the object that is currently supported, such as the Administration GUI.

Invalid State Errors

In the Web services API, these errors are `InvalidStateFault` SOAP faults. They are caused by the current state of the object, such as failing to delete a schedule because it is currently executing.

EQA-13000: Operation *operationName* cannot be performed on an object with type *objectType* in state *objectStatus*.

Cause: An operation was specified that could not be performed on the object while it was in its current state.

Action: Correct the state of the object before proceeding.

EQA-13001: The object with key *objectKey* and type *creatableType* is already active.

Cause: The activate operation was attempted on a creatable object that was already active.

Action: None. The object is active.

EQA-13002: The object with type *universalType* is already active.

Cause: The activate operation was attempted on a universal object that was already active.

Action: None. The object is active.

EQA-13003: The object with key *objectKey* and type *creatableType* is already inactive.

Cause: The deactivate operation was attempted on a creatable object that was already inactive.

Action: None. The object is inactive.

EQA-13004: The object with type *universalType* is already inactive.

Cause: The deactivate operation was attempted on a universal object that was already inactive.

Action: None. The object is inactive.

EQA-13005: The object with key *objectKey* and type *creatableType* cannot be activated because another object with the same type is already active.

Cause: The activate operation was attempted on a creatable object, but another object of the same type was already active. Only one object of this type can be active at a time, such as an identity plug-in.

Action: Deactivate the other object of this type, then try again.

EQA-13006: The object with key *objectKey* and type *creatableType* is already starting.

Cause: The start operation was attempted on a creatable object that was already starting.

Action: To restart the object, first stop it or wait for it to stop.

EQA-13007: The object with type *universalType* is already starting.

Cause: The start operation was attempted on a universal object that was already starting.

Action: To restart the object, first stop it or wait for it to stop.

EQA-13008: The object with key *objectKey* and type *creatableType* is already stopping.

Cause: The stop operation was attempted on a creatable object that was already stopping.

Action: None. Wait for it to stop.

EQA-13009: The object with type *universalType* is already stopping.

Cause: The stop operation was attempted on a universal object that was already stopping.

Action: None. Wait for it to stop.

Administration API Run-Time Errors

In the Web services API, these errors are `AdminRuntimeFault` SOAP faults. They are unexpected or result from conditions encountered at run-time, such as an invalid user name or an unavailable database. In the Java client, these are unchecked exceptions.

EQA-15000: An unexpected error occurred during operation *operationName*.

Cause: An unexpected error occurred during an API operation.

Action: Inspect the underlying error message, the log files, or both.

EQA-15001: A connection to the database could not be established.

Cause: An attempt to connect to the database failed.

Action: Inspect the underlying exception in the log file.

EQA-15002: A connection to the Web Service URL *wsURL* could not be established.

Cause: An attempt to connect to the Web service URL failed.

Action: Verify that the Web service endpoint is running by opening `http://host:port/search/api/admin/AdminService?WSDL` in a browser. If it is running and the problem remains, then inspect the underlying exception in the log file.

EQA-15003: Invalid login credentials. Check your user name and password and try again.

Cause: An invalid user name, password, or both were provided.

Action: Enter the correct user name and password, and try again.

EQA-15004: The operation *operationName* can only be performed by logged in users.

Cause: A Web services operation was attempted without previously logging in for stateful mode or providing credentials for stateless mode. This error also occurs after an interactive `searchadmin` session times out.

Action: For stateful mode, call `login` first. For stateless mode, provide the `Credentials` argument for the operation. For an interactive session, exit and open a new session.

EQA-15005: An unexpected error occurred while marshalling the XML document.

Cause: An error occurred while constructing the output XML.

Action: Inspect the underlying exception message, the log files, or both.

EQA-15006: An unexpected error occurred while unmarshalling the XML document.

Cause: An error occurred while processing the input XML.

Action: Inspect the underlying exception message, the log files, or both.

EQA-15007: The XML schema *xsdName* was not found.

Cause: A required XML schema was not found.

Action: Inspect the underlying exception message, the log files, or both.

