# Schema Reference Manual

Sun™ ONE Messaging and Collaboration

Version 6.0

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# Contents

Who Should Read This Manual	13
What You Need to Know	14
How This Manual is Organized	14
Monospaced Font	
Bold Monospaced Font	15
Italicized Font	15
Square or Straight Brackets	16
Command Line Prompts	16
Platform-specific Syntax	
Where to Find Related Information	16
Messaging Server Documents	16
Calendar Server Documents	17
Where to Find This Manual Online	18
Related Third-Party Web Site References	18
Chapter 1 Overview	
Data Model for Sun ONE LDAP Schema, v.2	
Data Model for Sun ONE LDAP Schema, v.1	
Sun ONE Messaging Server Schema Overview	
Mail Recipient	
Personal Address Book	
Domains	25
Delegation of Management	26
Sun ONE Calendar Server Schema Overview	27
Chapter 2 Object Classes	21
List of Object Classes	

Object Classes	
domain	
groupOfUniqueNames	
icsAdministrator	. 34
icsCalendarDomain	. 35
icsCalendarDWPHost	. 35
icsCalendarGroup	. 36
icsCalendarResource	. 37
icsCalendarUser	. 37
inetAdmin	. 38
inetDomain	. 39
inetDomainAlias	. 40
inetDomainAuthInfo	. 40
inetLocalMailRecipient	. 41
inetMailAdministrator	
inetMailGroup	. 43
inetMailUser	. 43
inetOrgPerson	. 44
inetResource	. 45
inetSubscriber	. 45
inetUser	. 46
ipUser	. 47
mailDomain	. 48
mailPublicFolder	. 49
msgVanityDomainUser	. 49
organization	
organizationalUnit	. 50
pab	. 51
pabGroup	. 52
pabPerson	. 53
userPresenceProfile	. 53
Chapter 3 Attributes	55
List of Attributes	
Attribute Definitions	
adminRole	
aliasedObjectName	
businessCategory	
calCalURI	
calFBURL	
cn	
CO	
commonName (see cn)	
COMMINSTER TRANSPORTED TO COMMINSTER THE PROPERTY OF THE PROPE	

countryName (see co)	
dataSource	
dateOfBirth	
dc	
description	
domainUidSeparator	
domOrgMaxUsers	
domOrgNumUsers	
facsimileTelephoneNumber	
givenName	
icsAdminRole	
icsAlias	
icsAllowedServiceAccess	
icsAllowRights	
icsAnonymousAllowWrite	
icsAnonymousCalendar	
icsAnonymousDefaultSet	76
icsAnonymousLogin	77
icsAnonymousSet	77
icsCalendar	78
icsCalendarOwned	78
icsCapacity	79
icsContact	79
icsDefaultAccess	80
icsDefaultSet	80
icsDomainAllowed	81
icsDomainNames	82
icsDomainNotAllowed	83
icsDWPBackEndHosts	84
icsDWPHost	85
icsExtended	85
icsExtendedDomainPrefs	86
icsExtendedGroupPrefs	
icsExtendedResourcePrefs	
icsExtendedUserPrefs	88
icsFirstDay	
icsFreeBusy	
icsGeo	
icsMandatorySubscribed	
icsMandatoryView	
icsPartition	
icsPreferredHost	
icsQuota	

icsRecurrenceBound	. 96
icsRecurrenceDate	
icsRegularExpressions	. 97
icsSessionTimeout	
icsSet	. 98
icsSourceHtml	
icsStatus	
icsSubscribed	
icsTimezone	
inetCanonicalDomainName	
inetCoS	
inetDomainBaseDN	
inetDomainCertMap	
inetDomainSearchFilter	
inetDomainStatus	
inetMailGroupStatus	
inetResourceStatus	
inetSubscriberAccountId	
inetSubscriberChallenge	
inetSubscriberResponse	
inetUserHttpURL	
inetUserStatus	
mail	
mailAccessProxyPreAuth	
mailAccessProxyReplay	
mailAdminRole	
mailAllowedServiceAccess	
mailAlternateAddress	
mailAntiUBEService	
mailAutoReplyMode	
mailAutoReplySubject	
mailAutoReplyText	
mailAutoReplyTextInternal	
mailAutoReplyTimeOut	
mailClientAttachmentQuota	
mailConversionTag	
mailDeferProcessing	
mailDeliveryFileURL	
mailDeliveryOption	
mailDomainAllowedServiceAccess	
mailDomainCatchallAddress	
mailDomainConversionTag	
mailDomainDiskQuota	133

mailDomainMsgMaxBlocks	134
mailDomainMsgQuota	
mailDomainReportAddress	135
mailDomainSieveRuleSource	136
mailDomainStatus	
mailDomainWelcomeMessage	139
mailEquivalentAddress	
mailFolderName	
mailForwardingAddress	
mailHost	
mailMessageStore	
mailMsgMaxBlocks	
mailMsgQuota	
mailProgramDeliveryInfo	
mailPublicFolderDefaultRights	
mailQuota	
mailRejectText	
mailRoutingAddress	
mailRoutingHosts	
mailRoutingSmartHost	
mailSieveRuleSource	
mailSMTPSubmitChannel	
mailUserStatus	
maxPabEntries	
memberOf	
memberOfPAB	
memberOfPABGroup	
memberURL	
mgrpAddHeader	
mgrpAllowedBroadcaster	
mgrpAllowedDomain	
mgrpAuthPassword	
mgrpBroadcasterPolicy	
mgrpDeliverTo	
mgrpDisallowedBroadcaster	
mgrpDisallowedDomain	
mgrpErrorsTo	
mgrpModerator	
mgrpMsgMaxSize	
mgrpMsgPrefixText	
mgrpMsgRejectAction	
mgrpMsgRejectText	
mgrpMsgSuffixText	169

mgrpNoDuplicateChecks	
mgrpRemoveHeader	170
mgrpRequestTo	171
mgrpRFC822MailMember	171
msgVanityDomain	172
multiLineDescription	173
nickName	173
nswcalDisallowAccess	174
nswmExtendedUserPrefs	174
0	175
objectClass	175
organizationName (see o)	176
organizationUnitName (see ou)	176
ou	176
owner	177
pabURI	177
parentOrganization	178
postalAddress	
preferredLanguage	179
preferredMailHost	
preferredMailMessageStore	
seeAlso	182
sn	182
telephoneNumber	183
uid	183
un	184
uniqueMember	
userId (see uid)	
userPassword	
vacationEndDate	186
vacationStartDate	187
01	400
Chapter 4 Sun ONE Identity Server Classes and Attributes	189
iplanet-am-managed-assignable-group	
iplanet-am-managed-filtered-group	
iplanet-am-managed-filtered-role	
iplanet-am-managed-group	
iplanet-am-managed-group-container	
iplanet-am-managed-org-unit	
iplanet-am-managed-people-container	
iplanet-am-managed-person	
iplanet-am-managed-role	195

iplanet-am-managed-static-group	
iplanet-am-user-service	
iPlanetPreferences	
sunISManagedOrganization	
sunManagedOrganization	
sunNameSpace	
sunServiceComponent	
userPresenceProfile	
Attributes	
associatedDomain	
inetGroupStatus	
iplanet-am-group-subscribable	
iplanet-am-modifiable-by	
iplanet-am-role-aci-description	
iplanet-am-role-aci-list	
iplanet-am-role-any-options	
iplanet-am-role-description	
iplanet-am-role-managed-container-dn	
iplanet-am-role-service-options	
iplanet-am-role-type	
iplanet-am-service-status	
iplanet-am-static-group-dn	
iplanet-am-user-account-life	
iplanet-am-user-admin-start-dn	
iplanet-am-user-alias-list	
iplanet-am-user-auth-config	
iplanet-am-user-auth-modules	
iplanet-am-user-failure-url	
iplanet-am-user-federation-info	
iplanet-am-user-federation-info-key	
iplanet-am-user-login-status	
iplanet-am-user-password-reset-force-reset	
iplanet-am-user-password-reset-options	
iplanet-am-user-password-reset-passwordChanged	
iplanet-am-user-password-reset-question-answer	
iplanet-am-user-service-status	
iplanet-am-user-success-url	
preferredLocale	220
preferredTimeZone	
sunAdditionalTemplates	
sunKeyValue	
sunNameSpaceUniqueAttrs	223
sunOrganizationAlias	223

sunOverrideTemplates	. 224
sunPreferredDomain	. 224
sunPreferredOrganization	. 225
sunRegisteredServiceName	
sunServiceId	. 227
sunSmsPriority	. 228
sunXmlKeyValue	. 228
Chapter 5 iPlanet Delegated Administrator for Messaging Classes and Attributes	220
Object Classes	
inetDomainOrg	
inetMailGroupManagement	
inetManagedGroup	
nsManagedDept	
nsManagedDeptAdminGroup	
nsManagedDomain	
nsManagedFamilyGroup	
nsManagedISP	
nsManagedMailList	
nsManagedOrgUnit	
nsManagedOrgOffit	
nsUniquenessDomain	
•	
Attributes	
domainUidSeparator	
domOrgMaxUsers	
domOrgNumUsers	
memberOfManagedGroup	
mgmanAllowSubscribe	
mgmanDenySubscribe	
mgmanGoodbyeText	
mgmanHidden	
mgmanIntroText	
mgmanJoinability	
mgmanMemberVisibility	
mgmanVisibility	
mnggrpAdditionPolicy	
mnggrpBillableUser	
mnggrpCurrentUsers	
mnggrpDeletionPolicy	
mnggrpMailQuota	
mnggrpMaxUsers	
mnggrpStatus	
mnggrpUserClassOfServices	. 251

nsDefaultMaxDeptSize	251
nsMaxDepts	252
nsMaxDomains	252
nsMaxMailLists	253
nsMaxUsers	254
nsNumDepts	254
nsNumDomains	255
nsNumMailLists	255
nsNumUsers	256
nsSearchFilter	257
nsdaCapability	257
nsdaDomain	258
nsdaModifiableBy	258
preferredMailMessageStore	259
Appendix A General Information	261
LDAP Overview	
Attribute Syntax	262
Object Identifiers	262
Standard Time Zones	263
Glossary	271

## **About This Manual**

This manual serves as a reference for schema information for Sun<sup>™</sup> Open Net Environment (ONE) Messaging and Collaboration products using LDAP, specifically Sun ONE Messaging Server and Sun ONE Calendar Server.

Topics covered in this chapter include:

- Who Should Read This Manual
- What You Need to Know
- How This Manual is Organized
- Document Conventions
- Where to Find Related Information
- Where to Find This Manual Online
- Related Third-Party Web Site References

### Who Should Read This Manual

You should read this manual if you want to provision Sun ONE Messaging Server, or Sun ONE Calendar Server, using LDAP. The audience for this manual consists of:

- System architects who want to develop customized provisioning tools that
  interface between Messaging and Collaboration product entries in the LDAP
  directory and their existing source of users, groups, and domains information
  such as a company database or billing system.
- Site Administrators who want to know how to create domain, user, group, or resource entries using LDAP.

### What You Need to Know

This manual assumes that you have a general understanding of the following:

- The Internet and the World Wide Web
- Sun ONE Administration Server
- Sun ONE Directory Server and LDAP
- Email and email concepts
- Calendar and calendar concepts
- Sun ONE Console
- RFC 2798, and RFC 2445

The RFC's may be found at the IETF web sites:

- http://www.ietf.org/rfc/rfc2798.txt
- http://www.ietf.org/rfc/rfc2445.txt
- ISO8601 DateTime Format

For a list of time zone names used with these products, see Appendix A, Standard Time Zones.

In addition, you probably need to have a general understanding of either the two following products:

- iPlanet Delegated Administrator for Messaging, for use with Sun ONE LDAP Schema, v.1
- Sun ONE Identity Server, for use with Sun ONE LDAP Schema, v.2

# How This Manual is Organized

This manual contains the following chapters and appendix:

- About This Manual (this chapter)
- Chapter 1, "Overview"
- Chapter 2, "Object Classes"
- Chapter 3, "Attributes"
- Chapter 4, "Sun ONE Identity Server Classes and Attributes"

- Chapter 5, "iPlanet Delegated Administrator for Messaging Classes and Attributes"
- Appendix A, "General Information"
- Glossary

### **Document Conventions**

# Monospaced Font

Monospaced font is used for any text that appears on the computer screen or text that you should type. It is also used for filenames, distinguished names, functions, and examples.

## **Bold Monospaced Font**

Bold monospaced font is used to represent text within a code example that you should type. For example, you might see something like this:

./installer

In this example, ./installer is what you would type at the command line.

### Italicized Font

*Italicized font* is used to represent text that you enter using information that is unique to your installation (for example, variables). It is used for server paths and names.

For example, throughout this document you will see path references of the form:

msg\_svr\_base/...

The Messaging Server Base (msg svr base) represents the directory path in which you install the server. The default value of the *msg\_svr\_base* is /opt/SUNWmsgsr.

## Square or Straight Brackets

Square (or straight) brackets [] are used to enclose optional parameters.

## **Command Line Prompts**

Command line prompts (for example, % for a C-Shell, or \$ for a Korn or Bourne shell) are not displayed in the examples. Depending on which operating system you are using, you will see a variety of different command line prompts. However, you should enter the command as it appears in the document unless specifically noted otherwise.

## Platform-specific Syntax

All paths specified in this manual are in UNIX® format. If you are using a Windows 2000-based Messaging and Collaboration, you should assume the Windows 2000 equivalent file paths whenever UNIX file paths are shown in this book.

### Where to Find Related Information

In addition to this manual, Sun ONE Messaging Server, and Sun ONE Calendar Server come with supplementary information for administrators, end users and developers.

## Messaging Server Documents

Use the following URL to see all the Messaging Server documentation:

http://docs.sun.com/coll/S1\_MessagingServer\_60

Listed below are the documents that are available:

- Sun ONE Messaging Server Installation Guide
- Sun ONE Messaging Server Release Notes
- Sun ONE Messaging Server Administrator's Guide
- Sun ONE Messaging Server Reference Manual

- Sun ONE Messaging and Collaboration Schema Reference Manual
- Sun ONE Messaging Server Provisioning Guide

If you are using Sun ONE LDAP Schema, v.1, use the Provisioning Guide found in the iPlanet Messaging Server 5.2 documents.

If you are using Sun ONE LDAP Schema v.2, use information found in the Sun Java Enterprise System documentation.

- Sun ONE Messaging and Collaboration Event Notification Service Manual
- Sun ONE Messaging Server Messenger Express Customization Guide
- Sun ONE Messaging Server MTA Programmer's Reference Manual

The Sun ONE Messaging Server product suite contains other products such as Sun ONE Console, Directory Server, and Administration Server. Documentation for these and other products can be found at the following URL:

http://docs.sun.com/db/prod/sunone

In addition to the software documentation, see the Sun ONE Messaging Server Software Forum for technical help on specific Messaging Server product questions. The forum can be found at the following URL:

http://swforum.sun.com/jive/forum.jsp?forum=15

### Calendar Server Documents

Use the following URL to see all the Calendar Server documentation:

http://docs.sun.com/coll/S1\_CalendarServer\_60

The following documents are available:

- Sun ONE Calendar Server Release Notes
- Sun ONE Calendar Server Installation Guide
- Sun ONE Calendar Server Administrator's Guide
- Sun ONE Calendar Server Programmer's Manual
- Sun ONE Messaging and Collaboration Schema Reference Manual
- Sun ONE Messaging and Collaboration Event Notification Service Manual

### Where to Find This Manual Online

You can find the *Sun ONE Messaging and Collaboration Schema Reference Manual* online in HTML and PDF formats.

To find this manual or other Sun ONE Messaging Server documentation, use the URL:

http://docs.sun.com/coll/S1 MessagingServer 60

Or, for this manual and other Sun ONE Calendar Server documentation, use the URL:

http://docs.sun.com/coll/S1 CalendarServer 60

# Related Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.

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## Overview

This chapter give an overview of  $Sun^{TM}$  ONE Messaging and Collaboration schema. It contains the following sections:

- Data Model for Sun ONE LDAP Schema, v.2
- Data Model for Sun ONE LDAP Schema, v.1
- Sun ONE Messaging Server Schema Overview
- Sun ONE Calendar Server Schema Overview

# Data Model for Sun ONE LDAP Schema, v.2

The basic data model of Sun ONE object classes is to extend LDAP entry *types* (for example, user, group, domain) created by *core object classes* by overlaying them with *shared classes* (object classes can be shared by more than one service) and *service-specific object classes* (classes specific to a certain type of server).

In addition, there are two ways to structure the LDAP data model: native mode (the preferred way) using only an Organization Tree, and compatibility (for backwards compatibility with earlier versions of Sun ONE or iPlanet™ LDAP based products) using both a DC Tree and an Organization Tree. Provisioning your LDAP differs depending on whether you chose the native or compatibility mode at installation time.

Use the Sun™ ONE Messaging and Collaboration User Management Utility (a command line utility) to add, modify and delete users, groups and domains.

For a discussion of the differences between the native and compatibility modes as regards LDAP data models, the *Sun Java*<sup>TM</sup> *Enterprise System Installation Guide*.

For more information on RFC 2798, RFC 2252, and internet standards, use the following URL:

#### http://www.imc.org/rfcs.html

Table 1-1 shows the core classes, shared classes and server specific classes for the three types of entries for native mode: domains, users and groups. Note that for Calendar Server, there is an additional type of entry for resources that need to be scheduled, such as conference rooms and equipment.

Note that while userPresenceProfile is not specifically a Messaging Server object class (it is used to store vacation start and end dates), Calendar Server does not use it at all.

This table also includes the classes used by Identity Server in these types of entries. Identity Server classes are shown in italicized font. Note that the object classes and attributes defined for Identity Server are subject to change. See the *Sun Java* \*\* *Enterprise System Installation Guide* for a discussion of provisioning concepts.

**Table 1-1** Native Mode Entry types and Corresponding Object Classes

Types	Core Classes	Shared Classes	Server Specific Classes
Domain	organization		mailDomain
	domain		icsCalendarDomain
	sunManagedOrganization		
	sunNameSpace		
User	person	ipUser	inetMailUser
	inetUser	userPresenceProfile	inetLocalMailRecipient
	organizationalPerson	iplanet-am-managed-person	
	inetOrgPerson		
Group	groupOfUniqueNames	iplanet-am-managed-	inetMailGroup
	iplanet-am-managed-group	filtered-group	inetLocalRecipient
		iplanet-am-managed-	
		assignable-group	
		iplanet-am-managed-static	
		-group	
Resource	inetResource		icsCalendarResource

Table 1-2 shows the core classes, shared classes and server specific classes for the four types of entries for compatibility mode: DC Tree domains, Organization Tree domains, users and groups.

Note that for Calendar Server, there is an additional type of entry for resources that need to be scheduled, such as conference rooms and equipment. Also note that userPresenceProfile is used only by Messaging Server, even though it is not a messaging specific object class.

This table also includes the classes used by Identity Server in these types of entries.

Table 1-2 Compatibility Mode Entry types and Corresponding Object Classes

Types	Core Classes	Shared Classes	Server Specific Classes
DC Tree	domain		mailDomain
Domain	inetDomain		icsCalendarDomain
Org Tree	organization		
Domain	sunManagedOrganization		
	sunNameSpace		
User	person	ipUser	inetMailUser
	inetUser	userPresenceProfile	inetLocalMailRecipient
	organizationalPerson	iplanet-am-managed-person	
	inetOrgPerson		
Group	groupOfUniqueNames	iplanet-am-managed- filtered-group	inetMailGroup
	iplanet-am-managed-group		inetLocalRecipient
		iplanet-am-managed- assignable-group	
		iplanet-am-managed-static -group	
Resource	inetResource		icsCalendarResource

# Data Model for Sun ONE LDAP Schema, v.1

The basic data model of Sun ONE object classes is to extend LDAP entry types (for example, user, group, domain) created by core object classes by overlaying them with *shared classes* (object classes can be shared by more than one service) and service-specific object classes (classes specific to a certain type of server).

This model has an Organization Tree for holding user and group information and a Domain Component Tree (DC Tree) that holds the domain information.

This model is administered by the iPlanet Delegated Administrator for Messaging graphical user interface.

For more information on RFC 2798, RFC 2252, and internet standards, use the following URL:

http://www.imc.org/rfcs.html

Table 1-3 shows the core classes, shared classes and server specific classes for the four types of entries: DC Tree domains, Organization Tree domains, users and groups. Note that for Calendar Server, there is an additional type of entry for resources that need to be scheduled, such as conference rooms and equipment. This table also includes the marker classes used by Delegated Administrator.

**Table 1-3** Two-DIT Entry types and Corresponding Object Classes

Types	Core Classes	Shared Classes	Server Specific Classes
DC Tree	domain		mailDomain
Domain	inetDomain		nsManagedDomain
			icsCalendarDomain
Org Tree Domain	organization		nsManagedDomain
User	person	ipUser	inetMailUser
	inetUser	userPresenceProfile	inetLocalMailRecipient
	organizationalPerson		nsManagedPerson
	inetOrgPerson		
Group	groupOfUniqueNames		inetMailGroup
			inetLocalRecipient
			inetMailGroupManagement
			nsManagedMailingList
Family Account	inetManagedGroup		nsManagedDept
Resource	inetResource		icsCalendarResource

# Sun ONE Messaging Server Schema Overview

The basic Sun ONE Messaging Server schema model is to extend LDAP entries created by structural object classes. Extensions are made to a base LDAP entry using auxiliary object classes. The extensions made for Sun ONE Messaging Server are defined in this manual.

For example, inetOrgPerson is the structural class used to make a base user entry. This user entry becomes an email user when overlaid by the auxiliary classes defined in this document. Similarly, groupOfUniqueNames is the structural class used to make a base group entry, which becomes an email distribution list when overlaid by the distribution list auxiliary object classes.

Sun ONE Messaging Server auxiliary object classes can be grouped by function into the following categories and subcategories:

- Mail Recipient
  - Email Users
  - Email Groups (Distribution Lists)
  - Email Routing
- Personal Address Book
  - Personal Address Book
  - Personal Address Book Group
  - Personal Address Book Person
- Domains
  - Hosted Domain Entries
  - Domain Aliases
  - Domain Organizations
- Delegation of Management
  - Managed Group
  - Store Administrator

## Mail Recipient

There are two types of mail recipients: users and groups. Both user and group email use the inetLocalMailRecipient auxiliary object class for local mail routing attributes.

#### **Email Users**

LDAP entries created by inetOrgPerson can be enabled for messaging services by overlaying the entry with inetUser, ipUser, inetMailUser, inetLocalMailRecipient, and userPresenceProfile. Optionally, inetSubscriber may be used for holding subscriber type attributes for the user, but it is not required for creating messaging server users.

### **Email Groups**

LDAP entries created by groupOfUniqueNames can be enabled for messaging services by overlaying the entry with inetMailGroup, inetMailUser, and inetLocalMailRecipient. These object classes define distribution lists and how they are to be used by the messaging server.

### **Email Routing**

For email routing attributes, the messaging server uses the object class inetLocalMailRecipient.

### Personal Address Book

LDAP entries created by inetorgperson can be enabled for personal address books by overlaying the entry with object classes pab, pabGroup, and pabPerson. The data model for personal address book entries is the address book (pab), which contains zero or more persons (pabPerson) and zero or more group (pabGroup) entries.

#### Personal Address Book

The personal address book (pab object class) contains zero or more pabPerson and zero or more pabGroup entries. All users and groups belong to the default personal address book called All.

### Personal Address Book Group

The personal address book group object class, pabGroup, corresponds to a personal distribution list. A group belongs to zero or more personal address books. The link between groups and personal address books is established by memberOfPAB, a multi-valued attribute of pabGroup.

#### Personal Address Book Person

The personal address book user object class, pabPerson, is a user entry in a personal address book. A user (pabPerson) can belong to zero or more personal address book groups (pabGroup) and zero or more personal address books (pab).

The link between users and groups is established by memberOfPABGroup, a multi-valued attribute of pabPerson, which allows the user to belong to many groups. A user can also belong to many personal address books. This link is established by memberOfPAB, a multi-valued attribute of pabPerson.

### **Domains**

Domain object classes are used to specify email-addressable organizations. These domains are known as hosted domains.

This section discusses the following:

- Hosted Domain Entries
- Domain Aliases
- Domain Organizations

#### **Hosted Domain Entries**

LDAP entries created by domain and inetDomain can be enabled for hosted domains using the object class mailDomain. There must be an instance of both mailDomain, and inetDomain for each hosted domain. Optionally, to hold attributes suitable for overriding the default behavior of mailDomain and for stored certmaps, inetDomainAuthInfo can be used.