EQA-15008: An unexpected error occurred while reading the XML schema.

Cause: An error occurred while reading a required XML schema.

Action: Inspect the underlying exception message, the log files, or both.

EQA-15009: An unexpected error occurred while reading from the database.

Cause: An error occurred while reading from the database.

Action: Inspect the underlying exception message, the log files, or both.

EQA-15010: The plug-in manager raised an error while validating the plug-in parameters.

Cause: A plug-in manager class raised an error during validation of the plug-in parameters in the input XML.

Action: Inspect the underlying exception message, the log files, or both.

EQA-15011: The plug-in manager raised an unexpected error.

Cause: A plug-in manager raised an unexpected error.

Action: Inspect the underlying exception message, the log files, or both.

EQA-15014: Operation *operationName* cannot proceed because the remote resource located at *resourceURI* cannot be contacted.

Cause: An operation was unable to contact a remote resource (such as a federated source), which was needed to continue.

Action: Ensure that the remote resource is available and try again.

EQA-15015: The external tool *externalToolName* raised an error.

Cause: The API invoked an external executable tool, which raised an error.

Action: Inspect the underlying error message, the log files, or both.

EQA-15016: The system property *propertyName* was not set properly.

Cause: A system property required by SES was missing or set incorrectly.

Action: Contact the system administrator.

EQA-15017: The privileged user required to perform the operation was not found. See the log file for more information.

Cause: Some operations in Oracle SES required the existence of a privileged user in LDAP. If the user is not found, then the operation cannot be performed.

Action: Contact the system administrator.

EQA-15018: More than one active Oracle Enterprise Scheduler Job Request was found when only one was expected to exist. Contact the System Administrator to correct the problem.

Cause: When processing an Oracle SES schedule, more than one Oracle Enterprise Scheduler job request was found. When more than one exists, Oracle SES cannot process the schedule correctly.

Action: Correct the problem in Oracle Enterprise Scheduler, such as removing the extra job request.

EQA-15019: The schedule frequency configured in Oracle Enterprise Scheduler for the schedule with name *scheduleName* is not a supported frequency in Oracle Secure Enterprise Search. Contact the System Administrator to correct the problem.

Cause: A schedule was configured with an unsupported frequency.

Action: Contact the System Administrator. Oracle SES supports hourly, daily, weekly, and monthly schedules.

EQA-15020: Crawler execution failed due to an error executing the Oracle Enterprise Scheduler (ESS) Job Request. Check the ESS logs for more information.

Cause: An error occurred in processing the job request.

Action: Check the Oracle Enterprise Scheduler logs.

Dependent Object Errors

In the Web services API, these errors are `DependentObjectFault` SOAP faults. They are related to dependent objects of the object being processed. For example, an operation on a schedule might fail because of the current state of a source.

EQA-16000: The dependent object *dependentObjectName* referenced in object with type *universalType* was not found.

Cause: A universal administrative object referenced another object that did not exist, such as a `resultList` with rendering attributes that were not created previously.

Action: Create the dependent object first.

EQA-16001: The dependent object *dependentObjectName* referenced in object with key *objectKey* and type *creatableType* was not found.

Cause: A creatable administrative object referenced another object that did not exist, such as a schedule with an assigned source that was not created previously.

Action: Create the dependent object first.

EQA-16002: A duplicate dependent object *dependentObjectName* was found in object with type *universalType*.

Cause: A universal administrative object referenced a list of dependent objects that contained duplicates, such as a `resultList` that listed the same rendering attributes twice.

Action: Remove the duplicates in the dependent object list.

EQA-16003: A duplicate dependent object *dependentObjectName* was found in object with key *objectKey* and type *creatableType*.

Cause: A creatable administrative object referenced a list of dependent objects that contained duplicates, such as a `schedule` that listed the same assigned source twice.

Action: Remove the duplicates in the dependent object list.

EQA-16004: The dependent object *dependentObjectName* referenced in object with type *universalType* is in use.

Cause: A universal administrative object referenced a dependent object that was already being referenced. Only one object can reference the dependent object.

Action: Remove the reference to the dependent object from the other administrative object. For example, remove the rendering attribute from the other `resultList`.

EQA-16005: The dependent object *dependentObjectName* referenced in object with key *objectKey* and type *creatableType* is in use.

Cause: A creatable administrative object referenced a dependent object that was already being referenced. For example, a `schedule` cannot be created with an assigned source that is assigned to another `schedule`. Only one object can reference the dependent object.

Action: Remove the reference to the dependent object from the other administrative object. For example, remove the assigned source from the other `schedule`.

EQA-16006: The object with type *universalType* is in use by dependent object *dependentObjectName*.

Cause: The universal administrative object was in use by a dependent object.

Action: Eliminate the dependency before attempting this operation again.

EQA-16007: The object with key *objectKey* and type *creatableType* is in use by dependent object *dependentObjectName*.

Cause: The creatable administrative object was in use by the dependent object. For example, a search attribute cannot be deleted while a `source` attribute mapping is using it.

Action: Eliminate the dependency. For example, first remove the `source` with the attribute mapping or remove the attribute mapping from the `source`, then delete the search attribute.

EQA-16008: The dependent object *dependentObjectName* referenced in object with type *universalType* was found but is not valid for this object.

Cause: A universal administrative object referenced a dependent object that was invalid for this reference, such as a `Date` attribute where only `String` attributes are valid.

Action: Reference a dependent object with valid characteristics. You may modify the characteristics of the specified dependent object or reference a different dependent object.

EQA-16009: The dependent object *dependentObjectName* referenced in object with key *objectKey* and type *creatableType* was found but is not valid for this object.

Cause: A creatable administrative object referenced a dependent object that was invalid for this reference, such as a Date attribute where only String attributes are valid.

Action: Reference a dependent object with valid characteristics. You may modify the characteristics of the specified dependent object or reference a different dependent object.

EQA-16010: Operation *operationName* cannot be performed on object with type *universalType* because of the state of a dependent object with type *dependentObjectType*.

Cause: The universal administrative object depends on an object that was in an invalid state for the operation.

Action: Correct the state of the dependent object.

EQA-16011: Operation *operationName* cannot be performed on object with key *objectKey* and type *creatableType* because of the state of a dependent object with type *dependentObjectType*.

Cause: The creatable administrative object depends on an object that was in an invalid state for the operation. For example, a source cannot be deleted while assigned to a schedule that is executing.

Action: Correct the state of the dependent object.

EQA-16012: The property *propertyName* for object with type *universalType* must contain the following dependent objects: *dependentObjectName1*, *dependentObjectName2*

Cause: A property in the universal administrative object did not contain the required dependent objects.

Action: Modify the property to contain the listed dependent objects.

EQA-16013: The property *propertyName* for object with key *objectKey* and type *creatableType* must contain the following dependent objects: *dependentObjectName1*, *dependentNameObject2*

Cause: A property in the creatable administrative object did not contain the required dependent objects, such as the mandatory attribute names for a federated source.

Action: Modify the property to contain the listed dependent objects.

EQA-16014: The property *propertyName* for object with type *universalType* requires a dependent object with type *dependentObjectType* to be active.

Cause: A dependent object was not active, as required by the universal administrative object.

Action: Activate an appropriate dependent object with the specified type.

EQA-16015: The property *propertyName* for object with key *objectKey* and type *creatableType* requires a dependent object with type *dependentObjectType* to be active.

Cause: A dependent object was not active, as required by the creatable administrative object. For example, an active identity plug-in is needed for using a source-level ACL policy in a source.

Action: Activate an appropriate dependent object with the specified type.

EQA-16016: The dependent object *dependentObjectName* referenced in object with type *universalType* was not found as specified. The specified value *specifiedValue* for property *propertyName* differs from the actual value *actualValue*.

Cause: A universal administrative object referenced the properties of a dependent object, but the specified values did not match the actual values. For example, the data type of a search attribute might be specified incorrectly.

Action: Correct the specification of the dependent object.