For Sun ONE LDAP Schema v.2, each hosted domain entry must also carry the Sun ONE Identity Server marker class, sunManagedOrganization and its attribute, sunPreferredDomain. This is true in both native and compatibility modes. In addition, if the hosted domain is also to be a namespace, the domain entry must contain the sunNameSpace object class and sunNameSpaceUniqueAttrs attribute.

For Sun ONE LDAP Schema v.1, each hosted domain entry must carry the Delegated Administrator marker class nsManagedDomain.

#### Domain Aliases

A hosted domain can have aliases. In Sun ONE LDAP Schema v.1, and Sun ONE LDAP Schema v.2 compatibility mode, these aliases are separate nodes on the DC Tree, and depending on what type of aliasing is being one, can carry separate routing information. However, for Sun ONE LDAP Schema v.2 native mode, there is no DC Tree. All aliasing is handled by adding the associatedDomain attribute (which lists all the alias names) to the domain node. This means a loss of functionality for native mode. That is for native mode, there can not be separate domain information (and thus different mail routing) for alias domains.

For Sun ONE LDAP Schema v.2, compatibility mode, the DC Tree domain alias nodes are still present, and can be provisioned using the Sun ONE User Management Utility.

For the User Management Utility (commadmin), see the Sun ONE Messaging and Collaboration User Management Utility Installation and Administration Guide.

### **Domain Organizations**

To support a managed domain organization in Sun ONE LDAP Schema v.1, the auxiliary object classes <code>inetDomainOrg</code> is used in conjunction with the structural class <code>organization</code>. A domain organization is usually created as a way of introducing hierarchy beneath a customer subtree and assigning administrators for that domain organization. The resulting structures are not domains. They are usually denoted with the attribute <code>organizationalUnit</code> (ou).

Sun ONE LDAP Schema v.2 does not support "domain organizations" as used by earlier versions of Messaging Server. Especially do not use <code>iplanet-am-managed-organizational-unit</code>, which despite its name, is treated exactly the same as a regular domain named by <code>sunManagedOrganization</code>. Since this organization is not a domain, and there is no marker class for this in Identity Server, if you want to use the "domain organization" concept in your Sun ONE Schema LDAP, v.2 directory, you must provision and manage these structures by directly writing LDAP entries (using <code>ldapmodify</code>).

## **Delegation of Management**

Managed group object classes are used to specify arbitrary groupings of users or groups (and possibly other resources defined in the LDAP directory) so that management of these resources can be delegated to another user. Examples of such groupings are DNS domain boundaries, and departments.

### Managed Group

Managed groups commonly have different rules for adding or deleting members. To enable policy differences in the administration of groups, an instance of the object class inetOrgPerson, with its associated policy attributes, must exist for each managed group.

#### Store Administrator

To define a group of administrators for domains, the object class inetMailAdministrator is used to grant members administrative privileges over users in the same domain where the group is defined.

### Sun ONE Calendar Server Schema Overview

This section lists the Sun ONE Calendar Server object classes and their attributes.

Table 1-4 shows the calendar-specific object classes and their attributes. In addition, Sun ONE Calendar Server also uses one non-calendar object class, inetResource.

Table 1-4 Calendar-Specific Object Classes

Object Classes	Required Attributes	Allowed Attributes
icsAdministrator (not currently used)	N/A	icsAdminRole, icsExtended, icsExtendedGroupPrefs

 Table 1-4
 Calendar-Specific Object Classes (Continued)

Object Classes	Required Attributes	Allowed Attributes
icsCalendarDomain (not all attributes are currently used)	N/A	icsAllowedServiceAccess, icsAllowRights, icsAnonymousAllowWrite, icsAnonymousCalendar, icsAnonymousDefaultSet, icsAnonymousLogin, icsAnonymousSet, icsDefaultAccess, icsDomainAllowed, icsDomainNotAllowed, icsDWPBackEndHosts, icsExtended, icsExtendedDomainPrefs, icsMandatorySubscribed, icsPreferredHost, icsQuota, icsRecurrenceBound, icsRecurrenceDate, icsSessionTimeout, icsSourceHtml, icsStatus, icsTimezone
icsCalendarDWPHost (not currently implemented)	N/A	<pre>cn,description, icsDomainNames, icsDWPHost,icsExtended, icsRegularExpressions, icsStatus</pre>
icsCalendarGroup (not currently implemented)	icsStatus	N/A
icsCalendarResource (not all attributes are currently used)	N/A	cn, icsAlias, icsCalendar, icsCapacity, icsContact, icsDWPHost, icsExtended, icsExtendedResourcePrefs, icsGeo, icsPartition, icsPreferredHost, icsQuota, icsStatus, icsTimezone, mailAlternateAddress, mail, uid

Table 1-4 Calendar-Specific Object Classes (Continued)

Object Classes	Required Attributes	Allowed Attributes
icsCalendarUser (not all attributes are currently used)	N/A	cn, givenName, icsAllowedServiceAccess, icsCalendar, icsCalendarOwned, icsDefaultSet, icsDWPHost, icsExtended, icsExtendedUserPrefs, icsFirstDay, icsFreeBusy, icsGeo, icsPartition, icsPreferredHost, icsQuota, icsSet, icsStatus, icsSubscribed, icsTimezone, mail, mailAlternateAddress, nswcalDisallowAccess, preferredLanguage, sn, uid, userPassword

Sun ONE Calendar Server Schema Overview

# Object Classes

This chapter describes LDAP object classes for Sun<sup>™</sup> Open Net Environment (ONE) Messaging and Collaboration products. The objects are listed alphabetically.

Note that the object classes and attributes specific only to Sun ONE Identity Server are found in a separate chapter, Chapter 4, "Sun ONE Identity Server Classes and Attributes."

Note also that the object classes and attributes specific only to iPlanet Delegated Administrator for Messaging are found in a separate chapter, Chapter 5, "iPlanet Delegated Administrator for Messaging Classes and Attributes."

# List of Object Classes

This chapter describes the following object classes:

- "domain" on page 32
- "groupOfUniqueNames" on page 33
- "icsAdministrator" on page 34
- "icsCalendarDomain" on page 35
- "icsCalendarDWPHost" on page 35
- "icsCalendarGroup" on page 36
- "icsCalendarResource" on page 37
- "icsCalendarUser" on page 37
- "inetAdmin" on page 38
- "inetDomain" on page 39

- "inetDomainAlias" on page 40
- "inetDomainAuthInfo" on page 40
- "inetLocalMailRecipient" on page 41
- "inetMailAdministrator" on page 42
- "inetMailGroup" on page 43
- "inetMailUser" on page 43
- "inetOrgPerson" on page 44
- "inetResource" on page 45
- "inetSubscriber" on page 45
- "inetUser" on page 46
- "ipUser" on page 47
- "mailDomain" on page 48
- "mailPublicFolder" on page 49
- "msgVanityDomainUser" on page 49
- "organization" on page 50
- "organizationalUnit" on page 50
- "pab" on page 51
- "pabGroup" on page 52
- "pabPerson" on page 53
- "userPresenceProfile" on page 53

# **Object Classes**

### domain

#### Supported by

iPlanet Messaging Server 5.0, iPlanet Calendar Server 5.1

#### Definition

Object class used to define entries that represent DNS domains.

This class can only be used with an entry that doe not correspond to an organization, organizational unit, or other type of object for which an object class has been defined.

This is a core class for both Messaging and Calendar products.

#### **Superior Class**

top

#### **Object Class Type**

structural

#### OID

0.9.2342.19200300.100.4.13

#### **Required Attributes**

dc, objectClass

#### **Allowed Attributes**

associatedName, businessCategory, description, destinationIndicator, fax (facsimileTelephoneNumber), internationalIsdnNumber, localityName, manager, o (organizationName (see o)), physicalDeliveryOfficeName, postOfficeBox, postalAddress, postalCode, preferredDeliveryMethod, registeredAddress, searchGuide, seeAlso, st, street, telephoneNumber, telexTerminalIdentifier, telexNumber, userPassword, x121Address

## groupOfUniqueNames

#### Supported by

iPlanet Messaging Server 5.0, iPlanet Calendar Server 5.1

#### Definition

Defines entries for a group of unique names. A static group entry must be extended by this class. (A group entry may also be extended by inetUser.) Use roles to define dynamic groups. For information on roles, see the *Sun ONE Directory Server Administrator's Guide*.

#### Superior Class

top

#### **Object Class Type**

structural

#### OID

2.5.6.17

#### **Required Attributes**

cn, objectClass, uniqueMember

#### **Allowed Attributes**

businessCategory, description, o, ou, owner, seeAlso

### **icsAdministrator**

#### Supported by

Not currently used.

#### Definition

Specifies a calendar administrator. Must be used in conjunction with other object classes.

#### **Superior Class**

#### **Object Class Type**

structural

#### OID

2.16.840.1.113730.3.2.145

#### **Required Attributes**

N/A

#### **Allowed Attributes**

icsAdminRole, icsExtended, icsExtendedGroupPrefs

### icsCalendarDomain

#### Supported by

Sun ONE Calendar Server 5.1.1

#### Definition

Specifies a calendar domain. Must be used in conjunction with inetDomain.

#### **Superior Class**

top

#### **Object Class Type**

structural

#### OID

1.3.6.1.4.1.42.2.27.9.2.4

#### **Required Attributes**

N/A

#### **Allowed Attributes**

The following attributes are currently used:

icsAllowedServiceAccess, icsAllowRights, icsDefaultAccess, icsDomainNames.icsExtendedDomainPrefs.icsStatus.icsTimezone

The following attributes are reserved but not implemented for this object class:

icsAnonymousAllowWrite, icsAnonymousCalendar, icsAnonymousDefaultSet, icsAnonymousLogin, icsAnonymousSet, icsDomainAllowed, icsDomainNotAllowed, icsDWPBackEndHosts, icsExtended, icsMandatorySubscribed, icsMandatoryView, icsPreferredHost, icsQuota, icsRecurrenceBound, icsRecurrenceDate, icsSessionTimeout, icsSourceHtml,

### icsCalendarDWPHost

#### Supported by

Sun ONE Calendar Server 5.1.1

#### Definition

Reserved; not implemented.

Contains configuration and other information specific to one DWP server. Each entry tracks which domain it serves. The domain names are used to scope searches.

#### **Superior Class**

#### **Object Class Type**

structural

#### OID

1.3.6.1.4.1.42.2.27.9.2.1

#### **Required Attributes**

N/A

#### **Allowed Attributes**

cn,description,icsDomainNames,icsDWPHost,icsExtended, icsRegularExpressions,icsStatus

# icsCalendarGroup

#### Supported by

iPlanet Calendar Server 5.1

#### Definition

Reserved, not implemented.

**Superior Class** 

#### **Object Class Type**

structural

#### OID

1.3.6.1.4.1.42.2.27.9.2.5

#### **Required Attributes**

icsStatus

#### **Allowed Attributes**

N/A

## icsCalendarResource

## Supported by

iPlanet Calendar Server 5.1, Sun ONE Messaging and Collaboration User Management Utility 1.0

Modified in 5.1.1 - attributes added: icsDWPHost. icsPartition.uid

#### Definition

Specifies a calendar resource, such as a conference room or piece of equipment that must be scheduled. Must be used in conjunction with inetResource. Not all attributes are currently used.

Sun ONE Identity Server 6.1 reserves this as a marker class for calendar resources but does not support calendar resources yet.

### Superior Class

inetResouce

## **Object Class Type**

structural

## OID

1.3.6.1.4.1.42.2.27.9.2.3

#### **Required Attributes**

N/A

#### Allowed Attributes

The following attributes are currently used:

cn, description, icsCalendar, icsDWPHost, icsPartition, icsStatus, icsTimezone, mail, mailAlternateAddress, uid

The following attributes are reserved but not implemented for this object class:

icsAlias, icsCapacity, icsContact, icsExtended, icsExtendedResourcePrefs, icsGeo, icsPreferredHost, icsQuota

## icsCalendarUser

## Supported by

iPlanet Calendar Server 5.1

Modified in 5.1.1 - attributes added: icsDWPHost, icsPartition

## Definition

Specifies a calendar user, including the DWP host name.

## **Superior Class**

top

## **Object Class Type**

auxiliary

#### OID

1.3.6.1.4.1.42.2.27.9.2.2

## **Required Attributes**

N/A

#### Allowed Attributes

These attributes are currently in use:

cn, givenName, icsAllowedServiceAccess, icsCalendar, icsCalendarOwned, icsDWPHosticsExtendedUserPrefs,icsFirstDay, icsPartition, icsSet, icsStatus, icsSubscribed, icsTimezone, mail, mailAlternateAddress, preferredLanguage, sn, uid, userPassword

These attributes are reserved but not currently used:

icsDefaultSet, icsExtended, icsFreeBusy, icsGeo, icsPreferredHost, icsQuota, nswcalDisallowAccess

## inetAdmin

## Supported by

iPlanet Messaging Server 5.0

#### Definition

Identifies administrator user or group.

## **Superior Class**

top

### **Object Class Type**

Auxiliary

OID

2.16.840.1.113730.3.2.112

## **Required Attributes**

objectClass

#### **Allowed Attributes**

memberOf, adminRole

## inetDomain

## Supported by

iPlanet Messaging Server 5.0

#### **Definition**

Used in two-tree LDAP data models to extend the base entry created by domain in the DC Tree. It represents a hosted domain account and is used in conjunction with mailDomain and (optionally inetDomainAuthInfo) for creating a hosted domain node in the DC Tree suitable for mail services for the hosted organization. This object class must be used for all hosted domain entries in the DC Tree.

Sun ONE Identity Server uses this as a marker class for domains in the DC Tree.

## **Superior Class**

top

## **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.129

### **Required Attributes**

inetDomainBaseDN

## **Allowed Attributes**

inetDomainStatus

## inetDomainAlias

## Supported by

iPlanet Messaging Server 5.0

#### Definition

Structural class for creating domain alias entries in the DC Tree for the compatibility mode LDAP data model. Entries may be created that point at other hosted domain objects. Such domain alias entries must be extended by this object class. Attribute aliasedObjectName, inherited from the parent object class alias (see RFC 2256), holds the DN of the LDAP entry for which the node is an alias.

Use this object class when you want two identical domains with different names. If you want two domains that have different attribute settings, create two inetDomain entries and use the inetCanonicalDomainName attribute to decorate the domain to use for mail routing.

This object class is not used in the native mode LDAP data model. Instead, to show the aliases for a domain, the (Organization Tree) domain entry is extended by sunManagedOrganization and decorated with the businessCategory attribute.

## **Superior Class**

alias

## **Object Class Type**

structural

#### OID

2.16.840.1.113730.3.2.131

## **Required Attributes**

aliasedObjectName, dc

#### Allowed Attributes

N/A

## inetDomainAuthInfo

## Supported by

iPlanet Messaging Server 5.0

### Definition

This object class is used to extend the domain entry with search filter, domain cert map, and a canonical domain name if more than one hosted domain refers to the same organization subtree.

## **Superior Class**

top

## Object Class Type

auxiliary

#### OID

2.16.840.1.113730.3.2.133

## **Required Attributes**

N/A

#### Allowed Attributes

domainUidSeparator, inetDomainSearchFilter, inetDomainCertMap, inetCanonicalDomainName

# inetLocalMailRecipient

## Supported by

iPlanet Messaging Server 5.0

## Definition

Stores information that provides a way to designate an LDAP entry as one that represents a local (intra-organizational) email recipient, to specify the recipient's email address(es), and to provide routing information pertinent to the recipient. This is intended to support SMTP message transfer agents in routing RFC 822-based email within a private enterprise only, and is not to be used in the process of routing email across the public Internet.

## **Superior Class**

top

## **Object Class Type**

auxiliary

#### OID

2.16.840.1.113.730.3.2.147

## **Required Attributes**

N/A

#### Allowed Attributes

mail, mailAlternateAddress, mailHost, mailRoutingAddress

## inetMailAdministrator

## Supported by

iPlanet Messaging Server 5.0

## Definition

LDAP group defined with groupOfUniqueNames can be overlaid with this object class. Members (listed in the attribute uniqueMember) of a group overlaid with this object class and where mailAdminRole is set to storeAdmin get IMAP proxyauth (proxy authentication) rights over all users in the same domain in which the group entry exists.

## **Superior Class**

top

## **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.148

## **Required Attributes**

N/A

#### Allowed Attributes

mailAdminRole

# inetMailGroup

## Supported by

iPlanet Messaging Server 5.0

#### Definition

Used to extend the base entry created by <code>groupOfUniqueNames</code> to define a group of mail recipients. <code>inetMailGroup</code> is used to store attributes of a mailing list. It is used in conjunction with <code>inetLocalMailRecipient</code> and <code>inetMailGroupManagement</code> (for mailing lists managed by the Delegated Administrator).

## **Superior Class**

top

## **Object Class Type**

auxiliary

#### OID

1.3.6.1.4.1.42.2.27.2.2.2

#### Required Attributes

N/A

#### Allowed Attributes

dataSource, inetMailGroupStatus, mailConversionTag,
mailDeferProcessing, mailDeliveryFileURL, mailDeliveryOption,
mailEquivalentAddress, mailMsgMaxBlocks, mailProgramDeliveryInfo,
mailRejectText, memberURL, mgrpAddHeader, mgrpAllowedBroadcaster,
mgrpAllowedDomain, mgrpAuthPassword, mgrpBroadcasterPolicy,
mgrpDeliverTo, mgrpDisallowedBroadcaster, mgrpDisallowedDomain,
mgrpErrorsTo, mgrpModerator, mgrpMsgMaxSize, mgrpMsgPrefixText,
mgrpMsgRejectAction, mgrpMsgRejectText, mgrpMsgSuffixText,
mgrpNoDuplicateChecks, mgrpRemoveHeader, mgrpRFC822MailMember,
preferredLanguage, uniqueMember

## inetMailUser

## Supported by

iPlanet Messaging Server 5.0

#### Definition

Used to extend the base entry created by inetOrgPerson to define a messaging service user. It represents a mail account and is used in conjunction with inetUser and inetLocalMailRecipient. Optionally, inetSubscriber may also be used for general account management purposes.

## **Superior Class**

top

## **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.146

#### **Required Attributes**

N/A

#### Allowed Attributes

cn, dataSource, icsQuota, mailAllowedServiceAccess, mailAntiUBEService, mailAutoReplyMode, mailAutoReplySubject, mailAutoReplyTimeOut, mailAutoReplyText, mailAutoReplyTextInternal, mailConversionTag, mailDeferProcessing, mailDeliveryOption, mailEquivalentAddress, mailForwardingAddress, mailMessageStore, mailMsgMaxBlocks, mailMsgQuota, mailProgramDeliveryInfo, mailQuota, mailSieveRuleSource, mailSMTPSubmitChannel, mailUserStatus, nswmExtendedUserPrefs

# inetOrgPerson

#### Supported by

Specified here for reference only.

#### Definition

All user entries are created with this object class. Refer to the internet draft *The LDAP inetOrgPerson Object Class* for further details.

## **Superior Class**

organizationalPerson

## **Object Class Type**

structural

## OID

2.16.840.1.113730.3.2.2

## **Required Attributes**

N/A

#### **Allowed Attributes**

businessCategory, givenName, mail, uid, preferredLanguage

## inetResource

## Supported by

iPlanet Calendar Server 5.1

## Definition

Specifies a resource, which is defined as an object to which calendar services are provided. For example, a conference room, or a piece of equipment shared by many that needs to be scheduled.

## **Superior Class**

top

## **Object Class Type**

structural

#### OID

2.16.840.1.113730.3.2.142

## **Required Attributes**

cn

## **Allowed Attributes**

facsimileTelephoneNumber, inetResourceStatus, mail, postalAddress, telephoneNumber

## inetSubscriber

## Supported by

iPlanet Messaging Server 5.0

#### Definition

Used to extend the base entry created by inetOrgPerson to define a user. It represents a subscriber account and may be used in conjunction with inetUser, inetMailUser, and ipUser for creating a mail account.

## Superior Class

top

## **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.134

## **Required Attributes**

N/A

#### Allowed Attributes

inetSubscriberAccountId,inetSubscriberChallenge, inetSubscriberResponse

## inetUser

## Supported by

iPlanet Messaging Server 5.0, Sun ONE Calendar Server 5.1.1

## **Definition**

It represents a user account, or a resource (defined as any object to which services are provided) account, and is used in conjunction with inetMailUser and ipUser for creating a mail account. When creating user accounts, this object class extends the base entry created by inetOrgPerson.

This attribute can be used with icsCalendarUser for creating a calendar user account. (Note that inetResource is used by Calendar Server to create resource accounts.)

User and resource entries must be extended by this object class. Group entries may be extended with this class.

## **Superior Class**

top

## **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.130

## **Required Attributes**

N/A.

#### Allowed Attributes

inetUserHttpURL (see note),inetUserStatus, memberOf (see note),uid,
userPassword

#### NOTE

The attributes inetuserHttpURL, and memberOf are deprecated for this object class and are likely to be removed from the class in future versions of Sun ONE schema.

# ipUser

## Supported by

iPlanet Messaging Server 5.0

## **Superior Class**

top

#### Definition

Object class for services like mail and calendar. Used to extend the base entry created by inetOrgPerson and inetUser. This object class holds the reference to the personal address book container and the class of service specifier.

## **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.135

## **Required Attributes**

N/A

#### Allowed Attributes

inetCoS, memberOfPAB, maxPabEntries, pabURI

## mailDomain

## Supported by

iPlanet Messaging Server 5.0

#### Definition

Auxiliary class used to extend the base entry created by domain and inetDomain for enabling messaging services for the hosted domain. It represents a hosted domain account with access to Messaging Service. This object class must be used for all hosted domain entries.

In the absence of the mailPublicFolderDefaultRights attribute for a maliPublicFolder entry, the presence of the attribute in the mailDomain entry allows administrators to specify the default rights to assign to the public folder.

## **Superior Class**

top

## **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.151

## **Required Attributes**

N/A

#### **Allowed Attributes**

mailAccessProxyPreAuth, mailAccessProxyReplay,
mailClientAttachmentQuota, mailDomainAllowedServiceAccess,
mailDomainConversionTag, mailDomainCatchallAddress,
mailDomainDiskQuota, mailDomainMsgMaxBlocks, mailDomainMsgQuota,
mailDomainReportAddress, mailDomainSieveRuleSource,mailDomainStatus,
mailDomainWelcomeMessage, mailPublicFolderDefaultRights,
mailQuota, mailRoutingHosts, mailRoutingSmartHost, preferredLanguage,
preferredMailHost.

## mailPublicFolder

## Supported by

Sun ONE Messaging Server 6.0

#### Definition

Defines a public folder.

#### Superior Class

top

## **Object Class Type**

structural

OID

## Required Attributes

mailFolderName

#### **Allowed Attributes**

mailMessageStore, mailPublicFolderDefaultRights, mailDeliveryOption

# msgVanityDomainUser

## Supported by

iPlanet Messaging Server 5.0

## Definition

This object class and its attribute are deprecated in the current release, and may not be supported in future releases. Sites should stop using this feature and consider migrating current vanity domains to hosted domains.

Auxiliary class for supporting the notion of a vanity domain for messaging. Used to extend the base mail user entry to assign a vanity domain to the user.

#### Superior Class

top

## **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.150

## Required Attributes

N/A

#### Allowed Attributes

msgVanityDomain

# organization

### Supported by

iPlanet Messaging Server 5.0

#### Definition

Defines entries that represent organizations. An organization is generally assumed to be a large, relatively static grouping within a larger corporation or enterprise.

## **Superior Class**

top

#### OID

2.5.6.4

## **Required Attributes**

objectClass, o (organizationName)

#### **Allowed Attributes**

businessCategory, description, destinationIndicator, facsimileTelephoneNumber, internationalIsdnNumber, l (localityName), physicalDeliveryOfficeName, postalAddress, postalCode, postOfficeBox, preferredDeliveryMethod, registeredAddress, searchGuide, seeAlso, st, street, telephoneNumber, teletexTerminalIdentifier, telexNumber, userPassword

# organizationalUnit

## Supported by

iPlanet Messaging Server 5.0

### Definition

Defines entries that represent organizations. An organization is generally assumed to be a large, relatively static grouping within a larger corporation or enterprise.