EQA-16017: The dependent object *dependentObjectName* referenced in object with key *objectKey* and type *objectType* was not found as specified. The specified value *specifiedValue* for property *propertyName* differs from the actual value *actualValue*.

Cause: A creatable administrative object referenced the properties of a dependent object, but the specified values did not match the actual values. For example, the data type of a search attribute might be specified incorrectly.

Action: Correct the specification of the dependent object.

EQA-16019: Usage of the value *propertyValue* for property *propertyName* requires that the parent object with key *objectKey* and type *creatableType* has not been crawled.

Cause: The source description contained a property value that cannot be used after the source has been crawled.

Action: Either delete and re-create the source with this property value, or specify a different value for the property.

EQA-16020: The operation *operationName* for object with type *universalType* requires a dependent object with type *dependentObjectType* to be active.

Cause: A dependent object was not active, as required for the operation on the specified universal administrative object.

Action: Activate the specified dependent object.

EQA-16021: The operation *operationName* for object with key *objectKey* and type *creatableType* requires a dependent object with type *dependentObjectType* to be active.

Cause: A dependent object was not active, as required for the operation on the specified creatable administrative object. For example, an identity plug-in must be active when exporting a source that uses source-level ACL and access control entries.

Action: Activate the specified dependent object.

Index

A

about operator, 2-101
ACL policies, 2-81
activate command, 3-1
activate service request, 4-2
address (Web service), 1-5
administration API run-time errors, C-13
administration object errors, C-11
administrator log-in, 1-4
alert

- exporting, 4-23
- returning object keys, 4-33

alternate words, *See* altWord
altWord

- creating, 3-8, 3-20, 4-5, 4-8
- deleting, 3-34, 3-35, 3-37, 4-14, 4-16, 4-19
- exporting, 3-43, 3-45, 4-23, 4-26, 4-29
- object description, 2-12
- returning object keys, 3-47, 4-33
- updating, 3-69, 3-88, 4-50, 4-53

and operator, 2-101
API run-time errors, C-13
API version, 3-49, 4-35
applications, searching, 2-67
ASP.NET, ii-xi, 1-5
attribute ranking, 2-56
attributes

- custom search, 2-64
- shortcut search, B-1

authentication

- plug-ins, 2-34
- self-service, 2-81
- time-out, 2-54

authorization

- plug-ins, 2-77
- time-out, 2-54

B

boostedUrl

- creating, 4-5, 4-8, 4-14, 4-16, 4-19
- exporting, 4-26, 4-29
- updating, 4-50, 4-53

boundary rules, 2-29, 2-53, 2-82
BT (broader term), 2-103

bye, *See* quit command

C

cache files, 2-99
character sets, 2-5
Chinese, B-3
clustering

- exporting, 4-23
- pipeline, 2-16

clusterTree

- exporting, 4-23
- returning object keys, 4-33

collaboration repositories, searching, 2-67
configuration settings

- query results, 2-50

Config.xsd, 1-10
CONNECTION option, 1-2, 1-4
CONNECTION_LIST option, 1-4
content management repositories, searching, 2-67
cookies, 2-85
count method, 2-52
crawler

- character sets, 2-5
- documents formats, 2-2
- languages, 2-4
- log configuration, 2-16
- log files, 2-99
- scheduling, 2-59

crawler configuration, 2-73, 2-78, 2-83
See also crawlerSettings
crawler settings
See crawlerSettings
crawlerSettings

- exporting, 4-23
- object description, 2-14
- updating, 3-70, 4-50

creatable types

- listed, 1-8
- retrieving object keys, 3-47

create command, 3-1
create service request, 4-5
createAll command, 3-1
createAll service request, 4-8
custom attributes, 2-64