### Superior Class

top

#### OID

2.5.6.5

## Required Attributes

objectClass, ou

#### Allowed Attributes

businessCategory, description, destinationIndicator, facsimileTelephoneNumber, internationalIsdnNumber, 1 (localityName), physicalDeliveryOfficeName, postalAddress, postalCode, postOfficeBox, preferredDeliveryMethod, registeredAddress, searchGuide, seeAlso, st, street, telephoneNumber, teletexTerminalIdentifier, telexNumber, userPassword

# pab

## Supported by

iPlanet Messaging Server 5.0

#### Definition

The data model used is as follows:

pabPerson is a user entry in the personal address book.

pabGroup is the group entry and corresponds to a personal distribution list. For example, the pabGroup "pab-notes" may contain pabPersons micky and john.

pab is the address book that contains zero or more pabPerson and zero or more pabGroup entries. This is the top level logical container. pab may contain pabPerson and/or pabGroup. A pabPerson may belong in zero or more pabGroup and zero or more pab.

pabPerson may belong to zero or more pabGroup entries. This link is established by memberOfPABGroup, a multi-valued attribute holding the DN of the pabGroup in which the pabPerson belongs. A pabPerson may also belong to many personal address book's. This link is established by having the DN of the pab listed as a value of the attribute memberOfPAB.

All users and groups belong in the default personal address book called "All."

## **Superior Class**

top

## **Object Class Type**

structural

#### OID

2.16.840.1.113730.3.2.140

#### Required Attributes

cn

#### **Allowed Attributes**

description, un

# pabGroup

#### Supported by

iPlanet Messaging Server 5.0

#### Definition

pabGroup is a group entry in a personal address book (pab) and corresponds to a personal distribution list. For example, the pabGroup "pab-notes" may contain pabPersons micky and john.

#### **Superior Class**

top

## **Object Class Type**

structural

#### OID

2.16.840.1.113730.3.2.139

#### **Required Attributes**

cn

#### **Allowed Attributes**

description, memberOfPAB, nickName, un

# pabPerson

## Supported by

iPlanet Messaging Server 5.0

## **Definition**

A user entry in the personal address book (pab).

## **Superior Class**

inetOrgPerson

## **Object Class Type**

structural

#### OID

2.16.840.1.113730.3.2.138

## **Required Attributes**

N/A

## **Allowed Attributes**

calCalURI, calFBURL, co, dateOfBirth, mailAlternateAddress, memberOfPAB, memberOfPABGroup, nickName, organizationName (see o), ou (oranizationalUnitName), un

# userPresenceProfile

## Supported by

iPlanet Messaging Server 5.0

## **Definition**

Used to store the presence information for a user.

## **Superior Class**

top

## **Object Class Type**

auxiliary

## OID

2.16.840.1.113730.3.2.136

## **Required Attributes**

N/A

## **Allowed Attributes**

vacationEndDate, vacationStartDate

# **Attributes**

This chapter describes attributes required or allowed by LDAP object classes for  $Sun^{TM}$  Open Net Environment (ONE) Messaging and Collaboration products. The attributes are listed alphabetically.

Note that attributes used exclusively by Sun ONE Identity Server are covered in Chapter 4, "Sun ONE Identity Server Classes and Attributes." Whereas, attributes used exclusively by iPlanet Delegated Administrator for Messaging are covered in Chapter 5, "iPlanet Delegated Administrator for Messaging Classes and Attributes."

# List of Attributes

This chapter describes the following attributes:

- "adminRole" on page 61
- "aliasedObjectName" on page 62
- "businessCategory" on page 63
- "calCalURI" on page 63
- "calFBURL" on page 64
- "cn" on page 64
- "co" on page 65
- "commonName (see cn)" on page 66
- "countryName (see co)" on page 66
- "dataSource" on page 66

- "dateOfBirth" on page 66
- "dc" on page 67
- "description" on page 67
- "facsimileTelephoneNumber" on page 70
- "givenName" on page 71
- "icsAdminRole" on page 71
- "icsAlias" on page 72
- "icsAllowedServiceAccess" on page 72
- "icsAllowRights" on page 73
- "icsAnonymousAllowWrite" on page 75
- "icsAnonymousCalendar" on page 76
- "icsAnonymousDefaultSet" on page 76
- "icsAnonymousLogin" on page 77
- "icsAnonymousSet" on page 77
- "icsCalendar" on page 78
- "icsCalendarOwned" on page 78
- "icsDefaultSet" on page 80
- "icsDomainAllowed" on page 81
- "icsDomainNames" on page 82
- "icsDomainNotAllowed" on page 83
- "icsDWPBackEndHosts" on page 84
- "icsDWPHost" on page 85
- "icsExtended" on page 85
- "icsExtendedDomainPrefs" on page 86
- "icsExtendedGroupPrefs" on page 87
- "icsExtendedResourcePrefs" on page 88
- "icsExtendedUserPrefs" on page 88

- "icsFirstDay" on page 92
- "icsFreeBusy" on page 92
- "icsGeo" on page 93
- "icsMandatorySubscribed" on page 93
- "icsMandatoryView" on page 94
- "icsPartition" on page 94
- "icsPreferredHost" on page 95
- "icsQuota" on page 96
- "icsRecurrenceBound" on page 96
- "icsRecurrenceDate" on page 97
- "icsRegularExpressions" on page 97
- "icsSessionTimeout" on page 98
- "icsSet" on page 98
- "icsSourceHtml" on page 100
- "icsStatus" on page 100
- "icsSubscribed" on page 102
- "icsTimezone" on page 102
- "inetCanonicalDomainName" on page 103
- "inetCoS" on page 104
- "inetDomainBaseDN" on page 105
- "inetDomainCertMap" on page 106
- "inetDomainSearchFilter" on page 106
- "inetDomainStatus" on page 107
- "inetMailGroupStatus" on page 109
- "inetResourceStatus" on page 110
- "inetSubscriberAccountId" on page 111
- "inetSubscriberChallenge" on page 112

- "inetSubscriberResponse" on page 112
- "inetUserHttpURL" on page 113
- "inetUserStatus" on page 113
- "mail" on page 115
- "mailAccessProxyPreAuth" on page 115
- "mailAccessProxyReplay" on page 116
- "mailAdminRole" on page 117
- "mailAllowedServiceAccess" on page 117
- "mailAlternateAddress" on page 120
- "mailAntiUBEService" on page 121
- "mailAutoReplyMode" on page 122
- "mailAutoReplySubject" on page 123
- "mailAutoReplyText" on page 123
- "mailAutoReplyTextInternal" on page 124
- "mailAutoReplyTimeOut" on page 124
- "mailClientAttachmentQuota" on page 125
- "mailConversionTag" on page 125
- "mailDeferProcessing" on page 126
- "mailDeliveryFileURL" on page 127
- "mailDeliveryOption" on page 128
- "mailDomainAllowedServiceAccess" on page 130
- "mailDomainCatchallAddress" on page 132
- "mailDomainConversionTag" on page 133
- "mailDomainDiskQuota" on page 133
- "mailDomainMsgMaxBlocks" on page 134
- "mailDomainMsgQuota" on page 134
- "mailDomainReportAddress" on page 135

- "mailDomainSieveRuleSource" on page 136
- "mailDomainStatus" on page 137
- "mailDomainWelcomeMessage" on page 139
- "mailEquivalentAddress" on page 139
- "mailFolderName" on page 140
- "mailForwardingAddress" on page 141
- "mailHost" on page 141
- "mailMessageStore" on page 142
- "mailMsgMaxBlocks" on page 143
- "mailMsgQuota" on page 143
- "mailProgramDeliveryInfo" on page 144
- "mailPublicFolderDefaultRights" on page 145
- "mailQuota" on page 147
- "mailRejectText" on page 148
- "mailRoutingAddress" on page 149
- "mailRoutingHosts" on page 149
- "mailRoutingSmartHost" on page 150
- "mailSieveRuleSource" on page 151
- "mailSMTPSubmitChannel" on page 153
- "mailUserStatus" on page 153
- "maxPabEntries" on page 155
- "memberOf" on page 155
- "memberOfPAB" on page 156
- "memberOfPAB" on page 156
- "memberOfPABGroup" on page 156
- "memberURL" on page 157
- "mgrpAddHeader" on page 158

- "mgrpAllowedBroadcaster" on page 158
- "mgrpAllowedDomain" on page 159
- "mgrpAuthPassword" on page 160
- "mgrpBroadcasterPolicy" on page 161
- "mgrpDeliverTo" on page 162
- "mgrpDisallowedBroadcaster" on page 163
- "mgrpDisallowedDomain" on page 164
- "mgrpErrorsTo" on page 165
- "mgrpModerator" on page 165
- "mgrpMsgMaxSize" on page 166
- "mgrpMsgPrefixText" on page 167
- "mgrpMsgRejectAction" on page 168
- "mgrpMsgRejectText" on page 169
- "mgrpMsgSuffixText" on page 169
- "mgrpNoDuplicateChecks" on page 170
- "mgrpRemoveHeader" on page 170
- "mgrpRequestTo" on page 171
- "mgrpRFC822MailMember" on page 171
- "msgVanityDomain" on page 172
- "msgVanityDomain" on page 172
- "multiLineDescription" on page 173
- "nickName" on page 173
- "nswmExtendedUserPrefs" on page 174
- "o" on page 175
- "objectClass" on page 175
- "organizationName (see o)" on page 176
- "organizationUnitName (see ou)" on page 176

- "ou" on page 176
- "owner" on page 177
- "pabURI" on page 177
- "parentOrganization" on page 178
- "postalAddress" on page 179
- "preferredLanguage" on page 179
- "preferredMailHost" on page 180
- "preferredMailMessageStore" on page 181
- "seeAlso" on page 182
- "sn" on page 182
- "telephoneNumber" on page 183
- "uid" on page 183
- "un" on page 184
- "uniqueMember" on page 185
- "userId (see uid)" on page 185
- "userPassword" on page 185
- "vacationEndDate" on page 186
- "vacationStartDate" on page 187

# **Attribute Definitions**

## adminRole

#### Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis

## **Object Classes**

inetAdmin

#### **Definition**

Specifies the administrator role for this administrator entry.

## Example

#### OID

2.16.840.1.113730.3.1.601

# aliasedObjectName

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

dn

## **Object Classes**

inetDomainAlias

#### Definition

Used only in compatibility mode (with a DC Tree) for Sun ONE LDAP Schema v.2, not in native mode (no DC Tree).

Used by the directory server to identify alias entries in the directory. Contains the distinguished name of the entry for which it is an alias. The domain attribute values are taken only from the referenced domain. So that routing will be identical between these domains.

#### Example

```
aliasedObjectName: cn=jdoe,o=sesta.com
```

#### OID

2.5.4.1

# businessCategory

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

groupOfUniqueNames, organization, organizationalUnit

#### **Definition**

Identifies the type of business in which the entry is engaged. This should be a broad generalization such as is made at the corporate division level.

## Example

businessCategory: Engineering

#### OID

2.5.4.15

## calCalURI

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

pabPerson

#### **Definition**

Contains URI to user's entire default calendar. For details see RFC 2739.

## Example

Varies according to the version of calendar server implemented. For details see RFC 2739.

#### OID

1.2.840.113556.1.4.478

## calFBURL

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

pabPerson

#### Definition

URL to the user's default busy time data. For details see RFC 2739.

## Example

Varies according to the version of calendar server implemented. For details see RFC 2739.

#### OID

1.2.840.113556.1.4.479

## cn

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis, single-valued

## **Object Classes**

icsCalendarResource, icsCalendarUser, inetResource

#### Definition

For users, full name of person. For resources, a unique identifier. In either case, it may contain spaces and special characters. Abbreviation for commonName.

## Example

For a user: cn: John Doe.

For a resource: cn: Conference Room #3

or

commonName: John Doe

commonName: Conference Room #3

OID

2.5.4.3

## CO

## Origin

LDAP

## **Syntax**

cis

## **Object Classes**

pabPerson

## Definition

Contains the name of a country, using a two character code. Abbreviation for countryName.

 $The \ attribute \ {\tt friendlyCountryName} \ is \ used \ to \ spell \ out \ the \ actual \ country \ name.$ 

## Example

co:IE

or

countryName:IE

friendlyCountryName: Ireland

## OID

2.5.4.4

# commonName (see cn)

# countryName (see co)

## dataSource

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

inetMailUser, inetMailGroup

## **Definition**

Text field to store a tag or identifier. Value has no operational impact.

## Example

dataSource:1.0

#### OID

2.16.840.1.113730.3.1.779

## dateOfBirth

#### Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

pabPerson

## **Definition**

Date of birth of the pabPerson. Format is: YYYYMMDD.

## Example

dateOfBirth: 19740404 (date of birth on April 6, 1974.)

## OID

2.16.840.1.113730.3.1.779

## dc

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

inetDomainAlias

## **Definition**

The domain component of the domain alias entry.

## **Example**

dc=sesta

For example a domain alias entry DN might be:

dn: dc=sesta, dc=fr, o=internet.

#### OID

0.9.2342.19200300.100.1.25

# description

## Origin

**LDAP** 

## **Syntax**

cis. multi-valued

### **Object Classes**

icsCalendarDWPHost, icsCalendarResource, groupOfUniqueNames, inetOrgPerson, organization, organizationalUnit, pab, pabGroup, sunServiceComponent

#### Definition

Provides a human readable description of the object. For people and organizations, this often includes their role or work assignment.

#### Example

description: Quality control inspector.

#### OID

2.5.4.13

# domainUidSeparator

### Origin

iPlanet Messaging Server 5.0

#### Syntax

cis, single-valued

#### **Object Classes**

inetDomainOrg

#### Definition

This attribute is used only for Sun ONE LDAP Schema v.1.

This attribute is used by the messaging server to override the default mailbox (MB) home. When present, this attribute specifies that compound user identifications (UIDs) are used in this domain and this attribute specifies the separator. For instance, if + is the separator, the mailbox names in this domain are obtained by replacing the right most occurrence of + in the uid with @. To map an internal mailbox name to the UID, the right most occurrence of @ is replaced with a + in the mailbox name.

While substitution of an @ for the UID separator is sufficient to generate a mailbox name, this may not be the same as any of the user's actual email addresses.

### NOTE

Format of internal mailbox names is uid@domain, where "domain" is DNS domain mapping to the namespace. The only exception to this rule is mailbox names for users in default domain where only the uid is used to construct internal mailbox names. See inetCanonicalDomainName on how the default value of domain name used can be overridden in specific cases.

The MTA option used to override this attribute's value is LDAP\_DOMAIN\_ATTR\_UID\_SEPARATOR.

## Example

domainUIDSeparator: #

#### OID

2.16.840.1.113730.3.1.702

# domOrgMaxUsers

### Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis, single-valued

## **Object Classes**

inetDomainOrg

## Definition

This attribute is used only for Sun ONE LDAP Schema v.1.

Maximum number of user entries in a domain organization.

#### Example

domOrgMaxUser: 500

## OID

2.16.840.1.113730.3.1.697

# domOrgNumUsers

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

inetDomainOrg

#### Definition

Number of current user entries in a domain organization.

## **Example**

domOrgNumUsers: 345

## OID

2.16.840.1.113730.3.1.698

# facsimile Telephone Number

#### Origin

iPlanet Calendar Server 5.1

## **Syntax**

tel, single-valued

## **Object Classes**

icsCalendarResource, inetResource, organization, organizationalUnit

## **Definition**

Fax telephone number for resources.

## Example

facsimileTelephoneNumber 1-800-555-1212

## OID

2.5.4.23

# givenName

## Origin

**LDAP** 

## **Syntax**

cis

## **Object Classes**

icsCalendarUser

#### Definition

Identifies the entry's given name, usually a person's first name.

## Example

givenName: John

## OID

2.5.4.42

## icsAdminRole

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis

## **Object Classes**

icsAdministrator

## **Definition**

Administrative calendar role that can be assigned to a group.

## Example

## OID

2.16.840.1.113730.3.1.724

## icsAlias

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis, UTF8 encoded

## **Object Classes**

icsCalendarResource

#### Definition

Alias associated with a resource. An alias can make a resource name easier for the end user to work with.

## Example

The resource named "halleyscomet" can be aliased as "Halley's Comet".

icsAlias: Halley's Comet

## OID

2.16.840.1.113730.3.1.725

## icsAllowedServiceAccess

## Origin

Sun ONE Calendar Server 6.0

## **Syntax**

cis, single-valued

### **Object Classes**

icsCalendarDomain, icsCalendarUser

#### **Definition**

This attribute is used only if the icsStatus attribute is not set, or in other words, if icsStatus is set, this attribute is ignored.

Use this attribute to disallow calendar services to a user. As a default all users are allowed access with http, but if you specify this attribute as shown in the example, it disallows the user from receiving calendar access (user is disabled):

Any other setting, or absence of the attribute entirely, results in the user having access to http services (user is enabled).

## Example

icsAllowedServiceAccess:http

#### OID

2.16.840.1.113730.3.1.726

# icsAllowRights

## Origin

iPlanet Calendar Server 5.1

#### **Syntax**

int, single valued

## **Object Classes**

icsCalendarDomain

## **Definition**

A numeric string used to hold bit fields, each corresponding to a set of rights. Each bit corresponds to a setting in the ics.conf file. After you have figured out the bit string settings you want, convert the bits to an integer.

If the property is set (1), the right is not allowed. If the bit is not set (0), the right is allowed.

If this attribute does not exist, the corresponding ics.conf default settings are used.

Table 3-1 defines the meaning of each bit position for bits 0-15:

Table 3-1 Bit Definitions and ics.conf Settings

Bit	Allows (0) or Disallows (1)
0	Creation of calendars
1	Deletion of calendars
	<b>Bit</b> 0

 Table 3-1
 Bit Definitions and ics.conf Settings

Property Name and ics.conf Setting Name	Bit	Allows (0) or Disallows (1)
allowPublicWritableCalendars	2	Publicly writable calendars for users
service.wcap.allowpublicwriteablecalendars		
N/A	3	Reserved. Defaults to 0
allowModifyUserPreferences	4	Domain Administrator allowed to
service.admin.calmaster.wcap.allowgetmodifyuserprefs		change user preferences
allowModifyPassword	5	Users allowed to change their
service.wcap.allowchangepassword		password
N/A	6	Reserved. Defaults to 0
N/A	7	Reserved. Defaults to 0
allowUserDoubleBook	8	Double booking of user calendars
user.allow.doublebook		
allowResourceDoubleBook	9	Double booking of resource
resource.allow.doublebook		calendars
allowSetCn	10	User preference cn modified by set_userprefs command
service.wcap.allowsetprefs.cn		
allowSetGivenName	11	User preference givenname
service.wcap.allowsetprefs.givenname		modified by set_userprefs command
allowSetGivenMail	12	User preference mail modified by
service.wcap.allowsetprefs.mail		set_userprefs command
allowSetPrefLang	13	User preference
service.wcap.allowsetprefs.preferredlanguage		<pre>preferredlanguage modified by set_userprefs command</pre>
allowSetSn	14	User preference sn modified by
service.wcap.allowsetprefs.sn		set_userprefs command
N/A	15- 31	Reserved. Defaults to all 0

## Example

If you decide that you want to disallow the following bits:

- publicly writable user calendars (bit 2),
- double booking of resources (bit 9),
- and modifying the given name (bit 11),

then your bit pattern would look like this:

'00000000000000000000101000000100'

which you would convert into the integer 2564 so that:

icsAllowRights: 2564

#### OID

2.16.840.1.113730.3.1.727

# ics Anonymous Allow Write

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

boolean (yes, no)

## **Object Classes**

icsCalendarDomain

#### **Definition**

Specifies if anonymous users can write events in public calendars. The value comes from the ics.conf setting

service.wcap.anonymousallowpubliccalendarwrite.

#### Example

icsAnonymousAllowWrite: yes

#### OID

# ics An onymous Calendar

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

ces

## **Object Classes**

icsCalendarDomain

#### Definition

Calendar ID for anonymous users. The value is taken from the ics.conf setting calstore.anonymous.calid.

## **Example**

icsAnonymousCalendar: guest1

#### OID

2.16.840.1.113730.3.1.729

# ics An onymous Default Set

#### Origin

Not implemented.

## **Syntax**

ces, UTF8 encoded

## **Object Classes**

icsCalendarDomain

#### **Definition**

Default calendar set for anonymous users.

## **Example**

## OID

# icsAnonymousLogin

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

boolean (yes, no))

## **Object Classes**

icsCalendarDomain

#### Definition

Specifies if anonymous login is allowed. Value is taken from the ics.conf file setting service.http.allowanonymousLogin.

## Example

icsAnonymousLogin: yes

#### OID

2.16.840.1.113730.3.1.798

# ics Anonymous Set

## Origin

Not implemented.

## **Syntax**

ces, UTF8 encoded

## **Object Classes**

icsCalendarDomain

## **Definition**

Reserved. Not implemented.

Default calendar set for anonymous users.

## Example

## OID

2.16.840.1.113730.3.1.732

# icsCalendar

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

ces, single-valued

## **Object Classes**

icsCalendarResource, icsCalendarUser

## **Definition**

Default calendar for a user or resource. Required attribute. It is a policy of Calendar Server to construct calendar IDs based on the user's ID, since it is guaranteed to be unique.

## Example

icsCalendar: jdoe

#### OID

2.16.840.1.113730.3.1.731

# icsCalendarOwned

#### Origin

iPlanet Calendar Server 5.1

## **Syntax**

ces. multi-valued

## **Object Classes**

icsCalendarUser

## **Definition**

Calendars owned by this user. Required attribute. Must be set with the user's default calendar value.

## Example

icsCalendar: jdoe

OID

1.3.6.1.4.1.42.2.27.9.1.6

# icsCapacity

## Origin

Not implemented.

## **Syntax**

int, single-valued

**Object Classes** 

#### Definition

Reserved, not implemented.

## **Example**

OID

2.16.840.1.113730.3.1.800

# **icsContact**

## Origin

Not implemented.

## **Syntax**

cis, UTF8 encoded

## **Object Classes**

icsCalendarResource

## **Definition**

Reserved, not implemented.

Resource contact name.

#### Example

icsContact: John Doe jdoe@sesta.com

#### OID

2.16.840.1.113730.3.1.733

## **icsDefaultAccess**

#### Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis, single valued

## **Object Classes**

#### Definition

Default access control string applied to the user's default calendar. For more information about access control, see "Access Control Entries" in the *Sun ONE Calendar Server Programmer's Manual*. If this attribute is not present, the value is taken from the ics.conf file setting calstore.calendar.default.acl.

#### Example

Granting the user both freebusy and scheduling permission for calendar components.

icsDefaultAccess: @sesta.com^c^sf^g

#### OID

2.16.840.1.113730.3.1.734

## icsDefaultSet

#### Origin

iPlanet Calendar Server 5.1

## Syntax

ces, single-valued

#### **Object Classes**

icsCalendarUser

#### Definition

User preference for what calendars to display at login. User's can specify any of their calendar sets (groups they have created) to be displayed at login instead of a single calendar.

#### Example

icsDefaultSet: MyCalendarGroup

OID

2.16.840.1.113730.3.1.735

# icsDomainAllowed

## Origin

Not implemented.

## Syntax

cis, single-valued (see mgrpAllowedDomain)

## **Object Classes**

icsCalendarDomain

#### Definition

What domains are allowed. The value has the following format:

```
service-list:client-list
```

where service-list is a blank- or comma-separated list of one or more service names or wildcards, and client-list is a blank- or comma-separated list of one or more host names or addresses, patterns or wildcards.

The following are the explicit wildcards recognized by the system:

Always matches ALL

LOCAL Matches any host whose name does not contain a dot character.

Matches any host whose name or address are unknown. Use this with care. UNKNOWN

KNOWN Matches any host whose name and address are known. Use with care.

DNSSPOOFER Matches any host whose name does not match its address. There is one operator that can be used in the service-list and the client-list:

Matches anything that matches list 1 unless it matches anything in list 2. EXCEPT

The expected form: list1 EXCEPT list2. List1 and list2 are comma-separated.

You can use patterns to distinguish clients by the network address that they can connect to. For example: service@host\_pattern:client-list.

The default value comes from service.http.domainallowed in the ics.conf file.

## Example

Allow local access to anyone in the sesta.com domain.

icsDomainAllowed: ALL:sesta.com

## OID

2.16.840.1.113730.3.1.736

## **icsDomainNames**

#### Origin

iPlanet Calendar Server 5.1.1

## Syntax

cis, multi-valued, ASCII

## **Object Classes**

icsCalendarDWPHost

#### Definition

For cross-domain searching, each domain to be searched must be listed using this attribute.