D

dash, using in commands, 3-3
data sources, 2-67
database storage, 2-98
deactivate command, 3-1
deactivate service request, 4-12
delete command, 3-1, 3-34
delete service request, 4-14
deleteAll command, 3-1, 3-35
deleteAll service request, 4-16
deleteList command, 3-1, 3-37
deleteList service request, 4-19
dependent object errors, C-15
describe, *See* export
dictionary, 2-52
disk quotas
 storageArea, 2-98
display URLs, 2-51
do you mean message, 2-13
docServiceInstance
 creating, 3-9, 3-21, 4-5, 4-8
 deleting, 3-34, 3-35, 3-37, 4-14, 4-16, 4-19
 exporting, 3-43, 3-45, 4-26, 4-29
 object description, 2-18
 returning object keys, 3-47
 updating, 3-71, 3-89, 4-50, 4-53
docServiceManager
 exporting, 3-43, 3-45, 4-26, 4-29
 object description, 2-21
 returning object keys, 3-47
docServicePipeline
 creating, 3-10, 3-22, 4-5, 4-8
 deleting, 3-34, 3-35, 3-37, 4-14, 4-16, 4-19
 exporting, 3-43, 3-45, 4-26, 4-29
 object description, 2-24
 returning object keys, 3-47
 updating, 3-72, 3-90, 4-50, 4-53
document formats, 2-2
document ranking, 2-56
document service instance, 2-18
document service manager, 2-21
document service pipeline, 2-16, 2-24
document types, 2-32
documents, searching, 2-67

E

e-mail display URL, 2-51
encryption, 2-8
endpoint, 1-5
English dictionary, 2-52
error messages, C-1
errors
 administration objects, C-11
 API run-time, C-13
 dependent objects, C-15
 invalid input, C-1
 invalid state, C-12
exit, *See* quit command
export command, 3-39, 3-41

export service request, 4-23
exportAll command, 3-43
exportAll service request, 4-26
exporting object descriptions, 3-39 to 3-46
exportList command, 3-45
exportList service request, 4-29

F

faceted search, 2-27
facetTree
 creating, 4-5, 4-8
 deleting, 3-34, 3-35, 3-37, 4-14, 4-16, 4-19
 exporting, 4-26, 4-29
 object description, 2-27
 updating, 4-50, 4-53
faults
 See errors
federated search, trusted entities, 2-48
federated sources, 2-53, 2-68 to 2-70
federation endpoints, 2-48
file display URL, 2-51, 2-72
file size, 2-98
file sources, 2-71
files, searching, 2-67
filter rules, 2-69
forms, 2-87
fragmentation, index, 2-38, 2-40

G

getAllObjectKeys command, 3-47
getAllObjectKeys service request, 4-33
getAllStates command, 3-2
getAllStates service request, 4-37
getAPIVersion command, 3-49
getAPIVersion service request, 4-35
getState command, 3-2
getState service request, 4-40
getStateList command, 3-2
getStateList service request, 4-43
globalBoundaryRules
 object description, 2-29
 updating, 3-73, 4-50
globalDocumentTypes
 object description, 2-32
 updating, 3-74, 4-50
globalization, 2-3

H

hash partitioning, 2-44
help command, 1-3
hit count method, 2-52
HTML forms, 2-87
hyphen, using in commands, 3-3

I

identity plug-ins, *See* identityPlugin
identityPlugin

- activating, 3-4, 4-2
- deactivating, 3-31, 4-12
- exporting, 3-43, 3-45, 4-23, 4-26, 4-29
- object description, 2-34
- returning current state, 3-50, 3-54, 3-62, 4-37, 4-40, 4-43
- returning object keys, 3-47, 4-33

implementation class, 1-5

index

- exporting, 4-23
- object description, 2-38
- returning current state, 3-56, 4-40
- updating, 3-75, 4-50

index fragmentation, 2-38

index optimizer, *See* indexOptimizer

index refresh, 2-59

indexOptimizer

- activating, 3-5, 4-2
- deactivating, 3-32, 4-12
- exporting, 4-23
- object description, 2-40
- returning current state, 3-57, 4-40
- starting, 3-66, 4-46
- updating, 3-76, 4-50

interactive sessions, 1-2

invalid input errors, C-1

invalid state errors, C-12

J

Japanese, B-3

Java example, A-1

Java Runtime Environment (JRE), A-5

JRockit, A-5

K

key names, retrieving, 3-47, 4-33

L

language codes

- crawler, 2-4
- product, 2-3
- query, 2-7

language detection, 2-15

language support, 2-3, 2-6

language, default, 2-15

links, depth limit, 2-15

list, *See* export

lists of values (LOVs), 2-64

localization, 2-3

location, sources types, 2-94

log-in proxies, *See* proxyLogin

logs

- crawler, 2-16, 2-99
- message, 1-11
- operations, 1-11
- querying statistics, 2-53
- search statistics, 2-53