## Example

icsDomainNames: sesta.com icsDomainNames: siroe.com

#### OID

1.3.6.1.4.1.42.2.27.9.1.3

## icsDomainNotAllowed

## Origin

iPlanet Calendar Server 5.1

#### Syntax

cis, single-valued (see mgrpDisallowedDomain)

## **Object Classes**

icsCalendarDomain

#### Definition

What domains are not allowed. The value has the following format:

service-list:client-list

where service-list is a blank- or comma-separated list of one or more service names or wildcards, and client-list is a blank- or comma-separated list of one or more host names or addresses, patterns or wildcards.

The following are the explicit wildcards recognized by the system:

Always matches ALL

LOCAL Matches any host whose name does not contain a dot character.

Matches any host whose name or address are unknown. Use this with care. UNKNOWN

Matches host whose name and address are known. Use with care. KNOWN

DNSSPOOFER Matches any host whose name does not match its address.

There is one operator that can be used in the service-list and the client-list:

Matches anything that matches list 1 unless it matches anything in list 2. EXCEPT

The expected form: list1 EXCEPT list2. List1 and list2 are comma-separated.

The value comes from ics.conf setting service.http.domainnotallowed.

#### Example 1

If you want to allow access to all but a selected few hosts, you can explicitly deny access as in the following example:

Deny access to anyone at the company22.com domain.

icsDomainNotAllowed: ALL:company22.com

In this instance, you would not need to have any specific icsDomainAllowed attributes.

#### Example 2

If you want to implement a no-access default, a single instance of this attribute will do it. This denies all service to all hosts, unless they are specifically permitted access by icsDomainAllowed attributes.

icsDomainNotAllowed: ALL:ALL

## Example 3

The following example shows how to deny access to any unknown users.

icsDomainNotAllowed: ALL:UNKNOWN@ALL

## OID

2.16.840.1.113730.3.1.737

## **icsDWPBackEndHosts**

## Origin

Sun ONE Calendar Server 5.1.1

## **Syntax**

cis. multi-valued

#### **Object Classes**

icsCalendarDomain

#### **Definition**

The list of all possible back end hosts used for calendars found in this domain. This attribute is required if the calendar installation is using the Database Wire Protocol (DWP).

#### Example

icsDWPBackEndHosts: machine1
icsDWPBackEndHosts: machine2

#### OID

1.3.6.1.4.1.42.2.27.9.1.5

## **icsDWPHost**

## Origin

iPlanet Calendar Server 5.1.1

## **Syntax**

cis, single-valued, ASCII

## **Object Classes**

icsCalendarDWPHost, icsCalendarResource, icsCalendarUser

## Definition

Stores a DWP host name so that the calendar ID can be resolved to the Database Wire Protocol (DWP) server that stores the calendar and its data. When the calendar database is distributed across several back end servers, the attribute value is the DNS name of user's back end host. Each user's entire calendar will be on a single back end server. Required if using the Calendar Lookup Database (CLD).

This attribute is required if the Calendar installation is using DWP to distribute calendar data across back end calendar data servers. If DWP is not being used, every user's calendar will be found on the same host as the calendar server. If an installation initially does not use DWP, but later switches to it, the calendar server will fill in this value based on the default DWP host name found in the domain entry. If there is no value or such entry (calendar server is not in hosted domain mode) then the value will be picked up from the ics.conf configuration file.

#### Example

icsDWPHost:calserv1

#### OID

1.3.6.1.4.1.42.2.27.9.1.1

## icsExtended

#### Origin

Sun ONE Calendar Server 5.1.1

## **Syntax**

cis, multi-valued

## **Object Classes**

icsCalendarDWPHost

## **Definition**

Extensions for calendar. Reserved.

## Example

#### OID

2.16.840.1.113730.3.1.738

# ics Extended Domain Prefs

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis, multi-valued

## **Object Classes**

icsCalendarDomain

## Definition

Preferences for calendar domains can be set using the properties found in Table 3-2. Each attribute value is a property-value pair. The default settings for these properties are found in the domain server's ics.conf file. In the absence of this attribute, the ics.conf settings will be used.

**Table 3-2** Domain Preferences

Property	Value	Description
allowProxyLogin	yes, no	Allow proxy login
calmasterAccessOverr	ide yes, no	Domain administrator can override access control
calmasterCred	string	Bind credentials (password) for user specified in ics.conf setting service.admin.calmaster. userid
calmasterUid	string	User ID for the domain administrator

Table 3-2 Domain Preferences (Continued)

Property	Value	Description
createLowerCase	yes, no	Make calendar name lowercase for creating new calendars and looking up calendars.
domainAccess	valid acl string	Access control string for domain. Used in cross domain searches.
fbIncludeDefCal	yes, no	User's default calendar included in freebusy calendar list.
filterPrivateEvents	yes, no	Filter the private and confidential events on queries to server.
resourceDefaultAcl	valid access string	Resource calendars' default ACL
setPublicRead	yes, no	Set default user calendars to public read and private write (yes), or private read and private write (no).
subIncludeDefCal	yes, no	User's default calendar included in subscribed calendar list
uiAllowAnyone	yes/no	Everybody ACL shows and can be used in the user interface.
uibaseURL	valid URL	Base server address.
		For example, https://proxyserver/
uiConfigFile	string	Specifies the configuration file for the user interface. (Allows items in the user interface to be turned off.)
uiProxyUrl	string	Proxy server address prepended in user interface JavaScript file.
		<pre>For example, https://web_portal.com/</pre>

## Example

icsExtendedDomainPrefs: createLowerCase=yes

icsExtendedDomainPrefs:

domainAccess=@@d^a^slfrwd^g;anonymous^a^r^g;@^a^s^g

## OID

2.16.840.1.113730.3.1.739

# ics Extended Group Prefs

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis

## **Object Classes**

icsAdministrator

## **Definition**

Extensions for calendar group preferences. Reserved.

## Example

#### OID

2.16.840.1.113730.3.1.740

# **icsExtendedResourcePrefs**

## Origin

Not implemented.

## **Syntax**

cis

## **Object Classes**

#### Definition

Reserved, not implemented.

## Example

## OID

2.16.840.1.113730.3.1.741

# icsExtendedUserPrefs

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis. multi-valued

## **Object Classes**

icsCalendarUser

## **Definition**

Extensions for calendar user preferences. The attribute value is a property-value pair. The following are the properties and their values

Table 3-3 **Extended User Preferences** 

Properties	Values	Description
ceAllCalendarTZIDS	a standard time zone	Time zone TZID for this calendar.
ceClock	12, 24	Defines whether a 12- or 24-hour clock is used.
ceColorSet	<pre>pref_group1 pref_group2 pref_group3 pref_group4 pref_group7</pre>	Defines which of the five UI color schemes to use.
ceDateOrder	M/D/Y D/M/Y Y/M/D	Determines what order the three elements of a date (month (M), day (D), and year (Y)) are displayed.
ceDateSeparator	Any single printable character. For example: /	The single character used to delimit displayed date elements (M,D,Y).
	or –	For example, a date can be displayed as: 12/22/2002.
ceDayHead	0–23	Start time hour (expressed as one of 24 hours in a day) for displaying calendar information.
ceDayTail	0–23	End time hour (expressed as one of 24 hours in a day) for displaying calendar information.
cdDefaultAgenda	unused	Not currently implemented.
cdDefaultAlarmEmail	email addresses separated by white space	Email Addresses event alarms sent to.
ceDefaultAlarmStart	P[unit count][unit type]	Amount of time before the event an alarm should be sent. Where unit count is any numeric value, and unit type is either M (minutes), H (hours), or D (days).
		For example: P10M
ceDefaultTZID	one of standard time zones	Time zone to use when a calendar does not have one assigned to it.
	For a list of time zones, see Standard Time Zones.	

 Table 3-3
 Extended User Preferences (Continued)

Properties	Values	Description
ceDefaultView	dayview	View to be presented at log in.
	weekview monthview	If this parameter is not present, overview is used as the default.
	yearview groupview	(groupview is the Comparison view on the user interface)
ceExludeSatSun	boolean (0, 1)	Calendars don't display if value=1. Default is value=0.
ceFontFace	One of these values: 1) Times New Roman, Times, serif 2) Courier New, Courier, noon 3) PrimaSans BT, Verdana, sans-serif	Three choices of font face to be used in the user interface.
ceFontSizeDelta	<pre>pref_font_size_ group_2 (normal) pref_font_size_ group_1 (larger)</pre>	Defines three font sizes for the user interface. In the interface they are defined as: normal, larger, smaller.
	<pre>pref_font_size_ group_3 (smaller)</pre>	
ceGroupInviteAll	boolean (0, 1)	When creating an invitation while viewing a group, invite all calendars in the group when value=1; default is 1.
ceInterval	PT0H15M PT0H30M PT1H0M PT2H0M PT4H0M	Defines the time interval to be used when displaying calendar information. Intervals are: 15 min., 30 min., 1hour, 2 hours, 4 hours.
ceNotifyEmail	any valid RFC 822 email address	Email address notifications are mailed to when the calendar receives an invitation to an event.
ceNotifyEnable	0, 1	Enables/disables email notifications being sent when the calendar receives an invitation to an event.  0 = do not sent notifications  1 = send notifications
ceSingleCalendarTZID	any valid time zone	Lists the time zone assigned to this calendar.
	For a list of valid time zones, see Standard	If the parameter is not sent, the default time zone is used.
	Time Zones.	For example: America/Los_Angeles

Table 3-3 Extended User Preferences (Continued)

Properties	Values	Description
ceToolImage	0, 1	Toggle for the user interface display of icon images on the toolbar.  0 = do not display icons,  1 = display icons (default)
ceToolText	0, 1	Toggle for the user interface display of icon text on the toolbar.  0 = do not display text with the icon  1 = display text with the icon (default)

## NOTE

Regarding ceToolImage and ceToolText: the user interface only allows three possibilities for the toolbar: icons and text (attributes values 1, 1), icons only (attributes values 1, 0), and text only (attributes values 0, 1). It does not allow the user to turn off both icons and text (attributes values 0, 0).

## Example

icsextendeduserprefs: ceClock=12

icsextendeduserprefs: ceColorSet=pref\_group\_1

icsextendeduserprefs: ceDateOrder=D/M/Y

icsextendeduserprefs: ceDateSeparator=/

icsextendeduserprefs: ceDayHead=10 icsextendeduserprefs: ceDayTail=17

icsextendeduserprefs: ceDefaultAlarmEmail=jdoe@sesta.com

icsextendeduserprefs: ceDefaultAlarmStart=P30H

icsextendeduserprefs: ceDefaultTZID=America/New\_York

icsextendeduserprefs: ceDefaultView=groupview

icsextendeduserprefs: ceFontFace=PrimaSans BT, Verdana, sans-serif

icsextendeduserprefs: ceFontSizeDelta=pref\_font\_size\_group\_3

icsextendeduserprefs: ceInterval=PT2H0M

icsextendeduserprefs: ceNotifyEmail=jdoe@sesta.com

icsextendeduserprefs: ceNotifyEnable=0

icsextendeduserprefs: ceSingleCalendarTZID=America/Los Angeles

```
icsextendeduserprefs: ceToolText=1
icsextendeduserprefs: ceToolImage=1
```

## OID

2.16.840.1.113730.3.1.742

# icsFirstDay

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis, single-valued

## **Object Classes**

icsCalendarUser

#### Definition

First day of the week to be displayed on user's calendar.

```
Range of values: 1–7, with 1 = Sunday, 2 = Monday, 3= Tuesday, 4 = Wednesday, 5 = Thursday, 6 = Friday, 7 = Saturday
```

## Example

icsFirstDay: 1

## OID

2.16.840.1.113730.3.1.743

# icsFreeBusy

#### Origin

Not implemented.

## **Syntax**

ces, single-valued

## **Object Classes**

## **Definition**

Reserved, not implemented.

## Example

#### OID

2.16.840.1.113730.3.1.744

## icsGeo

## Origin

Not implemented.

## **Syntax**

cis single-valued

Latitude; longitude

## **Object Classes**

## **Definition**

Reserved, not implemented.

Geographical location of user or resource.

## **Example**

This class exists only for compliance with the RFC spec and is not used.

## OID

2.16.840.1.113730.3.1.745

# ics Mandatory Subscribed

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

ces

## **Object Classes**

icsCalendarDomain

#### **Definition**

The valid calendar IDs for mandatory subscribed calendars for all users in a domain.

## Example

icsMandatorySubscribed: ConfRm1@sesta.com:meetings

#### OID

2.16.840.1.113730.3.1.746

# ics Mandatory View

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis

## **Object Classes**

icsCalendarDomain

#### Definition

The mandatory default view for all calendars in a domain. Views are: overview, day, week, month, year, comparison.

#### Example

icsMandatoryView: overview

#### OID

2.16.840.1.113730.3.1.747

# icsPartition

## Origin

Not implemented.

## **Syntax**

cis, single-valued, ASCII

## **Object Classes**

icsCalendarResource, icsCalendarUser

#### Definition

Reserved. not implemented.

The name of the partition that holds a calendar database. There is no default value.

## Example

icsPartition: partition1

## OID

1.3.6.1.4.1.42.2.27.9.1.4

# **icsPreferredHost**

## Origin

Not implemented.

## **Syntax**

cis, single-valued

## **Object Classes**

## **Definition**

Reserved, not implemented.

Specifies the preferred host for this calendar. This attribute is used by clients to retrieve the front-end-host server name.

## Example

## OID

# ics Quota

## Origin

Not implemented.

## **Syntax**

int, single-valued

## **Object Classes**

## **Definition**

Reserved, not implemented.

## Example

## OID

2.16.840.1.113730.3.1.748

# icsRecurrenceBound

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

int, single-valued

## **Object Classes**

icsCalendarDomain

## Definition

Maximum number of instances created for events and todos with infinite recurrence. The value is taken from the ics.conf setting calstore.recurrence.bound.

## Example

icsRecurrenceBound: 60

## OID

## **icsRecurrenceDate**

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis, single-valued

## **Object Classes**

icsCalendarDomain

#### Definition

An ISO8601 date/time string specifying the maximum date for events and todos with infinite recurrence.

## **Example**

icsRecurrenceDate: 20300365T115959Z

#### OID

2.16.840.1.113730.3.1.751

# icsRegularExpressions

#### Origin

iPlanet Calendar Server 5.1.1

## **Syntax**

ces, multi-valued, UTF8

## **Object Classes**

icsCalendarDWPHost

## **Definition**

Stores regular expressions used to divide the LDAP database between servers.

## Example

```
icsRegularExpressions: A-F,G-L,M-T,U-Z
```

A-F, G-L, M-T, U-Z are possible values for instances of this attribute and describe a database divided alphabetically between four servers.

## OID

1.3.6.1.4.1.42.2.27.9.1.2

# icsSessionTimeout

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

int, single-valued

## **Object Classes**

icsCalendarDomain

## **Definition**

Number of seconds of inactivity before a user session is timed out. Read from ics.conf setting service.http.idletimeout.

## Example

icsSessionTimeout: 600

#### OID

2.16.840.1.113730.3.1.752

# icsSet

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis, multi-valued

## **Object Classes**

icsAnonymousSet,icsCalendarUser,icsDefaultAnonymousSet

## Definition

Defines one group of calendars. End users create these groups for various tasks. Each group is represented by one icsSet attribute, that is, for every group the user creates there will be one icsSet attribute. For example, if the user has three groups defined, there will be three icsSet attributes.

The value for this attribute is a six-part string, with each part separated by a dollar sign (\$).

The following table shows the six parts of this attribute's value:

**Table 3-4** Six Parts of the Attribute Value

Part	Required?	Description
name	Required	The display name of this group.
calendars	Required	A semi-colon-separated list of calendar IDs (calid) that comprise this group.
tzmode	Required	Three possible values: default, inherit, specify. The value that tells where the time zone for this group comes from.
		default – take user's default time zone inherit – take the time zone of the first calendar in the group specify – take the time zone from the tz value that follows.
tz	Not Required, unless tzmode = specify	A valid time zone for this group. For a list of acceptable values, see Standard Time Zones. Value is optional unless tzmode = specify, then it is required.
mergeInDayView	Required	A boolean (TRUE/FALSE). The value tells whether to display this group in the Day view (TRUE) or the Comparison view (FALSE)
description	Not Required	Character string. Optional description of the calendar.

## Example

The value of this attribute should all be on one line or if you wish to break a line, start the next line with a single space or tab.

icsSet: name=GroupName\$calendars=calid1;calid2;calid3\$
tzmode=specify\$tz=America/Los\_Angeles\$mergeInDayView=FALSE\$
description=Example group of calendars.

#### OID

## **icsSourceHtml**

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

ces, single-valued

## **Object Classes**

icsCalendarDomain

## Definition

The alternate location of all client HTML files. A directory path that is relative to the installed client HTML files. The default value comes from the ics.conf setting service.http.uidir.path.

Table 3-5 lists the values for this attribute.

**Table 3-5** Alternate Locations for Client HTML files.

Parameters	Value	Definition
sourceUrl	directory	Directory relative to executable, where all URL references to files are stored.
uiDirPath	directory	Directory containing the default client. If only WCAP access is allowed, value is "".
calHostname	hostname	HTTP host for retrieving HTML documents.

## **Example**

icsSourceHtml: calHostname=calhost1

#### OID

2.16.840.1.113730.3.1.754

# icsStatus

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis, single-valued

#### Object Classes

inetDomain

#### Definition

This attribute must be set when assigning calendar services to a domain. The attribute describes the status of this domain's calendar service. Calendar status, with one of the values specified in Table 3-6:

Table 3-6 Calendar Status Values

Status	Definition
active	Users and resources in this domain have access to calendar services.
inactive	No calendar services allowed for any users or resources in this domain, until the status is changed to active again. Calendars remain in the database and the LDAP entry remains.
deleted	No calendar service allowed for any users or resources in this domain. It is marked for deletion. Calendars will be removed from the database and the LDAP attributes that control the calendar's service will be removed.
	All the entries remain in the directory, but object classes having to do only with calendars for these users, resources and domains will be removed. For example, icsCalendarUser, icsCalendarResource, icsCalendarDomain will be removed. In addition all attributes with the ics prefix will be removed.
	For resources, it means that the resources associated with this object are to be removed from the calendar system, but the entry remains in the directory. For domains, all calendars associated with all the users and resources within that domain are to be removed.

If this attribute is not set, the icsAllowedServiceAccess attribute is checked. If present and the value of that attribute is http, then calendar services are disabled for the user (the user status is inactive). If icsAllowedServiceAccess has any other value, or if both attributes are missing, then the default user status is active.

Calendar services evaluate the following status attributes in order:inetDomainStatus, icsStatus (for icsCalendarDomain), either inetResourceStatus or inetUserStatus, and icsStatus (for either icsCalendarResource or icsCalendarUser).

The rule is: the first of these attributes that is set to something other than active takes precedence over all the others.

#### Example

icsStatus: active

#### OID

# icsSubscribed

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

ces, multi-valued

## **Object Classes**

icsCalendarUser

#### Definition

List of calendars to which this user is subscribed. This includes all the calendars that the user owns, as well as any calendars owned by others to which the owner subscribes.

The value of this attribute is the calendar ID and optionally, the calendar name, with a dollar sign (\$) between them, when present.

## Example

icsSubscribed: jdoe\$MyHomeCalendar

icsSubscribed: jsmith

#### OID

2.16.840.1.113730.3.1.756

# icsTimezone

## Origin

iPlanet Calendar Server 5.1

## **Syntax**

cis

## **Object Classes**

icsCalendarResource, icsCalendarUser

#### Definition

The default time zone for this user or resource calendar if one is not explicitly assigned through their own user preferences (see icsExtendedUserPrefs). Specifically a valid time zone from the list found in "Standard Time Zones" on page 263. The value is taken from the ics.conf setting

calstore.default.timezoneID.

#### Example

icsTimezone: America/Chicago

OID

2.16.840.1.113730.3.1.757

# inetCanonicalDomainName

#### Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

inetDomainAuthInfo

#### Definition

Used both in Sun ONE LDAP Schema v.1 and compatibility mode for Sun ONE LDAP Schema v.2 (with a DC Tree). This attribute is a fully qualified domain name. For an explanation of native and compatibility mode LDAP structures, see the Sun Java™ Enterprise System Installation Guide.

In compatibility mode, if more than one DC node in a DC tree refers to the same organization node in the Organization tree, this attribute is used to specify the canonical domain name used by the mail processes to open users' mailboxes. (There can be only one canonical domain name per organization node, but there can be many DC nodes referring to the same organization node)

This attribute is not necessary if there is only one DC node referring to an organization node. If the attribute is missing, the DC node entry is taken for the canonical domain name.

If this attribute is missing and there are multiple DC nodes referring to the same organization node, the mail processes could possibly use the wrong domain name when trying to open users' mailboxes.

Using multiple domain nodes to point to the same organization node allows you to have different attribute settings (and therefore different routing) for each one. If you want to be sure the two domains have the same attribute settings (are routed identically), use aliasedObjectName on the duplicate node instead.

This attribute is not used for the Sun ONE LDAP Schema v.2 native mode LDAP data model.

## Example

For the corporation sesta.com, if two DC nodes exist, dc=sesta and dc=sesta2, both referring to the organization node o=sesta, then you must specify one of them in the attribute:

inetCanonicalDomainName: sesta.com

#### Thus:

dn: dc=sesta,dc=com,o=internet
inetDomainBaseDN: o=sesta.com
inetCanonicalDomainName: sesta.com
dn: dc=sesta2,dc=com,o=internet
inetDomainBaseDN: o=sesta.com

#### OID

2.16.840.1.113730.3.1.701

# inetCoS

#### Origin

iPlanet Messaging Server 5.0

#### Syntax

cis, single-valued

## **Object Classes**

ipUser

#### Definition

(Organization tree domain) Specifies the name of the Class of Service (CoS) template supplying values for attributes in the user entry. The RDN of the CoS template is the value of this attribute. Attribute values provided by the template and any override rules are specified in the CoS definition. CoS definitions are

created by using the object class cosDefinition. The value of attribute cosSpecifier in CoS definition entry is set to inetCoS. Create CoS definitions and templates in the container ou=CoS in the subtree for that domain. See the *iPlanet* Messaging Server 5.2 Provisioning Guide for more information.

## Example

inetCoS: HallofFame

OID

2.16.840.1.113730.3.1.706

## inetDomainBaseDN

#### Origin

iPlanet Messaging Server 5.0

## Syntax

dn, single-valued

## **Object Classes**

inetDomain

#### Definition

This attribute decorates domain nodes on the DC Tree when in compatibility mode. It is not used for native mode Sun ONE LDAP Schema v.2.

The two domains, the alias and the referenced domain, can have different attribute values, such that routing will differ between the two. If you want to ensure routing is the same, the attribute values of both domains must be identical.

DN of the organization's subtree where all user/group entries are stored. This attribute points to a valid Organization subtree DN. Messaging Server components using the RFC 2247 search (compatibility mode) must resolve this DN in order to search for user and group entries that correspond to the hosted organization.

## Example

inetDomainBaseDN: o=sesta.com,o=siroe-isp.com

#### OID

# inetDomainCertMap

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, multi-valued

## **Object Classes**

inetDomainAuthInfo

#### Definition

Reserved.

## Example

TBD

## OID

2.16.840.1.113730.3.1.700

# **inetDomainSearchFilter**

## Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis, single-valued

#### Object Classes

inetDomainAuthInfo

## **Definition**

LDAP search filter to use in search templates when performing a native mode search. The compatibility mode RFC 2247 algorithm search requires this attribute, but ignores its value.

Used during authentication to map login name in that domain to an LDAP entry.

The following variables can be used in constructing the filter:

• %U-Name part of the login name (that is, everything before the login separator stored in the servers configuration).

%∨-Domain part of the login string.

If this attribute is missing, it is equivalent to:

```
(&(objectclass=inetOrgPerson)(uid=%U))
```

Namespaces where users are provisioned with compound uids, such as uid=john siroe.com, where john is the userID and siroe.com is the domain, would use a search filter of uid=%U\_%V. This maps a login string of john@siroe.com (where @ is the login separator for the service) into a search request by the service for an entry's namespace of siroe.com, where uid=john\_siroe.com.

An alternate example of using this attribute would be for sites wanting to log people in based on their employee identification. Assuming the attribute empID in user entries stores employee identifications, the search filter would be:

```
(&(objectclass=inetOrgPerson)(empID=%U)).
```

This attribute must return a unique match for valid users within the inetDomainBaseDN subtree. If this attribute is not set, the uid attribute must be unique in the inetDomainBaseDN subtree.