M

mailing list display URL, 2-51

message log, 1-11

metadata repository, 2-38

MIME types, 2-2

MW_HOME, xiii

N

near operator, 2-101

nested link limit, 2-15

NT (narrower term), 2-103

O

object errors, C-11, C-15

object keys, retrieving, 3-47

objects

- creatable, 1-8
- universal, 1-7

operations log, 1-11

operations, listed by function, 1-11

operators, in search queries, 2-101

optimization, index, 2-38, 2-40

or operator, 2-101

Oracle Secure Enterprise Search

- what's new in 10.1.7, xv

Oracle SES API version, 3-49, 4-35

ORACLE_HOME, xiii

OracleAS Single Sign-On, 2-88

P

parallel query, 2-10

partition configuration

- See* partitionConfig

partitionConfig

- activating, 3-6
- object description, 2-44
- returning current state, 4-40
- updating, 3-77, 4-50

partitioning, 2-10

partitions, 2-99

password encryption, 2-8

PASSWORD option, 1-4

percent signs, using in commands, 3-3

phrase operator, 2-101

port name, 1-5

print, *See* export

processes

- for searching, 2-53

proxies, *See* proxyLogin

proxyLogin

- creating, 3-12, 3-24, 4-5, 4-8
- deleting, 3-34, 3-35, 3-37, 4-14, 4-16, 4-19
- exporting, 3-43, 3-45, 4-23, 4-26, 4-29
- object description, 2-48
- returning object keys, 3-47, 4-33
- updating, 3-78, 3-91, 4-50, 4-53

Q

query configuration, *See* queryConfig
query expansion

- alternate words, 2-12
- suggested links, 2-100
- thesaurus, 2-102

query languages, 2-7
query log, 2-53
query routing, 2-69
query statistics, 2-53
queryConfig

- exporting, 4-23
- object description, 2-50
- updating, 3-79, 4-50

quit command, 1-2
quotas, disk

- See* disk quotas

R

ranking documents, 2-56
relevanceRanking

- object description, 2-56
- updating, 3-80, 4-50

relevancy boosting, 2-52
resultList

- exporting, 4-23

robots exclusion, 2-85
run-time errors, C-13

S

schedule

- activating, 3-7, 4-2
- creating, 3-13, 3-25, 4-5, 4-8
- deactivating, 3-33, 4-12
- deleting, 3-34, 3-35, 3-37, 4-14, 4-16, 4-19
- exporting, 3-43, 3-45, 4-23, 4-26, 4-29
- object description, 2-59
- returning current state, 3-52, 3-60, 3-64, 4-37, 4-40, 4-43
- returning object keys, 3-47, 4-33
- starting, 3-67, 4-46
- stopping, 3-68, 4-48
- updating, 3-81, 3-92, 4-50, 4-53

search attributes, *See* searchAttr
search languages, 2-7
search results

- limiting by source group, 2-92

search statistics, 2-53
search statistics log, 2-53
searchadmin

- alphabetical command list, 3-1
- command syntax, 1-10
- individual commands, 1-2
- interactive sessions, 1-2

searchAttr

- creating, 3-14, 3-26, 4-5, 4-8
- deleting, 3-34, 3-35, 3-37, 4-14, 4-16, 4-19
- exporting, 3-43, 3-45, 4-23, 4-26, 4-29
- object description, 2-64
- returning object keys, 3-47, 4-33
- updating, 3-82, 3-93, 4-51, 4-53

secure search, 2-34
self-service authentication, 2-81
service name, 1-5
SES API version, 3-49, 4-35
session mode

- command-line interface, 1-2

single job mode

- command-line interface, 1-2

single sign-on, 2-88
skinBundle

- exporting, 4-23
- returning object keys, 4-33

source

- creating, 3-15, 3-27, 4-5, 4-8
- deleting, 3-34, 3-35, 3-37, 4-14, 4-16, 4-19
- exporting, 3-43, 3-45, 4-23, 4-26, 4-29
- federated, 2-68 to 2-70
- file, 2-71
- object description, 2-67
- returning object keys, 3-47, 4-33
- updating, 3-83, 3-94, 4-51, 4-53
- Web, 2-81

source code, Java, A-1
source groups, *See* sourceGroup
source types

- list of user-defined, 2-76
- See also* sourceType

sourceGroup

- creating, 3-16, 3-28, 4-5, 4-8
- deleting, 3-34, 3-35, 3-37, 4-14, 4-16, 4-19
- exporting, 3-43, 3-45, 4-23, 4-26, 4-29
- object description, 2-92
- returning object keys, 3-47, 4-33
- updating, 3-84, 3-95, 4-51, 4-53

sources

- search groups, 2-92
- See also* source, 2-81
- user-defined, 2-76

sourceType

- exporting, 3-43, 3-45, 4-23, 4-26, 4-29
- object description, 2-94
- returning object keys, 3-47, 4-33

space management

- storageArea, 2-98

spaceCalculator

- exporting, 4-23

spaces, using in commands, 3-3
special characters, using in commands, 3-3
spelling correction, 2-52
start command, 3-2
start service request, 4-46
state errors, C-12
state properties, 1-10, 2-8
state, getting current, 4-37, 4-40, 4-43
stateful client (Java), 1-6
stateful mode, 1-5
stateful objects, 2-9

- stateless client (Java), 1-6
- stateless mode, 1-5
- State.xsd, 1-10
- statistics collection, 2-53
- statistics log, for searches, 2-53
- status codes, 1-12
- stem operator, 2-101
- stop command, 3-2
- stop service request, 4-48
- storage areas, *See* storageArea
- storageArea
 - creating, 3-17, 3-29, 4-5, 4-8
 - deleting, 3-34, 3-35, 3-37, 4-14, 4-16, 4-19
 - exporting, 3-43, 3-45, 4-23, 4-26, 4-29
 - object description, 2-98
 - returning object keys, 3-47, 4-33
 - updating, 3-85, 3-96, 4-51
- suggested links, *See* suggLink
- suggLink
 - creating, 3-18, 3-30, 4-5, 4-8
 - deleting, 3-34, 3-35, 3-37, 4-14, 4-16, 4-19
 - exporting, 3-43, 3-45, 4-23, 4-26, 4-29
 - object description, 2-100
 - returning object keys, 3-47, 4-33
 - updating, 3-86, 3-97, 4-51, 4-53
- SYN (synonym), 2-103
- synonyms, 2-102
- system files, 2-99

T

- table display URL, 2-51
- tablespaces, 2-98
- task
 - exporting, 4-23
- thesaurus
 - creating, 3-19, 4-5
 - deleting, 3-34, 4-14
 - exporting, 4-23
 - object description, 2-102
 - returning object keys, 3-47, 4-33
 - updating, 3-87, 4-51
- thesaurus operator, 2-101
- threads
 - for searching, 2-53
- threads, for crawling, 2-15
- time-out intervals, 2-54
- translations, 2-6
- trusted entities, *See* proxyLogin

U

- underscores, using in commands, 3-3
- universal types
 - listed, 1-7
- update command, 3-2
- update service request, 4-50
- updateAll command, 3-2
- updateAll service request, 4-53
- URL recommendations, 2-100

- URLs for display, 2-51
- URLs, nested link limit, 2-15
- user-defined sources, 2-76

V

- validation, 2-34
- view, *See* export

W

- Web sites, searching, 2-67
- Web sources, 2-81
- wildcard characters, 3-3
- within operator, 2-101
- WSDL address, 1-5