#### Example

```
inetDomainSearchFilter: uid=%U
```

#### OID

2.16.840.1.113730.3.1.699

## inetDomainStatus

#### Origin

iPlanet Messaging Server 5.0

#### Syntax

cis, single-valued

#### **Object Classes**

inetDomain

#### Definition

Applications using a DC Tree as their entry point (RFC 2247 compliant compatibility mode LDAP data model) may choose to respect application specific status attributes, but must consume and respect this attribute on the affiliated physical node (Organization Tree). In other words, for compatibility mode, both the DC Tree and the Organization Tree contain this attribute and if the two attribute's values differ, the one on the Organization Tree will take precedence.

Specifies the global status of a domain for all services. The intent of this attribute is to allow the administrator to temporarily suspend and then reactivate access, or to permanently remove access, by the domain and all its users to all the services enabled for that domain.

This attribute takes one of three values. Supported values are:

Table 3-7 Status Attribute Values

Value	Description	
active	Domain is active and users in the domain may use services enabled by the overlay of service-specific object classes and the service state as indicated by the particular status attribute for that service.	
inactive	Domain is inactive. The account may not use any services granted by service-specific object classes. This state overrides individual service status set using the service's status attributes.	
deleted	Domain is marked as deleted. The account may remain in this state within the directory for some time (pending purging of deleted users). Service requests for all users in a domain marked as deleted will return permanent failures.	

A missing value implies status is active. An illegal value is treated as inactive.

There are four status attributes that mail services look at and which are evaluated in this order: inetDomainStatus, mailDomainStatus, inetUserStatus, and mailUserStatus. The rule is: the first of these attributes that is set to something other than active takes precedence over all the others.

Similarly, this attribute is used for calendar services when evaluating status. The status attributes used are: inetDomainStatus, icsStatus (of icsCalendarDomain), either inetResourceStatus or inetUserStatus, and icsStatus (of either icsCalendarResource or icsCalendarUser).

In addition, in compatibility mode, when this attribute decorates both the DC Tree and the Organization Tree, both attributes should agree. Administrators are responsible for keeping the two synchronized. If the two attributes do not have the same value, Messaging Server will use the value found in the Organization Tree, while some other legacy application might be using the DC Tree attribute only. This could cause unpredictable results.

For more information on native and compatibility mode LDAP schemes, see the Sun Java<sup>™</sup> Enterprise System Installation Guide.

### Example

inetDomainStatus: active

OID

2.16.840.1.113730.3.1.691

### **inetMailGroupStatus**

### Origin

iPlanet Messaging Server 5.0

### Syntax

cis, single-valued

### Object Classes

inetMailGroup

### Definition

Current status of a mail group.

The following table lists the possible status values and gives a description of each:

active	Messages are delivered to the members of the mailing list.
inactive	Messages sent to the mailing list result in a transient failure.
deleted	Mailing list can be purged from the directory. Messages sent to the group return a permanent failure.

A missing value implies status is active. An illegal value is treated as inactive.

There are four status attributes that interact with each other: inetDomainStatus, mailDomainStatus, inetGroupStatus, and inetMailGroupStatus. These are considered in the order just given. The first one with a status of active takes precedence over the setting of all the others.

The MTA option LDAP\_GROUP\_STATUS can be used to specify a different attribute to be used for group status.

### Example

inetMailGroupStatus: active

### OID

2.16.840.1.113730.3.1.786

### **inetResourceStatus**

### Origin

iPlanet Calendar Server 5.1

### **Syntax**

cis, single-valued

### **Object Classes**

inetResource

#### Definition

This is a global status for resources. It holds the current status of the resource: active, inactive, or deleted for all services. It is used by Sun ONE Identity Server to manage resources. Status changes can be made to a resource's status using the commoli interface, or by directly changing the LDAP entry for the group.

The following table lists the attribute's values and their meanings:

**Table 3-8** Status Attribute Values

Value	Description
active	The resource is active and it may be used in services enabled by the overlay of service-specific object classes and the service state as indicated by the particular status attribute for that service.
inactive	Resource is inactive. The resource may not be used in any services granted by service-specific object classes. This state overrides individual service status set using the service's status attributes.

Table 3-8 Status Attribute Values

Value	Description
deleted	Resource is marked as deleted. The resource may remain in this state within the directory for some time (pending purging of deleted resources). Service requests for all resources marked as deleted will return permanent failures.

There are several status attributes that are evaluated to determine status. They are evaluated in this order: inetDomainStatus, icsStatus (for icsCalendarDomain), inetResourceStatus, icsStatus (for icsCalendarResource). These are considered in the order just given. The first one with a status of active takes precedence over the setting of all the others.

### Example

inetResourceStatus: active

### OID

2.16.840.1.113730.3.1.758

### inetSubscriberAccountId

iPlanet Messaging Server 5.0

### **Syntax**

cis, multi-valued

### **Object Classes**

inetSubscriber

### Definition

A unique account ID used for billing purposes.

### Example

inetSubscriberAccountId: A3560B0

#### OID

2.16.840.1.113730.3.1.694

# inetSubscriberChallenge

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

inetSubscriber

### Definition

Attribute for storing the challenge phrase used to identify the subscriber. Used in conjunction with the inetSubscriberResponse.

### Example

inetSubscriberChallenge=Mother's Maiden Name

### OID

2.16.840.1.113730.3.1.695

# inet Subscriber Response

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

inetSubscriber

### **Definition**

Attribute for storing the response to the challenge phrase.

### Example

inetSubscriberResponse=Mamasita

### OID

2.16.840.1.113730.3.1.696

### inetUserHttpURL

### Origin

iPlanet Messaging Server 5.0, deprecated in Sun ONE Messaging Server 6.0

### **Syntax**

cis, single-valued

### **Object Classes**

inetUser

#### Definition

This attribute is deprecated for the user class inetUser starting in Sun ONE Messaging Server 6.0 and is likely to be removed from the object class in future versions of Sun ONE schema.

User's primary URL for publishing Web content. This is an informational attribute and may be used in phonebook-type applications. It is not intended to have any operational impact.

### Example

inetUserHttpURL: http://www.siroe.com/theotis

#### OID

2.16.840.1.113730.3.1.693

### inetUserStatus

### Origin

iPlanet Messaging Server 5.0, Sun ONE Calendar Server 5.1.1

### **Syntax**

cis, single-valued

### **Object Classes**

inetUser

### Definition

Specifies the status of a user's account with regard to global server access. This attribute enables the administrator to temporarily suspend, reactivate, or permanently remove access to all services for a user account.

The following table lists the values for this attribute:

**Table 3-9** Status Attribute Values

Values	Description
active	The user account is active and the user can use all services enabled by the overlay of service-specific object classes and the service state as indicated by the particular status attribute for that service. For example, a user can use the email system if both mailUserStatus and inetDomainStatus are set to active.
inactive	The user account is inactive. The account cannot use any services granted by service-specific object classes. This state overrides individual service status set using the service's status attributes.
deleted	The account is marked as deleted. The account can remain in this state within the directory for some time (pending purging of deleted users). Service requests for a user marked as deleted must return permanent failures.

A missing value implies status is active. An illegal value is treated as inactive.

There are four status attributes that mail services look at and which are evaluated in this order: inetDomainStatus, mailDomainStatus, inetUserStatus, and mailUserStatus. The rule is: the first of these attributes that is set to something other than active takes precedence over all the others.

For calendar services, the attributes evaluated are: inetDomainStatus, icsStatus (for icsCalendarDomain), inetUserStatus, icsStatus (for icsCalendarUser).

When this attribute applies to a static group, defined using the inetUser object class, inactivating (disabling) the group only applies to the group itself and not the users in the group.

To disable the users of a group, create a dynamic group by assigning roles to the users, and then disable the role (which disables all users assigned to that role). For more information about roles, see the *Sun ONE Directory Server Administrator's Guide*.

The MTA option LDAP\_USER\_STATUS can be used to specify a different attribute to be used for user status.

### Example

inetUserStatus=inactive

### OID

2.16.840.1.113730.3.1.692

### mail

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued (RFC 822 address)

### **Object Classes**

inetLocalMailRecipient, icsCalendarResource, icsCalendarUser

### **Definition**

Identifies a user's primary email address (the email address retrieved and displayed by white-pages lookup applications).

This attribute and mailAlternateAddress, are the default attributes used for reverse searches.

### Example

mail=jdoe@sesta.com

### OID

0.9.2342.19200300.100.1.3

# mailAccessProxyPreAuth

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

mailDomain

#### Definition

Attribute tells the MMP if the users in this domain have to be preauthenticated. Permitted values are yes or no.

### Example

mailAccessProxyPreAuth=yes

#### OID

2.16.840.1.113730.3.1.769

# mailAccessProxyReplay

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

mailDomain

### **Definition**

This attribute tells the Messaging Multiplexor how to reconstruct the login string when replaying the login sequence with the backend mail server. A missing attribute implies that the message access proxies construct the replay string based on the login name used by the client, the domain of the client, and the login separator used for this service. The mailAccessProxyReplay attribute overrides this default behavior when the message access proxy has a different backend server than Messaging and Collaboration.

The syntax is that of a login string, with the following substitutions:

- %U: Login name. That is, the name part of the login string, if it is a {name,domain} compound.
- %V: Domain part of the login string.
- %[attr]: The value of the LDAP user attribute.

### **Examples**

- 1. If the client logs in as hugo and the domain associated with the server IP address used is yoyo.com, and mailAccessProxyReplay=%U@%V, the replayed login string is hugo@yoyo.com.
- 2. If the client logs in as hugo, and the domain associated with the server IP address used is yoyo.com, and mailAccessProxyReplay=%[surname]@%V, the replayed login string is the value of the surname attribute of the client.
- 3. If the client logs in as hugo+yoyo.com, and the login separator for the service used is +, and mailAccessProxyReplay=%U@%V, the replayed login string is hugo@yoyo.com.

4. If the client logs in as hugo, and the domain associated with the server IP address used is yoyo.com, and mailAccessProxyReplay is not defined, and the login separator for the service used is +, the replayed login string is hugo+yoyo.com.

#### OID

2.16.840.1.113730.3.1.763

### mailAdminRole

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

inetMailAdministrator

### Definition

Specifies the administrative role assigned to the members of the group. The only legal value for this attribute is storeAdmin. The object class that contains this attribute—inetMailAdministrator—is overlaid on a group entry to grant members of a group administrative privileges over part of the mail server. Currently the only privilege group members inherit are rights to perform proxy authentication for any user in the domain. These rights extend over users in the same domain as where the group is defined. To grant such privileges the attribute mailAdminRole must be set to the value storeAdmin.

#### Example

mailAdminRole: storeAdmin

#### OID

2.16.840.1.113730.3.1.780

### mailAllowedServiceAccess

iPlanet Messaging Server 5.0

### Syntax

cis, single-valued

### **Object Classes**

inetMailUser

### Definition

Stores access filters (rules). If no rules are specified, then user is allowed access to all services from all clients. Rules are separated by a dollar sign (\$). The rules are evaluated in this manner:

- Access is granted if the client information matches an allow filter for that service.
- Access is denied if the client information matches a deny filter for that service.
- If no match is made with any allow or deny filters, access is granted, except in the case where there are allow filters but no deny filters. In this case, a lack of match means access is denied.

For a full explanation of access filters and an alternate way to control access through the administration console or the config utility, see "Configuring Client Access to POP, IMAP, and HTTP Services" in the *Sun ONE Messaging Server Administrator's Guide*.

### Rule Syntax

```
"+" or "-"service_list":"client_list
```

- + (allow filter) means the services in the service list are being granted to the client list.
- (deny filter) means the services are being denied to the client list.

service\_list is a comma separated list of services to which access is being granted or denied.

Legal service names are: imap, imaps, pop, pops, smtp, smtps, and http. Note that the MMP supports imap, imaps, pop, pops, and smtp. The backend supports imap, pop, smtp, and http.

client\_list is a comma separated list of clients (domains) to which access is being granted or denied.

Wildcards can be substituted for the client list (domains). The following table shows the legal wildcards and gives a description of each:

Table 3-10 Wildcards

Wildcards	Description
ALL, *	The universal wildcard. Matches all names.
DNSSPOOFER	Matches any host whose DNS name does not match its own IP address.
KNOWN	Matches any host whose name and address are known. Use with care.
LOCAL	Matches any local host (one whose name does not contain a dot character). If your installation uses only canonical names, even local host names will contain dots and thus will not match this wildcard.
UNKNOWN	Matches any host whose name or address are unknown. Use this with care.

The following wildcards can be used for the service list: \*, ALL.

### **Except Operator**

The access control system supports a single operator, EXCEPT. You can use the EXCEPT operator to create exceptions to the patterns found in a rule's service list and client list. EXCEPT clauses can be nested. If there are multiple EXCEPT clauses in a rule, they are evaluated right to left.

The EXCEPT format is:

list1 EXCEPT list2

where list1 is a comma separated list of services and list2 is a comma separated lists of clients.

### Example

This example shows a single rule with multiple services and a single wildcard for the client list.

```
mailAllowedServiceAccess: +imap,pop,http:*
```

This example shows multiple rules, but each rule is simplified to have only one service name and uses wildcards for the client list. (This is the most commonly used method of specifying access control in LDIF files.)

```
mailAllowedServiceAccess: +imap:ALL$+pop:ALL$+http:ALL
```

An example of how to disallow all services for a user is:

```
mailAllowedServiceAccess: -imap:*$-pop:*$-http:*
```

An example of a rule with an EXCEPT operator is:

```
mailAllowedServiceAccess: -ALL:ALL EXCEPT server1.sesta.com
```

This example denies access to all services for all clients except those on the host machine server1.sesta.com.

#### OID

2.16.840.1.113730.3.1.777

### mailAlternateAddress

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, multi-valued

### **Object Classes**

inetLocalMailRecipient, pabPerson

### Definition

Alternate RFC 822 email address of this recipient. If the MTA receives mail with a "from" header with this email address, it rewrites the header with the value of the mail attribute and routes the email to that inbox. The mailEquivalentAddress attribute works similarly to route the email, but does not rewrite the header.

The local part of the address may be omitted to designate a user/group as the catchall address. A catchall domain address is an address that will receive mail to a specified domain if the MTA does not find an exact user address match with that domain.

This attribute, along with mail, are the default attributes used for reverse searches.

### Example

```
mailAlternateAddress: jdoe@sesta.com
mailAlternateAddress: @sesta.com (catchall domain address)
```

#### OID

2.16.840.1.113730.3.1.13

### mailAntiUBEService

### Origin

iPlanet Messaging Server 5.2

### **Syntax**

cis, multi-valued

### **Object Classes**

inetMailUser, mailDomain

### Definition

The string values given by this and other optin attributes are collected and passed to the filtering agent being used (for instance, Brightmail).

For Brightmail spam and virus checking, the interpretation of these strings is specified in the Brightmail configuration file. Brightmail uses the information from this attribute for its processing.

There are two Brightmail values:

- spam When a spam message is found by the anti-UBE service, take the action specified in a system wide configuration option.
- virus When a virus in a message is detected by the anti-UBE service, take the action specified in a system wide configuration option.

SpamAssasin, another filtering agent, does not use the actual value of the attribute; it can be set to anything.

While another attribute can be named in the option.dat setting for LDAP\_OPTIN, it is not recommended. (For more information on Brightmail, see the Sun ONE Messaging Server 6.0 Administrator's Guide.)

To use this attribute to specify per user optin values, set the following in the option.dat file:

LDAP\_OPTIN=mailAntiUBEService

To use the attribute to specify domain level optin values, set the following in the option.dat file:

LDAP\_DOMAIN\_ATTR\_OPTIN=mailAntiUBEService

#### Example

mailAntiUBEService: virus

mailAntiUBEService: spam

OID

# mailAutoReplyMode

### Origin

iPlanet Messaging Server 5.0 (for reply mode), iPlanet Messaging Server 5.2 patch 1 (for echo mode)

### **Syntax**

cis, single-valued

### **Object Classes**

inetMailUser

### Definition

Specifies the autoreply mode for user mail account. This is one of several autoreply attributes used when autoreply is an active mail delivery option. The two modes for autoreply are:

• echo - Echo the original message with the added mailAutoReplyText or mailAutoReplyTextInternal to the original sender. This occurs only once a week per sender.

If you want the message to be echoed for each message from every sender regardless of how recently a previous reply was sent, set the mailAutoReplyTimeOut to 0, which will cause the reply message to be sent every time.

• reply - Send a fixed reply, contained in attributes mailAutoReplyText or mailAutoReplyTextInternal, to the original sender.

### Example

```
mailAutoReplyMode: reply
```

### OID

2.16.840.1.113730.3.1.14

# mailAutoReplySubject

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

inetMailUser

### **Definition**

Subject text of auto-reply response. \$SUBJECT can be used to insert the subject of the original message into the response.

### Example

mailAutoreplySubject: I am on vacation

### OID

2.16.840.1.113730.3.1.772

# mailAutoReplyText

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

inetMailUser

### **Definition**

Auto-reply text sent to all senders except users in the recipient's domain. If not specified, external users receive no auto response.

### Example

mailAutoreplyText: Please contact me later.

### OID

2.16.840.1.113730.3.1.15

# mailAutoReplyTextInternal

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

inetMailUser

#### Definition

Auto-reply text sent to senders from the recipients domain. If not specified, then internal uses get the mail auto-reply text message.

### Example

mailAutoreplyTextInternal: Please contact me later.

#### OID

2.16.840.1.113730.3.1.773

# mailAutoReplyTimeOut

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

int, single-valued

### **Object Classes**

inetMailUser

### Definition

Duration, in hours, for successive auto-reply responses to any given mail sender. Used only when mailAutoReplyMode: reply. If the value is set to 0 for mailAutoReplyMode: echo then a response is sent back every time a message is received. Auto-reply responses are sent out only if the recipient is listed in the "to" or "cc:" of the original message.

### Example

mailAutoreplyTimeout: 48

### OID

2.16.840.1.113730.3.1.771

# mailClientAttachmentQuota

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

int, single-valued

### **Object Classes**

mailDomain

### **Definition**

A positive integer value indicating the number of attachments the Messenger Express user can send per message in this domain. A value of -1 means no limit on attachments.

### Example

mailClientAttachmentQuota: 12

### OID

2.16.840.1.113730.3.1.768

# mailConversionTag

### Origin

iPlanet Messaging Server 5.2

### **Syntax**

cis, multi-valued (ASCII string)

### **Object Classes**

inetMailGroup, inetMailUser

### Definition

Conversion tags attached to a message to this user or group. Tag specific conversion actions are specified in the MTA configuration.

The MTA option used to override this attribute is LDAP CONVERSION TAG.

Example

OID

# mailDeferProcessing

### Origin

iPlanet Messaging Server 5.2

### Syntax

cis, single-valued (ASCII string)

### **Object Classes**

inetMailGroup, inetMailUser

### Definition

Controls whether or not address expansion of the current user or group entry is performed immediately (value is "No"), or deferred (value is "Yes").

# NOTE A different attribute (other than mailDeferProcessing) can be designated for this purpose in the MTA option LDAP\_REPROCESS.

Deferral takes place if the value is "Yes" and the current source channel isn't the reprocess channel. Deferral is accomplished by directing the user or group's address to the reprocess channel. That is, the expansion of the alias is aborted and the original address (user@domain) is queued to the reprocess channel.

If this attribute does not exist, the setting of the deferred processing flag associated with delivery options processing is checked. If it is set, processing is deferred.

If it is not set, the default for users is to process immediately (as if the value of this attribute were "No").

The default for groups (such as mailing lists) is controlled by the MTA option DEFER GROUP PROCESSING, which defaults to 1 (yes).

### Best Practices Suggestions for Duplicate Message Problem

Getting duplicate copies of messages can happen. For example, if a user sends an email to both addresseeA, and groupA that contains addresseeA, and DEFER\_GROUP\_PROCESSING=1 and this attribute is No, then the message immediately duplicates, such that addresseeA gets two copies, one that came directly, and one that took the deferred expansion hop through the reprocess channel for groupA to get expanded.

While disabling deferred group expansion would eliminate the duplicate, that's not a good idea if you have a lot of large groups. Using expandlimit 1 can potentially cause unnecessary overhead on general, non-group, multi-recipient messages.

To minimize the effect of this situation, the following two solutions are best practices:

- For installations with only a few small groups, setting the default DEFER\_GROUP\_PROCESSING=1, and this attribute to No, gives you duplicates but also gives you two major benefits:
  - You don't have to bother running the reprocess channel, which makes a bit less overhead and a bit faster delivery.
  - The potential for eliminating duplicate addresses is increased.
- If your installation has many small groups and only a few large groups, then set DEFER\_GROUP\_PROCESSING=0, and this attribute to Yes for the few large groups.

### Example

The default for mail users:

mailDeferProcessing: No

The default for mailing lists:

mailDeferProcessing:Yes

OID

TBD

# mailDeliveryFileURL

### Origin

iPlanet Messaging Server 5.0

### Syntax

ces, single-valued

### **Object Classes**

inetMailGroup

#### Definition

Fully qualified local path of file to which all messages sent to the mailing list are appended. Used in conjunction with mailDeliveryOption: file.

The MTA option used to override this attribute's value is LDAP\_PROGRAM\_FILE.

### Example

mailDeliveryFileURL: /home/dreamteam/mail archive

#### OID

2.16.840.1.113730.3.1.787

# mailDeliveryOption

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis. multi-valued

### **Object Classes**

inetMailGroup, inetMailUser

### Definition

Specifies delivery options for the mail recipient. One or more values are permitted on a user or group entry, supporting multiple delivery paths for inbound messages. Values will apply differently depending on whether the attribute is used in inetMailGroup or inetMailUser.

Note, that the mailUserStatus attribute is processed before this attribute. If mailUserStatus is set to hold, an internal flag is set so that when mailDeliveryOption is processed, the mailUserStatus hold overrides whatever delivery options are specified with mailDeliveryOption.

For users, delivery addresses are generated for each valid delivery option value.

Valid values are:

### For users only (inetMailUser):

- autoreply Specifies autoreply is turned on for the user. Messages on which
  the recipient is listed in the "To:" or "Cc:" header fields of the message are sent
  to the autoreply channel where an autoreply message is generated and sent to
  the original sender.
- hold A recipient is temporarily halted from receiving messages. Note that
  unlike mailUserStatus, hold for this attribute does not disallow POP, IMAP
  and WebMail access. For this attribute, hold only halts delivery to the
  recipient's mailbox, but access is still allowed.
- mailbox Deliver messages to the user's IMAP/POP store.
- native or unix Deliver messages to the user's /var/mail store INBOX. The store is in Berkeley mailbox format. Messaging Server does not support /var/mail access. Users must use UNIX tools to access mail from the /var/mail store.

### For groups only (inetMailGroup):

- file Messages are appended to the file specified in the attribute mailDeliveryFileURL.
- members Messages are sent to members of the mailing list. If missing, default=members is assumed.
- members\_offline To defer processing for this group, set the attribute to this value, and set the option.dat file option DEFER\_GROUP\_PROCESSING to zero (0).

### Both users and groups:

These values are handled the same for both users and groups.

- program Messages are delivered to a program, which is on the approved list of programs (specified in MTA's configuration). The name of the program is specifed in the attribute mailProgramdeliveryInfo.
- forward Specifies that messages will be forwarded. The forwarding address
  is specified in the attribute mailForwardingAddress. Note that when this
  value is set, mailForwardingAddress must be set to keep the mail system in
  sync.

The MTA option <code>DELIVERY\_OPTIONS</code>, found in the <code>msg\_svr\_base/config/option.dat file</code>, defines how each of the previously listed values will be processed.

The MTA option used to override this attribute's value is LDAP\_DELIVERY\_OPTION.

### Example

mailDeliveryOption: mailbox

#### OID

2.16.840.1.113730.3.1.16

### mailDomainAllowedServiceAccess

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single valued

### **Object Classes**

mailDomain

### Definition

Stores access filters (rules). If no rules are specified, then domain is allowed access to all services from all clients. Rules are separated by a dollar sign (\$). The rules are evaluated in this manner:

- Access is granted if the client information matches an allow filter for that service.
- Access is denied if the client information matches a deny filter for that service.
- If no match is made with any allow or deny filters, access is granted, except in the case where there are allow filters but no deny filters. In this case, a lack of match means access is denied.

For a full explanation of access filters and an alternate way to control access through the administration console or the config utility, see "Configuring Client Access to POP, IMAP, and HTTP Services" in the *Sun ONE Messaging Server Administrator's Guide*.

### Rule Syntax

```
"+" or "-" <service_list>":"<client_list>
```

- + (allow filter) means the service list services are being granted to the client list.
- (deny filter) means the services are being denied to the client list.

service\_list is a comma separated list of services to which access is being granted or denied.

Legal service names are: imap, imaps, pop, pops, smtp, smtps, and http. Note that the MMP supports imap, imaps, pop, pops, and smtp. The backend supports imap, pop, smtp, and http.

client\_list is a comma separated list of clients (domains) to which access is being granted or denied.

Wildcards can be substituted for the client list (domains). The following table shows the allowed wildcards and describes each of them:

Table 3-11 Wildcards

Wildcards	Meanings
ALL, *	The universal wildcard. Matches all names.
DNSSPOOFER	Matches any host whose DNS name does not match its own IP address.
KNOWN	Matches any host whose name and address are known. Use with care.
LOCAL	Matches any local host (one whose name does not contain a dot character). If your installation uses only canonical names, even local host names will contain dots and thus will not match this wildcard.
UNKNOWN	Matches any host whose name or address are unknown. Use this with care.

The following wildcards can be used for the service list: \*, ALL.

### Except Operator

The access control system supports a single operator, EXCEPT. You can use the EXCEPT operator to create exceptions to the patterns found in a rule's service list and client list. EXCEPT clauses can be nested. If there are multiple EXCEPT clauses in a rule, they are evaluated right to left.

The EXCEPT format is:

list 1 EXCEPT list 2

A list is a comma separated list of services or clients.

### Example

This example shows a single rule with multiple services and a single wildcard for the client list.

mailDomainAllowedServiceAccess: +imap,pop,http:\*

This example shows multiple rules, but each rule is simplified to have only one service name and uses wildcards for the client list.

```
mailDomainAllowedServiceAccess: +imap:ALL$+pop:ALL$+http:ALL
```

The second example is probably the most commonly used in Messaging Server LDIF files.

An example of a rule with an EXCEPT operator is:

```
mailDomainAllowedServiceAccess: -ALL:ALL EXCEPT server1.sesta.com
```

This example denies access to all services for all clients except those on the host machine server1.sesta.com.

### OID

2.16.840.1.113730.3.1.764

### mailDomainCatchallAddress

### Origin

iPlanet Messaging Server 5.2

### **Syntax**

cis, single-valued (RFC 822 mailbox)

### **Object Classes**

mailDomain

#### Definition

Specifies an address to be substituted for any address in the domain that doesn't match any user or group in the domain.

The MTA option used to override this attribute's value is LDAP\_DOMAIN\_ATTR\_CATCHALL\_ADDRESS.

### Example

#### OID

TBD

# mailDomainConversionTag

### Origin

iPlanet Messaging Server 5.2

### **Syntax**

cis, multi-valued (ASCII string)

### Object Classes

mailDomain

#### Definition

One or more conversion tags attached to messages to any user in the domain. Tag specific conversion actions are specified in the MTA configuration.

The MTA option used to override this attribute's value is LDAP\_DOMAIN\_ATTR\_CONVERSION\_TAG.

### Example

OID

TBD

# mailDomainDiskQuota

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

int, single-valued

### **Object Classes**

mailDomain

### Definition

Used for internal monitoring only. Disk quota, for all users in the domain, in bytes. This is used in quota reporting tools and not used for enforcing domain wide quota restrictions.

### Example

mailDomainDiskQuota: 50000000000

### OID

2.16.840.1.113730.3.1.766

# mailDomainMsgMaxBlocks

### Origin

iPlanet Messaging Server 5.2

### **Syntax**

int, single-valued

### **Object Classes**

mailDomain

### **Definition**

Imposes a size limit in units of MTA blocks on all messages sent to addresses in this domain. This limit doesn't apply to messages sent by users from this domain.

The value of this attribute is overridden by the value of mailmsgMaxBlocks, if set.

The MTA option used to override this attribute's value is LDAP\_DOMAIN\_ATTR\_BLOCKLIMIT.

### Example

### OID

TBD

# mail Domain Msg Quota

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

int, single-valued

### **Object Classes**

mailDomain

### Definition

Quota of number of messages permitted for all users in this domain. This is used in quota reporting tools and not for enforcing domain wide quota restrictions.

### Example

mailDomainMsgQuota: 2000000

### OID

2.16.840.1.113730.3.1.767

# mailDomainReportAddress

### Origin

iPlanet Messaging Server 5.2

### Syntax

cis, single-valued (RFC 822 mailbox)

### **Object Classes**

mailDomain

### Definition

This value is used as the header From: address in DSNs reporting problems associated with recipient addresses in the domain. It is also used when reporting problems to users within the domain regarding errors associated with nonlocal addresses.

If this attribute is not set, the reporting address will default to "postmaster@domain."

The MTA option used to override this attribute's value is LDAP DOMAIN ATTR REPORT ADDRESS.

### Example

### OID

TBD

### mailDomainSieveRuleSource

### Origin

iPlanet Messaging Server 5.2

### **Syntax**

cis, single-valued (RFC 3028 sieve filter)

### **Object Classes**

mailDomain

#### Definition

SIEVE filters are not supported by iPlanet Delegated Administrator.

SIEVE filter for all users in the domain. There are two possible forms for the value of this attribute: a single value that contains the complete sieve script (RFC 3028 compliant), and multiple values, with each value containing a piece of the sieve script (not RFC 3028 compliant).

### A script has the following form:

```
require ["fileinto", "reject"];
# $Rule Info: Order=(1-infinity, or 0 for disabled)
Template=(template-name) Name=(rule name)
if header :is "Sender" "owner-ietf-mta-filters@imc.org"
{ fileinto "filter"; # move to "filter" folder }
if header :is "Subject" "SPAM!"
{ delete }
```

### Multi-valued Form

Multiple SIEVE scripts per user can be stored in LDAP. To enable the user interface to handle several smaller rules scripts, rather than one script containing all the domain's rules, this attribute takes multiple values (that is, multiple rules). The server looks at every rule in mailSieveRuleSource.

To provide ordering and possible user interface editing information, there is an optional SIEVE comment line in each rule. This line has the following format:

```
# $Rule Info: Order=(1-infinity, or 0 for disabled)
```

All rules that have a Rule Info line will be processed first by the Messaging Server. If Order=0, then this rule is not used in the SIEVE evaluation. Otherwise, the rules are processed in the order provided (1 having highest priority). To accommodate SIEVE rules that might not have been entered using the Rule Info extension, any other rules found are run by the server, in order received from LDAP after all rules with corresponding order values have been processed.

### MTA Override Option

The MTA option that overrides this attribute's value is LDAP DOMAIN ATTR FILTER.

### Example

The following example is correctly formed, but Messaging Server ignores discard and reject text, and does not send a reject or discard reply message.

```
mailSieveRuleSource:
require ["fileinto", "reject", "redirect", "discard"]
if header :contains "Subject" "New Rules Suggestion
    {redirect "rules@sesta.com" # Forward message }
if header :contains "Sender" "porn.com"
    {discard text:
Your message has been rejected. Please remove this address from your
mailing list.
                # Reject message, send reply message.}
if size :over 1M
    { reject text:
Please do not send large attachments.
Put your file on a server and send the URL.
Thank you. # Discard message, send reply message.}
if header :contains "Sender" "domainadminstrator@sesta.com
    { fileinto complaints.refs # File message}
```

### OID

TBD

### mailDomainStatus

#### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

mailDomain

### Definition

Current status of the mail domain. Can be one of the following values: active, inactive, deleted, or hold. This attribute is the mail service domain status. Missing value implies status is active. An illegal value is treated as inactive.

The following table lists the status values:

**Table 3-12** Status Values

Value	Description
active	Mail service is marked as active for all users in this domain and all users in the domain that are marked active (see inetUserStatus and mailUserStatus for more information). However, any restrictions specified in mailAllowedServiceAccess and mailDomainAllowedServiceAccess still apply.
inactive	Mail service for all users in the domain is marked inactive. All user login attempts are rejected and messages sent to them get transient failure messages.
deleted	Mail domain is marked as deleted and will be removed during cleanup by the purge utility after the grace period is over. Mailboxes and user's mail service object classes are included in cleanup.
hold	Messages sent to all users in the domain are redirected to the hold channel. This value is typically used when users in the domain are being moved from one server to another without having to bounce messages back to the sender during the move. In this state, mailboxes can be moved without fear of any lost messages as all incoming messages are sent to the hold channel. Once the move is complete and the state has been changed from hold to active the messages are drained from the hold channel and sent to the MTAs where the user mailboxes now reside.
overquota	The MTA will not accept new messages for any users in the domain until this value is changed back to active.

There are four status attributes that mail services look at and which are evaluated in this order: inetDomainStatus, mailDomainStatus, inetUserStatus, and mailUserStatus. The rule is: the first of these attributes that is set to something other than active takes precedence over all the others.

The MTA option that overrides this attribute's values is LDAP\_DOMAIN\_ATTR\_STATUS.

### Example

mailDomainStatus: active

### OID

2.16.840.1.113730.3.1.770

# mailDomainWelcomeMessage

### Origin

Sun ONE Messaging Server 6.0

### **Syntax**

cis, single-valued

### Object Classes

mailDomain

#### Definition

Welcome message sent to new users added to this domain. '\$\$' is a carriage return. BNF syntax of this attribute is:

```
value:: <subjectline>'$'[<opt_headers>]'$$'<body>
subjectline:: 'Subject:'[<TEXT>]
opt_headers::<header_line>'$'[<opt_headers>]
header_line:: <header_name>':'<TEXT>
header_name:: <TEXT>
body:: [<lines>]
lines:: <line>'$'[<lines>]
line:: <TEXT>
```

### Example

mailDomainWelcomeMessage: Subject: Welcome!!\$X-Endorsement: We're good. \$\$Welcome to the mail system.

#### OID

2.16.840.1.113730.3.1.765

# mailEquivalentAddress

### Origin

iPlanet Messaging Server 5.2

### **Syntax**

cis, multi-valued (RFC 822 addr-spec)

### **Object Classes**

inetMailGroup, inetMailUser

### Definition

Equivalent to mailAlternateAddress in regard to mail routing, except with this attribute, the header doesn't get rewritten.

Note that mailEquivalentAddress is searched for when the system is deciding where to deliver messages, but it is not one of the attributes searched for when doing REVERSE\_URL address reversal.

This attribute works only for direct LDAP mode, not with the deprecated imsimta dirsync option.

### Example

```
mailEquivalentAddress: jdoe@sesta.com
mailEquivalentAddress: @sesta.com (catchall domain address)
```

### OID

**TBD** 

### mailFolderName

### Origin

Sun ONE Messaging Server 6.0

### Syntax

cis, single-valued

### **Object Classes**

mailDomain, mailPublicFolder

### Definition

This attribute specifies the name of a public folder.

### Example

mailFolderName: Announcements

OID

# mailForwardingAddress

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, multi-valued

### **Object Classes**

inetMailUser

### **Definition**

This attribute stores one or more forwarding addresses for inbound messages. Addresses are specified in RFC 822 format. Messages are forwarded to the listed address when mailDeliveryOption: forward is set.

Note that both mailDeiveryOption and this attribute must be set in order to keep the mail system in sync.

### Example

mailForwardingAddress: kokomo@sesta.com

### OID

2.16.840.1.113730.3.1.17

### mailHost

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

inetLocalMailRecipient

### Definition

For a user or group entry, the fully qualified host name of the MTA that is the final destination of messages sent to this recipient. To be deemed local, the user entry must have this attribute, and it must match either the local.hostname configutil attribute, or one of the names specified by the local.imta.hostnamealiases configutil attribute. Otherwise, a new source routed address is generated in the form:

@mailhost:user@domain and will be processed through the rewrite rules.

If a user entry does not have this attribute, the generated address will use the mailRoutingSmartHost hostname associated with the domain @smarthost:user@domain. If the domain has no mailRoutingSmartHost attribute, the address is discarded and a 5xx error is reported.

If a group entry does not have this attribute, the group is processed locally.

The MTA option that overrides this attribute's value is LDAP\_MAILHOST.

### Example

mailHost: mail.siroe.com

### OID

2.16.840.1.113730.3.1.18

### mailMessageStore

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

inetMailUser

### Definition

Specifies the message store partition name for the user. The mapping between the partition name and the file system location of the store is kept in the message store configuration. If not specified, the default store partition specified in the server configuration is used.

### Example

mailMessageStore: secondary

### OID

2.16.840.1.113730.3.1.19

# mailMsgMaxBlocks

### Origin

iPlanet Messaging Server 5.2

### **Syntax**

int, single-valued

### **Object Classes**

inetMailGroup, inetMailUser

### **Definition**

The size in units of MTA blocks of the largest message that can be sent to this user or group. The limit doesn't apply to messages sent by the user.

If this attribute is set, it overrides the value of mailDomainMsgMaxBlocks.

The MTA option that overrides the attribute's value is LDAP\_BLOCKLIMIT.

### Example

OID

**TBD** 

# mailMsgQuota

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

int, single-valued

### **Object Classes**

inetMailUser

### Definition

Maximum number of messages permitted for a user is set with mailMsgQuota. This is a cumulative count for all folders in the store. Table 3-13 shows the special values and their meanings:

 Table 3-13
 mailMsgQuota Special Values

Value	Meaning
0	No mail messages allowed
-1	No limit on number of messages allowed
-2	Use system default quota (use of this value is being deprecated)

If this attribute is missing, the system default quota is used.

During server configuration, quota enforcement must be turned on for mailMsgQuota to take effect. Both soft and hard quotas can be set (See Sun ONE Message Server Administrator's Guide).

The MTA option override is LDAP MESSAGE QUOTA.

### Example

mailMsqQuota: 2000

#### OID

2.16.840.1.113730.3.1.774

# mailProgramDeliveryInfo

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

ces, multi-valued

### **Object Classes**

inetMailGroup,inetMailUser

#### Definition

Specifies one or more programs used for program delivery. These programs have to be on the approved list of programs that the messaging server is permitted to execute for a domain. The attribute value specifies a reference to a program. That reference is resolved from the approved list of programs. The resolved reference also provides the program parameters and execution permissions. Used in conjunction with the mailDeliveryOption: program.

The value of this attribute should be used as the value for the method name (-m value) when running imsimta program.

The program approval process is documented further in the Sun ONE Messaging Server Administrator's Guide.

The MTA option used to name a different attribute for this function is LDAP PROGRAM INFO.

## Example

mailProgramDeliveryInfo: procmail

#### OID

2.16.840.1.113730.3.1.20

## mailPublicFolderDefaultRights

#### Origin

Sun ONE Messaging Server 6.0

## Syntax

cis. multi-valued

#### **Object Classes**

mailPublicFolder

#### Definition

Specifies the access control rights granted for this public folder. Each value of this attribute consists of two parts separated by a space. The two parts are: an identifier, as specified in RFC 2086, and a list of access rights (mod\_rights) as follows in Table 3-14.

**Table 3-14** Access Rights for a Public Folder

Allowed Characters	Name	Actions Permitted
1	lookup	Mailbox is visible to LIST/LSUB commands.
r	read	SELECT the mailbox, perform CHECK, FETCH, PARTIAL, SEARCH, COPY from mailbox.
S	seen	Keep seen/unseen information across sessions. (STORE SEEN flag)
W	write	STORE flags other than SEEN and DELETED.
i	insert	Perform APPEND, COPY into mailbox.
р	post	Send mail to submission address for mailbox (not enforced by IMAP 4 itself).
С	create	CREATE new sub-maiboxes in any implementation-defined hierarchy.
d	delete	STORE DELETED flag, perform EXPUNGE.
a	administer	Perform SETACL.

Sun ONE Messaging Server's IMAP ACL implementation also defines the following new identifier:

anyone@domain

where *domain* is a valid domain.

If the attribute is missing, the default rights specified in the mailPublicFolderDefaultRights attribute from the mailDomain object class will be applied. If mailDomain does not contain this attribute, the following default ACL is set when a public folder is first created:

anvone@domain lrs

where *domain* is a valid domain.

Group identifiers start with the prefix "group=". Do not put the group identifier prefix on a userid. The message store's user creation code checks for this.

### Examples

mailPublicFolderDefaultRights: anyone@sesta.com lrs mailPublicFolderDefaultRights: group: sales@sesta.com lrs mailPublicFolderDefaultRights: john@sesta.com lrswid

OID

## mailQuota

## Origin

iPlanet Messaging Server 5.0

## Syntax

int, single-valued

### Object Classes

inetMailUser, mailDomain

#### Definition

Specifies, in bytes, the amount of disk space allowed for the user's mailbox. The numeric portion of the value is limited to 4294966272. For values approaching of exceeding four gigabytes, use the G suffix instead of specifying the full value as a number. Other valid suffixes are: K for kilobytes, M for megabytes, and G for gigabytes.

Table 3-15 shows the special values for this attribute.

**Table 3-15** mailQuota Special Values

Value	Meaning
0	No space allowed for user's mailbox
-1	No limit on space usage allowed
-2	Use system default quota (use of this value is being deprecated)

The quota value is limited to 4096G because the message store uses a 32 bit unsigned integer to store the quota value.

If the attribute is not specified, the system default quota is used. The system default is specified in the server configuration parameter store. defaultmailboxquota. Setting the configuration parameter store. quotaenforcement to 'on' causes the message store to enforce the quota.

NOTE

LDAP\_DISK\_QUOTA is the MTA option used to specify a different attribute name for this function.

## Example

mailQuota: 4G

or for the system default quota:

mailQuota:

### OID

2.16.840.1.113730.3.1.21

## mailRejectText

## Origin

Sun ONE Messaging Server 5.2

#### Syntax

ces, multi-valued

#### **Object Classes**

inetMailGroup

#### Definition

The first line of text stored in the first value of this attribute is saved. This text is returned if any of the authentication attributes cause the message to be rejected. Since text can appear in SMTP responses, the value is limited to US-ASCII characters in order to comply with messaging standards.

#### NOTE

LDAP\_REJECT\_TEXT is the MTA option used to specify a different attribute name for this function.

#### Example

OID

**TBD** 

# mail Routing Address

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single valued

## **Object Classes**

inetLocalMailRecipient

## **Definition**

Used together with mailHost to determine whether or not the address should be acted upon at this time or forwarded to another system.

NOTE

LDAP\_ROUTING\_ADDRESS is the MTA option used to specify a different attribute name for this function.

## Example

OID

2.16.840.1.113730.3.1.24

# mailRoutingHosts

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, multi-valued

## **Object Classes**

mailDomain

#### Definition

Fully qualified host name of the MTA responsible for making routing decisions for users in this (and all contained) domain(s). Unspecified attribute implies all MTAs must route messages for the users/groups of this (and contained) domain(s).

When a domain is found to be nonlocal, the use of this attribute depends on the value of the MTA option ROUTE TO ROUTING HOST:

- If the value is zero (0), which is the default setting, the attribute was checked as part of the \$\* rewrite rule. With a nonlocal domain, the \$\* rewrite rule fails and no further use is made of this attribute's values. The remaining rewrite rules determine the handling of the domain.
- If the value of the option is one (1), then the first value of this attribute that the MTA receives is installed as the source route in the address. And, all addresses associated with the domain are routed to that host.

Since this attribute is multi-valued and the first value the MTA "sees" will be chosen when the option is set to 1, it might be tempting to assume that you can direct the order in which these mail hosts will be used; that is, you might assume you can do a sort of load balancing by ordering the various values of this attribute. But, LDAP does not guarantee that attribute value ordering is preserved, so the first value seen by the MTA might be any of the attribute's values, not necessarily the first one in the LDAP entry.

You can implement load balancing with a set of MX records for each of the routing host names. Do not attempt to do it with the ordering of this attribute's values.

LDAP\_DOMAIN\_AATR\_ROUTING\_HOSTS is the MTA option used to specify a different attribute name for this function.

## Example

mailRoutingHosts: mail.siroe.com

#### OID

2.16.840.1.113730.3.1.759

## mailRoutingSmartHost

#### Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis, single-valued

### **Object Classes**

mailDomain

#### Definition

Fully qualified host name, or domain-literal IP address, of a mail server responsible for handling mail for users not found in the local directory. Messages sent to users not found in the messaging server's directory are forwarded to the mail server specified in this attribute. This is useful when making a transition from one mail system to another and all users have not yet been moved over to the messaging server directory. An empty or missing attribute implies the local MTA is responsible for routing and delivering all messages for users in that domain.

This attribute is used by the system only if the domain it cares about is listed in the attribute, otherwise, it is ignored.

NOTE

LDAP\_DOMAIN\_ATTR\_SMARTHOST is the MTA option used to specify a different attribute name for this function.

## Example

mailRoutingSmartHost: mail.siroe.com mailRoutingSmartHost: 129.148.12.141

OID

2.16.840.1.113730.3.1.760

## mailSieveRuleSource

#### Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis, multi-valued

#### Object Classes

inetMailUser

#### Definition

SIEVE filters are not supported with iPlanet Delegated Administrator for Messaging. Use this with Sun ONE LDAP Schema v. 2 and Sun ONE Identity Server.

The attribute contains a SIEVE rule (RFC 3028 compliant) used to create a message filter script for a user entry. This attribute can be either single-valued, with the rule containing the complete SIEVE script, or multi-valued, with each rule containing an independently valid piece of the SIEVE script. When there are multiple values, the Web filter construction interface combines the rules into a single SIEVE script using an ordering parameter (Order) found in a #Rule Info: comment.

#### NOTE

Note that when the value of Order is a negative number, the value is ignored, and the rule is processed with other unordered SIEVE rules for this entry, but when the value of Order is zero, the rule is disabled and not processed at all.

The script is applied when a message is ready to be enqueued to the delivery channel. Though the SIEVE script is created while the MTA is expanding aliases, it is not used until after the resulting delivery addresses have been expanded and are being sent to the ims-ms, native, autoreply or pipe channels.

A script has the following form:

```
require ["fileinto", "reject"];
# $Rule Info: Order=(1-infinity, or 0 for disabled)
Template=(template-name) Name=(rule name)
if header :is "Sender" "owner-ietf-mta-filters@imc.org"
{ fileinto "filter"; # move to "filter" folder }
if header :is "Subject" "SPAM!"
{ delete }
```

## MTA Option

The MTA option used to name a different attribute for this function is LDAP FILTER.

### Example

```
Put your file on a server and send me the URL.
Thank you. # Discard message, send reply message.}
if header :contains "Sender" "barkley@sesta.com
    { fileinto complaints.refs # File message}
```

#### OID

2.16.840.1.113730.3.1.775

## mailSMTPSubmitChannel

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

inetMailUser

#### Definition

Most commonly, this attribute is a factor involved in setting up guaranteed message delivery, or in setting up other special classes of service. When defined, this attribute tells the MTA to consider the channel named by this attribute to be the effective submission channel, if the SMTP AUTH is successful.

#### Example

```
mailSMTPSubmitChannel: tcp_tas
```

#### OID

2.16.840.1.113730.3.1.776

## mailUserStatus

### Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis, single-valued

### **Object Classes**

inetMailUser

#### Definition

Stores one of the following mail user status (missing value implies status is inactive):

Table 3-16 Mail User Status

Status Value	Description	
active	Normal state. If inetUserStatus is also active, then mail is processed as per the values stored in other user attributes (such as mailDeliveryOption, mailSieveRuleSource, and so on). If not set to active, the status from inetUserStatus takes precedence. Other status attributes taken into consideration are inetDomainStatus and mailDomainStatus. If the combination of inetDomainStatus and mailDomainStatus permits mail delivery and access for the domain, the user state is determined from inetUserStatus and mailUserStatus.	
inactive	The user's mail account is inactive. A transient failure is returned to the sending MTA.	
deleted	User's mail account is marked deleted. A permanent failure is returned to the sending MTA and the user's mail account is a candidate for cleanup by the purge utility. User access to mailbox is blocked.	
hold	User's mail is sent to the hold queue and access to the mailbox over IMAP, POP, and HTTP is disallowed. MTA and Message Access Servers on the store server must comply with this requirement. This setting overrides any other mailDeliveryOption settings.	
overquota	The MTA will not deliver mail to a mailbox with this status.	

Missing value implies status is active. An illegal value is treated as inactive.

There are four status attributes that mail services look at and which are evaluated in this order: inetDomainStatus, mailDomainStatus, inetUserStatus, and mailUserStatus. The rule is: the first of these attributes that is set to something other than active takes precedence over all the others.

NOTE

 ${\tt LDAP\_USER\_STATUS} \ is \ the \ MTA \ option \ used \ to \ specify \ a \ different \ attribute \ name \ for \ this \ function.$ 

## Example

mailUserStatus: active

## OID

2.16.840.1.113730.3.1.778

## maxPabEntries

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

int, single-valued

## Object Classes

ipUser

#### Definition

Specifies the maximum number of personal address book entries users are permitted to have in their personal address book store. A value of -1 implies there is no limit. If this attribute is not present then the system default specified in the personal address book configuration is used.

### Example

maxPabEntries: 1000

#### OID

2.16.840.1.113730.3.1.705

## memberOf

## Origin

iPlanet Messaging Server 5.0, deprecated in Sun ONE Messaging Server 6.0 for inetUser. Sun ONE Identity Server

#### **Syntax**

dn. multi-valued

## **Object Classes**

inetAdmin, inetUser

## Definition

For Sun ONE LDAP Schema v.2, this attribute decorates inetAdmin, and specifies the DN of an assignable dynamic group to which a user belongs. It is used as the default well-known filtered attribute used in conjunction with mgrpDeliverTo to search for assignable dynamic group members.

This attribute is deprecated for inetUser in Sun ONE Messaging Server 6.0 and is likely to be removed from the inetUser object class in future versions of Sun ONE schema.

For Sun ONE LDAP Schema v.1, this attribute specifies the DN of a mailing list to which a user belongs, indicating static group membership as a backpointer.

## Example

memberOf: cn=Administrators,ou=groups o=sesta.com,o=basedn

#### OID

1.2.840.113556.1.2.102

## memberOfPAB

## Origin

iPlanet Messaging Server 5.0

## Syntax

cis. multi-valued

#### **Object Classes**

pabPerson, pabGroup

#### Definition

The unique name (un) of the personal address book(s) in which this entry belongs.

## Example

memberOfPAB:addressbook122FA7

#### OID

2.16.840.1.113730.3.1.718

## memberOfPABGroup

#### Origin

iPlanet Messaging Server 5.0

#### Syntax

cis. multi-valued

## **Object Classes**

pabPerson

#### Definition

Unique name of the personal group(s) in which this user belongs.

## Example

memberOfPabGroup:testgroup15577F2D

#### OID

2.16.840.1.113730.3.1.719

## memberURL

## Origin

iPlanet Messaging Server 5.2

## **Syntax**

ces, multi-valued

## **Object Classes**

inetMailGroup

#### Definition

A list of URLs, which, when expanded, provides a list of mailing list member addresses.

This is the preferred way to specify a dynamic mailing list. Alternately, you can use mgrpDeliverTo.

The MTA option used to override this attribute's value is LDAP\_GROUP\_URL2.

## Example

memberURL:ldap://cn=jdoes, o=sesta.com

#### OID

2.16.840.1.113730.3.1.198

## mgrpAddHeader

## Origin

**Netscape Messaging Server** 

## **Syntax**

ces, multi-valued

## **Object Classes**

inetMailGroup

#### Definition

Each attribute value specifies a header field that is to be added to the message header if it is present.

For the MTA, the values of these attributes are headers, which are used to set header-trimming ADD options.

NOTE

LDAP\_ADD\_HEADER is the MTA option used to specify a different attribute name for this function.

## Example

mgrpAddHeader:Reply-To: thisgroup@sesta.com

## OID

2.16.840.1.113730.3.1.781

# mgrp Allowed Broad caster

## Origin

iPlanet Messaging Server 5.0

#### **Syntax**

ces, multi-valued

## **Object Classes**

inetMailGroup

#### Definition

Identifies mail users allowed to send messages to the mail group. The Messaging Server expects this attribute to contain either a distinguished name or an RFC822address using an LDAP URI or a mailto address (see example). If a distinguished name is used, it must represent a mailable entry or entries of type group or groupOfUniqueNames. (That is, the group entry must contain an email address in one of the following attributes: mail, mailAlternateAddress, mailEquivalentAddress.) If no instances of this attribute exist on the inetMailGroup entry, then there are no restrictions on who can send messages to the mail group unless the mgrpAllowedDomain and mgrpDisallowedDomain attributes are used.

If multi-valued, each URL is expanded into a list of addresses and each address is checked against the current envelope "from" address. The message is allowed if there is a match.

To specify that only the members of this group can post to the group, use the group name as the value of the attribute.

If none of the attribute values is a valid URL, or none of the members of the group specified in the attribute value have a valid URL, then the message will bounce.

NOTE

LDAP\_AUTH\_URL is the MTA option used to specify a different attribute name for this function.

## Example

mgrpAllowedBroadcaster: ldap://uid=bjensen,o=siroe.com
mgrpAllowedBroadcaster:mailto:group1@siroe.com

## OID

2.16.840.1.113730.3.1.22

## mgrpAllowedDomain

## Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis, multi-valued

### **Object Classes**

inetMailGroup

#### Definition

Identifies domains (including subdomains) from which users are allowed to send messages to the mail group. If no instances of this attribute exist on the <code>inetMailGroup</code> entry, then there are no restrictions on who can send messages to the mail group unless the <code>mgrpAllowedBroadcaster</code>,

mgrpDisallowedBroadcaster, and mgrpDisallowedDomain attributes are used.

## NOTE

LDAP\_AUTH\_DOMAIN is the MTA option used to specify a different attribute name for this function.

## Example

mgrpAllowedDomain:siroe.com

This matches any user sending from \*.siroe.com.

#### OID

2.16.840.1.113730.3.1.23

## mgrpAuthPassword

## Origin

iPlanet Messaging Server 5.0

#### **Syntax**

ces, single-valued

#### **Object Classes**

inetMailGroup

#### Definition

Specifies a password needed to post to the list.

The presence of this attribute forces a reprocessing pass. As the message is enqueued to the reprocessing channel, the password is taken from the header and placed in the envelope. Then, while reprocessing, the password is taken from the envelope and checked against this attribute. Only passwords that are actually used are removed from the header field.

This allows for routing to the moderator in the event of a password failure.

NOTE

LDAP\_AUTH\_PASSWORD is the MTA option used to specify a different attribute name for this function.

## Example

#### OID

2.16.840.1.113730.3.1.783

## mgrpBroadcasterPolicy

## Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

## **Object Classes**

inetMailGroup

#### Definition

Policy for determining allowed broadcaster. It specifies the level of authentication required to access the list of broadcaster addresses. The allowed values are:

- AUTH\_REQ, SMTP\_AUTH\_REQUIRED
  - In order to post to the list, the sender must be authenticated using the SMTP AUTH command.
- PASSWORD\_REQUIRED, PASSWD\_REQUIRED, PASSWD\_REQ
  - All values mean the password to the broadcaster list, specified by the mgrpAuthPassword attribute, must appear in an Approved: header field in the message.
- NO\_REQUIREMENTS

This value means no special requirements apply.

### NOTE

LDAP\_AUTH\_POLICY is the MTA option used to specify a different attribute name for this function.

### Example

mgrpBroadcasterPolicy:AUTH\_REQ

#### OID

2.16.840.1.113730.3.1.3

## mgrpDeliverTo

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

ces, multi-valued

## **Object Classes**

inetMailGroup

#### Definition

Used as an alternative method of specifying mail group membership. This can be used to create a dynamic mailing list.

The preferred attribute to use for specifying dynamic mail group is memberURL.

The values of this attribute are a list of URLs, which, when expanded, provides mailing list member addresses.

Messaging Server expects this attribute to contain an LDAP URL using the format described in RFC 1959. Any entries returned by the resulting LDAP search are members of the mailing group. There is a hard limit on the length of the search filter of 1024 bytes.

## NOTE

LDAP\_GROUP\_URL1 is the MTA option used to specify a different attribute name for this function.

### Example

This example returns all users in the United States Accounting department for Sesta corporation.

```
mgrpDeliverTo: ldap:///ou=Accounting.o=Sesta.c=US??sub?
(&(objectClass=inetMailUser)(objectClass=inetOrgPerson))
```

#### OID

2.16.840.1.113730.3.1.25

## mgrpDisallowedBroadcaster

### Origin

iPlanet Messaging Server 5.0

## **Syntax**

ces. multi-valued

### Object Classes

inetMailGroup

#### Definition

Identifies mail users not allowed to send messages to the mail group. If no instances of this attribute exist on the inetMailGroup entry, then there are no restrictions on who can send messages to the mail group unless the mgrpAllowedDomain and mgrpDisallowedDomain attributes are used.

Messaging Server expects this attribute to contain either a distinguished name or an RFC822address. If a distinguished name is used, it must represent a mailable entry or entries of type group or groupOfUniqueNames. (That is, the group entry must contain an email address in one of the following attributes: mail, mailAlternateAddress, mailEquivalentAddress.) The distinguished name must be represented in the form of an LDAP URL as described in RFC 1959.

If multi-valued, each URL is expanded into a list of addresses and each address is checked against the current envelope "from" address. The message is disallowed if there is a match.

#### NOTE

LDAP CANT URL is the MTA option used to specify a different attribute name for this function.

## Example

mgrpDisallowedBroadcaster: ldap:///uid=bjensen, o=sesta.com

mgrpDisallowedBroadcaster: mailto:sys50@sesta.com

#### OID

2.16.840.1.113730.3.1.785

## mgrpDisallowedDomain

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, multi-valued

## **Object Classes**

inetMailGroup

## Definition

Identifies domains from which users are not allowed to send messages to the mail group. This attribute is a private extension used by Messaging Server to manage mailing lists. If this attribute exists, then messages from listed domains are rejected. If no instances of this attribute exist on the inetMailGroup entry, then there are no restrictions on who can send messages to the mail group unless the mgrpAllowedBroadcaster, mgrpDisallowedBroadcaster, and mgrpAllowedDomain attributes are used.

#### NOTE

LDAP\_CANT\_DOMAIN is the MTA option used to specify a different attribute name for this function.

## Example

mgrpDisallowedDomain:sesta.com

## OID

2.16.840.1.113730.3.1.784

## mgrpErrorsTo

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

ces, single-valued

## Object Classes

inetMailGroup

#### Definition

Recipient of error messages generated when messages are submitted to this list. Recipient's address can be specified using the mailto syntax, which includes an RFC 822 email address preceded by the keyword "mailto:" or simply an RFC 822 email address. Also supports LDAP URL syntax. However, if an LDAP URL is used, it must be one that produces a single address.

The envelope originator (MAIL FROM) address is set to the value of this attribute.

NOTE

LDAP\_ERRORS\_TO is the MTA option used to specify a different attribute name for this function.

#### **Examples:**

```
Example 1: mgrpErrorsTo:mailto:jordan@siroe.com
Example 2: mgrpErrorsTo:
ldap://uid=ofanning,ou=people,o=siroe.com,o=isp
```

#### OID

2.16.840.1.113730.3.1.26

## mgrpModerator

### Origin

iPlanet Messaging Server 5.0

## **Syntax**

ces, multi-valued

## **Object Classes**

inetMailGroup

#### Definition

LDAP URI or mailto URL identifying the moderators allowed to submit messages to this list. Only those messages that are submitted by the moderator are sent to the members of this list. Messages submitted by others are forwarded to the moderators for approval and resubmitting.

The URLs given as the value of this attribute are expanded into a series of addresses, and then compared with the envelope "from" address. If there is a match, group processing continues. If there is no match, the value of this attribute becomes the group URL, any list of RFC 822 addresses or DNs associated with the group is cleared, the delivery options for the group are set to "members," and there is no further group processing for the failed URL (subsequent group attributes are ignored).

#### NOTE

LDAP\_MODERATOR\_URL is the MTA option used to specify a different attribute name for this function.

## Example

mgrpModerator: mailto:jordan@sesta.com

## OID

2.16.840.1.113730.3.1.33

## mgrpMsgMaxSize

#### Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis, single-valued

#### **Object Classes**

inetMailGroup

#### Definition

Maximum message size in bytes that can be sent to the group. Messaging Server expects zero or one instance of this attribute to exist for every mailGroup entry. If no entry exists, then no size limit is imposed on mail to the group.

This attribute is obsolete, but still supported for backwards compatibility. Use mailMsgMaxBlocks instead.

**NOTE** 

LDAP\_ATTR\_MAXIMUM\_MESSAGE\_SIZE is the MTA option used to specify a different attribute name for this function.

## Example

mgrpMsgMaxSize:8000

OID

2.16.840.1.113730.3.1.3

# mgrpMsgPrefixText

## Origin

Not implemented.

#### Syntax

UTF-8 text, single-valued

## **Object Classes**

inetMailGroup

#### Definition

Specifies the text to be added to the beginning of the message text. You must supply the formatting. That is, you must insert CRLF where they belong in the text.

NOTE

LDAP\_PREFIX\_TEXT is the MTA option used to specify a different attribute name for this function.

## Example

OID

**TBD** 

## mgrpMsgRejectAction

## Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis, single-valued

## **Object Classes**

inetMailGroup

#### Definition

Identifies the action to be taken when a email sent to a mail group is rejected. The Messaging Server may reject mail for the following reasons:

- It is received from an unauthorized domain (as defined by the mgrpAllowedDomain attribute).
- It is received from an mail address that is not a member of the mgrpAllowedBroadcaster attribute.
- It is larger than the size permitted on mgrpMsgMaxSize.

This attribute takes two values: reply and toModerator:

reply – The system produces an SMTP error, which is also the default if the attribute is not set. The text of the failure notice is stored in the mgrpMsgRejectText attribute.

toModerator – The mail is forwarded to the moderator for processing. The moderator is identified by the mgrpModerator attribute.

#### NOTE

LDAP\_REJECT\_ACTION is the MTA option used to specify a different attribute name for this function.

#### Example

mgrpMsgRejectAction: reply

#### OID

2.16.840.1.113730.3.1.28

## mgrpMsgRejectText

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

inetMailGroup

#### Definition

Specifies the error text to use int he event of a group access failure. Because this text may appear in SMTP responses, this restricts the text to a single line of US-ASCII. This is implemented by reading only the first line of text in this attribute and using it only if it contains no 8-bit characters. (This is a limitation of the SMTP protocol.)

## Example

#### OID

2.16.840.1.113730.3.1.29

# mgrpMsgSuffixText

#### Origin

Not implemented.

#### Syntax

UTF-8 text, single valued

#### **Object Classes**

inetMailGroup

## Definition

Specifies the text to be appended to the text message. You must supply the formatting. That is, you must insert any CRLFs (carriage return, line feeds) that belong in the text.

#### NOTE

LDAP\_SUFFIX\_TEXT is the MTA option used to specify a different attribute name for this function.

### Example

OID

**TBD** 

## mgrpNoDuplicateChecks

## Origin

iPlanet Messaging Server 5.0, not implemented going forward for iPlanet Messaging Server 5.2

## **Syntax**

cis, single-valued

## **Object Classes**

inetMailGroup

## Definition

This attribute is no longer supported. Duplicate checking is controlled by characteristics of the lists themselves. Some lists combine and some lists don't.

Old definition: Prevents Messaging Server from checking for duplicate delivery to members of the mail group. Prevents multiple deliveries if a user is on multiple lists. No means the system checks for duplicate delivery. Yes means the system does not check for duplicate delivery.

## Example

mgrpNoDuplicateChecks: yes

## OID

2.16.840.1.113730.3.1.789

## mgrpRemoveHeader

#### Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis. multi-valued

## **Object Classes**

inetMailGroup

#### Definition

Each attribute value specifies a header field that is to be removed from the message header, if present.

Turns the headers specified into header trimming MAXLINES=-1 options.

NOTE

LDAP\_REMOVE\_HEADER is the MTA option used to specify a different attribute name for this function.

## Example

#### OID

2.16.840.1.113730.3.1.801

## mgrpRequestTo

This attribute has been removed from the schema. It is no longer supported. It only worked for dirsync mode, which was deprecated in iPlanet Messaging Server 5.2.

# mgrpRFC822MailMember

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, multi-valued

## **Object Classes**

inetMailGroup

#### Definition

Identifies recipients of mail sent to mail group. Mail sent to both this attribute and uniqueMember attributes are not members of the mixed-in groupOfUniqueNames. This attribute represents mail recipients that cannot be expressed as distinguished names, or who are to be sent mail from this group but who do not have the full privileges of a unique group member. Messaging Server expects this attribute to contain RFC 822 mail addresses. Generally used for group members who are not in the local directory.

For backwards compatibility, rfc822MailMember is also supported. You can use either one or the other of these attributes in any given group, but not both.

NOTE

LDAP\_GROUP\_RFC822 is the MTA option used to specify a different attribute name for this function.

### Example

mgrpRFC822MailMember:bjensen@siroe.com

## OID

2.16.840.1.113730.3.1.30

## msgVanityDomain

#### Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

msqVanityDomainUser

#### Definition

This attribute and the object class using it are deprecated in the current release, and may not be supported in future releases. Sites should stop using this feature and consider migrating current vanity domains to hosted domains.

#### Example

## OID

2.16.840.1.113730.3.1.799

## multiLineDescription

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

inetMailUser

#### Definition

Detailed description of the distribution list. A dollar sign ("\$") creates a new line.

## Example

multiLineDescription:People who like cats. \$And are ambivalent about people.

## OID

1.3.6.1.4.1.250.1.2

## nickName

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

pabPerson, pabGroup

#### Definition

Identifies the short name used to locate a pabPerson or a pabGroup entry.

## **Example**

nickname:Nick

#### OID

2.16.840.1.113730.3.1.720

## nswcalDisallowAccess

## Origin

Netscape<sup>™</sup> Calendar Hosting Server

## **Syntax**

cis, single

## **Object Classes**

icsCalendarUser

#### Definition

Lists the calendar protocols not allowed to be used by this user.

## Example

## OID

2.16.840.1.113730.3.1.539

## nswmExtendedUserPrefs

#### Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis, multi-valued

## **Object Classes**

inetMailUser

#### **Definition**

This attribute holds the pairs that define Messenger Express preferences such as sort order, Mail From address, and so on. Each instance of this attribute is the tuple <code>pref\_name=pref\_value</code>. This is a proprietary syntax and the example below is for illustrative purposes only.

#### Example

```
Example 1: nswmExtendedUserPrefs: meColorSet=4
Example 2: nswmExtendedUserPrefs: meSort=r
Example 3: nswmExtendedUserPrefs: meAutoSign=True
Example 4: nswmExtendedUserPrefs: meSignature=Otis
Fanning$ofanning@sesta.com
Example 5: nswmExtendedUserPrefs: meDraftFolder=Drafts
```

## OID

2.16.840.1.113730.3.1.520

0

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single valued

## **Object Classes**

pabPerson

#### **Definition**

Name of the user's company or organization. Abbreviation of organizationName.

## Example

```
organizationName:Company22 Incorporated
o:Company22 Incorporated
```

#### OID

2.5.4.10

# objectClass

Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis

## **Object Classes**

inetAdmin, organization

### **Definition**

Specifies the objects for this object class.

## **Example**

objectClass:person

#### OID

2.5.4.0

# organizationName (see o)

# organizationUnitName (see ou)

## ou

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single valued

## **Object Classes**

organizationalUnit,pabPerson

## **Definition**

Name of the organization unit to which the user belongs. Abbreviation for organizationUnitName.

## Example

organizationUnitName:docs

or

ou:docs

## OID

2.16.840.1.113730.3.1.722

## owner

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

dn, single-valued

## **Object Classes**

inetOrgPerson

## **Definition**

Identifies the distinguished name (DN) of the person or group with administrative privileges over the entry.

## Example

owner: cn=John Smith,o=Sesta,c=US

## OID

2.5.4.32

# pabURI

## Origin

iPlanet Messaging Server 5.0

## **Syntax**

cis, single-valued

## **Object Classes**

ipUser

#### Definition

LDAP URI specifying the container of the personal address book entries for this user. It takes the following form: ldap://server:port/container\_dn, where:

- server Host name of the personal address book LDAP server.
- *port* Port of the personal address book LDAP server.
- container\_dn DN of the subtree where all PAB entries for the user are created.

### Example

pabURI:

ldap://ldap.siroe.com:389/ou=ed,ou=people,o=sesta.com,o=isp,o=pab

## OID

2.16.840.1.113730.3.1.703

## parentOrganization

## Origin

Sun ONE Messaging Server 6.0, Sun ONE Calendar Server 6.0

## **Syntax**

cis, single-valued

## **Object Classes**

sunManagedSubOrganization

#### Definition

Specifies the logical parent of a suborganization. The value of this is the DN of the parent organization or parent suborganization.

## Example

parentOrganization:o=sesta,o=com,o=internet

## OID

## postalAddress

## Origin

**LDAP** 

## **Syntax**

cis

## **Object Classes**

icsCalendarResource, organization, organizationalUnit

#### **Definition**

Identifies the entry's mailing address. This field is intended to include multiple lines. When represented in LDIF format, each line should be separated by a dollar sign (\$).

To represent an actual dollar sign ("\$") or back slash ("\") within this text, use the escaped hex values, \24 and \5c respectively. For example, to represent the string:

```
The dollar ($) value can be found
in the c:\cost file.
```

## provide the string:

The dollar( $\setminus$ 24) value can be found\$in the c: $\setminus$ 5ccost file.

#### Example

```
postalAddress:123 Oak Street$Anytown, CA$90101
```

#### OID

2.5.4.16

# preferredLanguage

## Origin

iPlanet Messaging Server 5.0, iPlanet Calendar Server 5.1, Sun ONE Directory Server

## **Syntax**

RFC 2798, cis, single-valued

### **Object Classes**

icsCalendarUser, inetMailGroup, inetOrgPerson, iPlanetPreferences, mailDomain

#### Definition

Preferred written or spoken language for a person. The value for this attribute should conform to the syntax for HTTP Accept-Language header values.

Messaging Server uses this attribute to figure the locale. It does not use the locale specified with iPlanetPreferences.

Also used by Sun ONE Identity Server in user LDAP entries to store a user's preferred language. Note that only Sun ONE Identity Server uses the iplanetPreferences object class to host this attribute.

Table 3-17 lists the supported language strings:

 Table 3-17
 Language Strings for preferredLanguage Attribute

Language String	Language
de	German
en	English
es	Spanish
fr	French
ja	Japanese
ko	Korean
zh-CN	Chinese - People's Republic of China
zh-TW	Chinese - Taiwan

## **Example**

preferredLanguage:en

## OID

2.16.840.1.113730.3.1.39

# preferredMailHost

#### Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis, single-valued

# **Object Classes**

mailDomain

### Definition

Used by Sun ONE Messaging Server Delegated Administrator with Sun ONE LDAP Schema v.1 only.

Used to set the mailHost attribute of newly created users and groups in this mail domain.

# Example

preferredMailHost:mail.siroe.com

#### OID

2.16.840.1.113730.3.1.761

# preferred Mail Message Store

#### Origin

iPlanet Messaging Server 5.0

# **Syntax**

cis, single-valued

# **Object Classes**

mailDomain

# Definition

Used by Sun ONE Messaging Server Delegated Administrator for Sun ONE LDAP Schema v.1 only.

Used to set the mailMessageStore attribute of newly created users. If missing, Delegate Administrator leaves the mailMessageStore attribute empty and the access server assumes that the user's mailbox is in the default partition of the server instance.

# Example

preferredMailMessageStore: primary

# OID

2.16.840.1.113730.3.1.762

# seeAlso

# Origin

LDAP

# **Syntax**

dn

# **Object Classes**

groupOfUniqueNames, organization, organizationalUnit

# Definition

Identifies another LDAP entry that may contain information related to this entry.

# Example

```
seeAlso: cn=Quality Control
Inspectors,ou=manufacturing,o=Company22, c=US
```

#### OID

2.5.4.34

# sn

# Origin

**LDAP** 

# **Syntax**

cis

# **Object Classes**

icsCalendarUser

# **Definition**

Identifies the entry's surname, also referred to as last name or family name.

# Example

surname: jones

OID

2.5.4.4

# telephone Number

# Origin

**LDAP** 

# **Syntax**

tel

# **Object Classes**

domain, organization, organizationalUnit

# **Definition**

Identifies the entry's phone number.

# Example

telephoneNumber:800-555-1212

# OID

2.5.4.20

# uid

# Origin

iPlanet Calendar Server 5.0, iPlanet Messaging Server 5.0

# **Syntax**

cis, single-valued

# **Object Classes**

icsCalendarResource, icsCalendarUser

#### Definition

Identifies the unique identifier for this user or resource within its relative namespace. All valid user and resource entries must have a uid attribute. Group entries may have a uid.

For Messaging Server, the uid is used to generate the user address to pass to the delivery channel. If a user entry does not have a uid attribute, the entry is ignored. If multiple uid attributes exist in an entry, only the first one is used. The MTA used to override this attribute's value is LDAP\_UID.

# Example

uid:jdoe

#### OID

0.9.2342.19200300.100.1.1

# un

### Origin

iPlanet Messaging Server 5.0

#### Syntax

cis, single-valued

# **Object Classes**

pabPerson, pabGroup, pab

#### Definition

Unique name assigned to PAB entry. This is also the naming attribute for entries created by this object class and is used to form the DN of all PAB entries, irrespective of the type (pab, pabPerson, or pabGroup).

#### Example

un:Nick

#### OID

2.16.840.1.113730.3.1.717

# uniqueMember

# Origin

iPlanet Messaging Server 5.0

# **Syntax**

dn, multi-valued

# **Object Classes**

groupOfUniqueNames

#### Definition

Identifies a member of a static group. Each member of the group is listed in the group's LDAP entry using this attribute.

# **Example**

```
uniqueMember: uid=jdoe,ou=People,o=sesta.com,o=basedn
uniqueMember: uid=rsmith,ou=People,o=sesta.com,o=basedn
```

#### OID

2.5.4.50

# userId (see uid)

# userPassword

# Origin

iPlanet Messaging Server 5.0

# **Syntax**

bin, single-valued

Even though RFC 2256 defines this attribute as multi-valued, for Sun ONE products, only one value is allowed.

#### **Object Classes**

inetUser, domain, organization, organizationalUnit

#### Definition

This attribute identifies the entry's password and encryption method in the following format:

{encryption method}encrypted password

Transfer of cleartext passwords is strongly discouraged where the underlying transport service cannot guarantee confidentiality. Transfer of cleartext may result in disclosure of the password to unauthorized parties.

# Example

userPassword: { sha } FTSLQhxXpA05

### OID

2.5.4.35

# vacationEndDate

### Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis, single-valued

# **Object Classes**

userPresenceProfile

#### **Definition**

Vacation end date and time. Date is in the following format: YYYYMMDDHHMMSSZ; where YYYY is the four digit year, MM is the two digit month, DD is the two digit day, HH is the two digit hour, and SS is the two digit second. Time is normalized to GMT. Z is the character Z.

When the current date falls outside the range of dates specified by the attributes <code>vacationStartDate</code> and <code>vacationEndDate</code>, then any delivery options (in the DELIVERY\_OPTIONS list) prefixed with "^" are removed from the active set of options. For example, if one of the DELIVERY\_OPTIONS is "^\*autoreply" and today's date falls outside the vacation date range, then the option is removed from the active options list. Otherwise, the autoreply delivery option is activated.

#### Example

vacationEndDate:20000220000000Z

# OID

2.16.840.1.113730.3.1.708

# vacationStartDate

# Origin

iPlanet Messaging Server 5.0

# **Syntax**

cis, single-valued

# **Object Classes**

userPresenceProfile

# **Definition**

Vacation start date and time. Date is in the following format: YYYYMMDDHHMMSSZ; where YYYY is the four digit year, MM is the two digit month, DD is the two digit day, HH is the two digit hour, and SS is the two digit second. Time is normalized to GMT. z is the character z.

# Example

vacationStartDate:20000215000000Z

#### OID

2.16.840.1.113730.3.1.707

vacationStartDate

# Sun ONE Identity Server Classes and Attributes

This chapter describes LDAP object classes and attributes for Sun™ Open Net Environment (ONE) Identity Server implementing Sun ONE LDAP Schema v.2. The objects and attributes are listed alphabetically.

Note that the Identity Server schema is subject to change. To understand provisioning considerations, see the  $Sun\ Java^{TM}$  Enterprise System Installation Guide.

The chapter is divided into two sections:

- "Object Classes" on page 189
- "Attributes" on page 202

# **Object Classes**

This section describes the following Sun ONE Identity Server object classes:

- "iplanet-am-managed-assignable-group" on page 190
- "iplanet-am-managed-filtered-group" on page 191
- "iplanet-am-managed-filtered-role" on page 191
- "iplanet-am-managed-group" on page 192
- "iplanet-am-managed-group-container" on page 193
- "iplanet-am-managed-org-unit" on page 193
- "iplanet-am-managed-people-container" on page 194
- "iplanet-am-managed-person" on page 195

- "iplanet-am-managed-role" on page 195
- "iplanet-am-managed-static-group" on page 196
- "iplanet-am-user-service" on page 197
- "iPlanetPreferences" on page 197
- "sunISManagedOrganization" on page 198
- "sunManagedOrganization" on page 199
- "sunNameSpace" on page 199

# iplanet-am-managed-assignable-group

# Supported by

Sun ONE Identity Server

#### Definition

Specifies a dynamic group with a well-known attribute in the search filter. For Messaging Server, the well-known attribute is memberOf. The search filter is contained in the mgrpDeliverTo attribute.

# Superior Class

iplanet-am-managed-group

# **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.182

# **Required Attributes**

N/A

# **Allowed Attributes**

Inherits attributes from superior class.

# iplanet-am-managed-filtered-group

# Supported by

Sun ONE Identity Server

#### Definition

Specifies a dynamic group which can be filtered on any attribute. The search filter is set in the mgrpDeliverTo attribute.

This group is not subscribable. Do not use iplanet-am-group-subscribable for a filtered dynamic group.

### **Superior Class**

iplanet-am-managed-group

# Object Class Type

auxiliary

#### OID

2.16.840.1.113730.3.2.181

#### **Required Attributes**

N/A

#### Allowed Attributes

Inherits attributes from superior class. Note that since this group can not be subscribed to, the mail attribute should not be used with it. If present, it will be ignored.

# iplanet-am-managed-filtered-role

#### Supported by

Sun ONE Identity Server

# **Definition**

Specifies the attributes necessary to define administrator roles and their ACIs. The list of all users assigned this role is a dynamic list; that is, the list can be retrieved only by performing a search filtered by the role name. For further information on roles, see the Sun ONE Identity Server documentation at:

http://docs.sun.com

### **Superior Class**

iplanet-am-managed-role

# **Object Class Type**

auxiliary

#### OID

1.3.6.1.4.1.42.2.27.9.2.74

# **Required Attributes**

N/A

#### **Allowed Attributes**

This class inherits the attributes of its superior class, see iplanet-am-managed-role.

# iplanet-am-managed-group

# Supported by

Sun ONE Identity Server

#### Definition

This is the superior class for the various types of groups: static, assignable dynamic, and filtered dynamic. (See iplanet-am-managed-assignable-group, iplanet-am-managed-filtered-group, iplanet-am-managed-static-group.)

# **Superior Class**

top

# **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.180

# **Required Attributes**

N/A

# **Allowed Attributes**

mail, inetGroupStatus

# iplanet-am-managed-group-container

# Supported by

Sun ONE Identity Server

#### Definition

The Sun ONE Identity Server class that defines the groups container under each Sun ONE Messaging Server hosted domain.

#### **Superior Class**

top

# **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.189

# **Required Attributes**

N/A

#### **Allowed Attributes**

N/A

# iplanet-am-managed-org-unit

#### Supported by

Sun ONE Identity Server

#### Definition

This class is used by Sun ONE Identity Server to manage organizational units. It uses the same attributes as sunManagedOrganization and for all intents and purposes functions as any other organization managed by Identity Server.

Do not use this class for the domain organizations, or people and group containers in Sun ONE Messaging Server. Even though the attribute that holds the container name is organizational unit (ou), the proper Identity Server class to use is either

iplanet-am-managed-group-container, or iplanet-am-managed-people-container.

# **Superior Class**

top

# **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.186

# **Required Attributes**

N/A

#### **Allowed Attributes**

businessCategory, iplanet-am-service-status, telephoneNumber, sunOverrideTemplates, sunPreferredDomain, seeAlso

# iplanet-am-managed-people-container

# Supported by

Sun ONE Identity Server

#### **Definition**

The Sun ONE Identity Server class that defines the people container under each Sun ONE Messaging Server hosted domain.

# **Superior Class**

top

# **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.187

# **Required Attributes**

N/A

#### **Allowed Attributes**

N/A

# iplanet-am-managed-person

# Supported by

Sun ONE Identity Server

#### Definition

Specifies sunONE Identity Server attributes used to manage users.

# **Superior Class**

top

# **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.184

#### **Required Attributes**

N/A

# **Allowed Attributes**

iplanet-am-modifiable-by, iplanet-am-role-aci-description, iplanet-am-static-group-dn, iplanet-am-user-account-life

# iplanet-am-managed-role

# Supported by

Sun ONE Identity Server

#### Definition

Specifies the attributes necessary to define administrator roles and their ACIs. This is the superior class for iplanet-am-managed-filtered-role.

# **Superior Class**

top

# **Object Class Type**

auxiliary

# OID

2.16.840.1.113730.3.2.179

# **Required Attributes**

N/A

### **Allowed Attributes**

```
iplanet-am-role-aci-description, iplanet-am-role-aci-list, iplanet-am-role-any-options, iplanet-am-role-description, iplanet-am-role-managed-container-dn, iplanet-am-role-service-options, iplanet-am-role-type
```

# iplanet-am-managed-static-group

### Supported by

Sun ONE Identity Server

#### Definition

Defines a group in which there are members identified with the uniqueMember attribute. Each user named in those attributes has the memberOf attribute in their LDAP user entry.

Note that static groups can have dynamic members. In this case, the LDAP entry must also contain the <code>iplanet-am-managed-assignable-group</code> object class.

#### **Superior Class**

iplanet-am-managed-group

# **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.183

# **Required Attributes**

N/A

#### Allowed Attributes

N/A (inherits from iplanet-am-managed-group)

# iplanet-am-user-service

# Supported by

Sun ONE Identity Server

#### Definition

This class contains the Sun ONE Identity Server attributes necessary to manage user accounts.

# Superior Class

top

# **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.176

# **Required Attributes**

N/A

#### **Allowed Attributes**

```
iplanet-am-user-account-life, iplanet-am-user-admin-start-dn, iplanet-am-user-alias-list, iplanet-am-user-auth-config, iplanet-am-user-auth-modules, iplanet-am-user-failure-url, iplanet-am-user-federation-info, iplanet-am-user-federation-info-key, iplanet-am-user-login-status, iplanet-am-user-password-reset-force-reset, iplanet-am-user-password-reset-options, iplanet-am-user-password-reset-question-answer, iplanet-am-user-service-status, iplanet-am-user-success-url
```

# **iPlanetPreferences**

#### Supported by

Sun ONE Directory Server

#### Definition

Used by Sun ONE Identity Server. While Sun ONE Messaging Server does not use this object class, it is necessary for Identity Server.

Attributes for this object class hold certain preferences for this user. Specifically, the preferred language, preferred locale, and preferred time zone.

Note: Sun ONE Messaging Server does not use this object class to define the preferred language. In addition, it does not use an attribute for locale; it infers the locale from the language. Messaging Server holds the preferredLanguage attribute in inetOrgPerson.

# **Superior Class**

top

# **Object Class Type**

auxiliary

OID

#### **Required Attributes**

N/A

#### Allowed Attributes

preferredLanguage, preferredLocale, preferredTimeZone

# sunISManagedOrganization

#### Supported by

Sun ONE Calendar Server 6.0, Sun ONE Messaging Server 6.0

#### Definition

For Sun ONE LDAP Schema v.2, this is a core class for both Messaging and Calendar products doing authentication with SSO. Every physical node must contain this class, including the root suffix.

The attribute holds the fully qualified login host name.

#### Superior Class

top

# **Object Class Type**

auxiliary

OID

# Required Attributes

N/A

#### Allowed Attributes

sunOrganizationAlias

# sun Managed Organization

# Supported by

Sun ONE Calendar Server 6.0, Sun ONE Messaging Server 6.0

#### Definition

This is a core class for both Messaging and Calendar products. Every physical node must contain this class.

# **Superior Class**

top

# **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.185

# **Required Attributes**

inetDomainStatus

#### **Allowed Attributes**

sunPreferredDomain, businessCategory, sunPreferredOrganization, telephoneNumber, sunOverrideTemplates

# sunNameSpace

# Supported by

Sun ONE Identity Server

# Definition

Used for Sun ONE LDAP Schema v.2 only. Required to be present at the root of a subtree representing a namespace. Sun ONE Identity Server enforces the uniqueness attribute for namespaces.

Any organization or its subtree nodes can be designated as a namespace by extending the organization LDAP entry with this object class. Namespaces based on different unique attributes may overlap. That is, a subtree of a node designated as a namespace could also be its own namespace if the unique attributes are different. For example, the parent node could use uid to enforce uniqueness, while the child node uses the employee number.

This is a different paradigm than was used in Sun ONE LDAP Schema v.1, in which every domain was considered a unique namespace (using uid as the default unique attribute). For Sun ONE LDAP Schema v.2, all namespaces must be explicitly declared using this object class.

#### NOTE

After Sun ONE Identity Server is installed, the root-suffix node contains this object class, but not its corresponding attribute. If you want to provision more than one unique namespace for your Sun ONE Messaging Server or Sun ONE Calendar Server installation, do not add sunNameSpaceUniqueAttrs to the root-suffix node.

For more information about namespaces, see the  $Sun\ Java^{TM}\ Enterprise\ System$  Installation Guide.

#### Superior Class

top

# Object Class Type

auxiliarv

#### OID

1.3.6.1.4.1.42.2.27.9.2.29

#### Required Attributes

N/A

#### Allowed Attributes

sunNameSpaceUniqueAttrs

# sun Service Component

# Supported by

Sun ONE Calendar Server 6.0, Sun ONE Messaging Server 6.0

#### Definition

Templates are LDAP entries of this object class. Search templates are used to describe how applications should construct searches to send to the directory server in order to locate entries in the DIT.

The entry is named by its required ou attribute.

### Superior Class

top

# **Object Class Type**

auxiliary

#### OID

1.3.6.1.4.1.42.2.27.9.2.27

# **Required Attributes**

organizationalUnitName (ou)

#### Allowed Attributes

description, sunKeyValue, sunServiceId, sunSmsPriority, sunXmlKeyValue

# userPresenceProfile

# Supported by

iPlanet Messaging Server 5.0

# **Definition**

Used to store the presence information for a user.

# **Superior Class**

top

# **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.136

# **Required Attributes**

N/A

#### Allowed Attributes

vacationEndDate, vacationStartDate

# **Attributes**

This section describes the following Sun ONE Identity Server attributes:

- "associatedDomain" on page 203
- "inetGroupStatus" on page 204
- "mail" on page 115
- "iplanet-am-modifiable-by" on page 206
- "iplanet-am-role-aci-description" on page 206
- "iplanet-am-role-aci-list" on page 207
- "iplanet-am-role-any-options" on page 208
- "iplanet-am-role-description" on page 208
- "iplanet-am-role-managed-container-dn" on page 209
- "iplanet-am-role-service-options" on page 209
- "iplanet-am-role-type" on page 210
- "iplanet-am-service-status" on page 211
- "iplanet-am-static-group-dn" on page 211
- "iplanet-am-user-account-life" on page 211
- "iplanet-am-user-admin-start-dn" on page 212
- "iplanet-am-user-alias-list" on page 213
- "iplanet-am-user-auth-config" on page 213
- "iplanet-am-user-auth-modules" on page 214

- "iplanet-am-user-failure-url" on page 214
- "iplanet-am-user-federation-info" on page 215
- "iplanet-am-user-federation-info-key" on page 215
- "iplanet-am-user-login-status" on page 216
- "iplanet-am-user-password-reset-force-reset" on page 217
- "iplanet-am-user-password-reset-options" on page 217
- "iplanet-am-user-password-reset-question-answer" on page 218
- "iplanet-am-user-service-status" on page 219
- "iplanet-am-user-success-url" on page 219
- "preferredLocale" on page 220
- "preferredTimeZone" on page 220
- "sunAdditionalTemplates" on page 221
- "sunKeyValue" on page 221
- "sunNameSpaceUniqueAttrs" on page 223
- "sunOrganizationAlias" on page 223
- "sunOverrideTemplates" on page 224
- "sunPreferredDomain" on page 224
- "sunPreferredOrganization" on page 225
- "sunRegisteredServiceName" on page 226
- "sunServiceId" on page 227
- "sunSmsPriority" on page 228
- "sunXmlKeyValue" on page 228

# associatedDomain

# Origin

Sun ONE LDAP Schema 2

### Syntax

dn, multi-valued

# **Object Classes**

inetDomain, sunManagedOrganization

### Definition

Specifies the DNS domain name aliases used to lookup an organization entry.

Used when a domain subtree is being referenced by domain names in addition to the one specified in the attribute sunPreferredDomain.

# Example

```
associatedDomain:qa.sesta.com
associatedDomain:eng.sesta.com
```

OID

# inetGroupStatus

#### Origin

Sun ONE Identity Server

#### **Syntax**

cis, single-valued

# **Object Classes**

iplanet-am-managed-group

#### Definition

This is a global status for groups and overrides the status found in inetMailGroupStatus. It holds the current status of the group: active, inactive, or deleted for all services. It is used by Sun ONE Identity Server to manage groups. Status changes can be made to a group's status using the commcli interface, or by directly changing the LDAP entry for the group.

The following table lists the attribute's values and their meanings:

**Table 4-1** Status Attribute Values

Value	Description
active	The group is active and its users may use services enabled by the overlay of service-specific object classes and the service state as indicated by the particular status attribute for that service.
inactive	Group is inactive. The group users may not use any services granted by service-specific object classes. This state overrides individual service status set using the service's status attributes.
deleted	Group is marked as deleted. The group may remain in this state within the directory for some time (pending purging of deleted groups). Service requests for all groups marked as deleted will return permanent failures.

A missing value implies status is active. An illegal value is treated as inactive.

# Example

inetGroupStatus: active

OID

1.3.6.1.4.1.42.2.27.9.1.588

# iplanet-am-group-subscribable

# Origin

Sun ONE Identity Server

# **Syntax**

boolean, single-valued

#### **Object Classes**

iplanet-am-managed-group

# Definition

Specifies if users can subscribe to the group. Boolean value: true, false. Default setting is true.

If the value is true, the group can be seen, searched for and subscribed to by end users. If the value is false, the group can be seen and searched for but can not be subscribed to by end users.

Filtered groups can not be subscribed to; this attribute is ignored if found on a filtered group.

### Example

iplanet-am-group-subscribable: true

#### OID

2.16.840.1.113730.3.1.1085

# iplanet-am-modifiable-by

### Origin

Sun ONE Identity Server

### Syntax

dn, multi-valued

# **Object Classes**

iplanet-am-managed-person

#### **Definition**

This attribute lists the role-dn of the administrator who has access rights to modify this user entry. By default, the value is set to the role-dn of the administrator who created the account.

# Example

For native mode (with domain nodes on the organization tree):

```
iplanet-am-modifiable-by: cn:Top-level Admin Role, o=sesta.com
```

For compatibility mode (with domain nodes on the DC Tree):

```
iplanet-am-modifiable-by: cn=Top-level Admin Role, dc=sesta, dc=com
```

#### OID

2.16.840.1.113730.3.1.1094

# iplanet-am-role-aci-description

# Origin

Sun ONE Identity Server

#### **Syntax**

string, multi-valued

# **Object Classes**

iplanet-am-managed-person

#### Definition

Description of the ACI that belongs to this role.

### Example

### OID

2.16.840.1.113730.3.1.1081

# iplanet-am-role-aci-list

# Origin

Sun ONE Identity Server

### **Syntax**

string, multi-valued

#### Object Classes

iplanet-am-managed-role

#### Definition

The set of ACIs associated with this role. The format is a DN:ACI pair, where the DN of the entry is specified with its ACI. When deleting a role, this attribute allows for the ACIs associated with this role to be located and cleaned up properly.

#### Example

For native mode (with domain nodes on the organization tree):

```
iplanet-am-role-aci-list: o=sesta.com,o=basedn:aci:
(target="ldap://o=sesta.com,o=basedn")(targetfilter=(!(|(nsroledn=cn=Top-le
vel Admin Role,o=sesta.com,o=basedn)(nsroledn=cn=Top-level Help Desk Admin
Role,o=sesta.com,o=basedn))))(targetattr != "nsroledn")(version 3.0; acl
"Organization Admin access allow"; allow (all) roledn =
"ldap://cn=myrole,o=sesta.com,o=basedn";)
```

For compatibility mode (with domain nodes on a DC Tree):

```
iplanet-am-role-aci-list: dc=sesta,dc=com:aci:
(target="ldap:///dc=sesta,dc=com")(targetfilter=(!(|(nsroledn=cn=Top-level
Admin Role,dc=sesta,dc=com)(nsroledn=cn=Top-level Help Desk Admin
Role,dc=sesta,dc=com))))(targetattr != "nsroledn")(version 3.0; acl
"Organization Admin access allow"; allow (all) roledn =
"ldap://cn=myrole,dc=sesta,dc=com";)
```

#### OID

2.16.840.1.113730.3.1.1082

# iplanet-am-role-any-options

# Origin

Sun ONE Identity Server

#### **Syntax**

string, multi-valued

# **Object Classes**

iplanet-am-managed-role

#### Definition

Not currently used.

Example

#### OID

2.16.840.1.113730.3.1.1084

# iplanet-am-role-description

# Origin

Sun ONE Identity Server

# **Syntax**

cis. multi-valued

# Object Classes

iplanet-am-managed-role

#### Definition

An optional description of the role being defined.

# Example

iplanet-am-role-description: Top Level Admin Role

#### OID

2.16.840.1.113730.3.1.1080

# iplanet-am-role-managed-container-dn

# Origin

Sun ONE Identity Server

# **Syntax**

dn. multi-valued

### **Object Classes**

iplanet-am-managed-role

# Definition

Defines the container this role resides in.

#### Example

For example, if the role being defined administers the domain organization east:

iplanet-am-role-managed-container-dn: ou=east,o=sesta.com,o=basedn

#### OID

2.16.840.1.113730.3.1.977

# iplanet-am-role-service-options

#### Origin

Sun ONE Identity Server

# **Syntax**

string, multi-valued

# **Object Classes**

iplanet-am-managed-role

### Definition

Not currently used.

### Example

# OID

2.16.840.1.113730.3.1.1083

# iplanet-am-role-type

# Origin

Sun ONE Identity Server

# **Syntax**

string, multi-valued

# **Object Classes**

iplanet-am-managed-role

# Definition

Defines the type of role. There are three values, as shown in the following table:

Role Value	Role Names
1	Top Level Admin Role
2	General Admin Role
3	User Role

Even though this attribute is defined as multi-valued string, it is implemented in Messaging Server as if it were a single-valued integer.

# **Example**

iplanet-am-role-type: 1

#### OID

2.16.840.1.113730.3.1.1079

# iplanet-am-service-status

This attribute is aliased to sunRegisteredServiceName. Use that attribute instead.

# iplanet-am-static-group-dn

### Origin

Sun ONE Identity Server

### **Syntax**

dn. multi-valued

# Object Classes

iplanet-am-managed-group

#### Definition

Defines the DNs for the static groups this user belongs to.

### Example

For native mode (with domain nodes on the organization tree):

```
iplanet-am-static-group-dn: cn=mygroup, ou=groups, o=sesta.com
```

For compatibility mode (with domain nodes on the DC Tree):

```
iplanet-am-static-group-dn: cn=mygroup, ou=groups, dc=sesta, dc=com
```

#### OID

2.16.840.1.113730.3.1.1094

# iplanet-am-user-account-life

#### Origin

Sun ONE Identity Server

# Syntax

date string, single-valued

# Object Classes

iplanet-am-user-service

#### Definition

Specifies the account expiration date in the following format:

```
yyyy/mm/dd hh:mm:ss
```

where the first mm is for month, dd is for day, yyyy for full year (for example, 2005), hh is for the time stamp hour, the final mm is for the timestamp minutes, and ss is for the timestamp seconds.

If this attribute is present, the authentication service will disallow login if the current date has passed the specified account expiration date.

# Example

```
iplanet-am-user-account-life: 2040/12/31 23:59:59
```

#### OID

2.16.840.1.113730.3.1.976

# iplanet-am-user-admin-start-dn

#### Origin

Sun ONE Identity Server

#### **Syntax**

dn, single-valued

# Object Classes

iplanet-am-user-service

#### Definition

Specifies the starting point node (DN) displayed in the starting view of the IS Console when this administrator logs in.

# Example

```
iplanet-am-user-admin-start-dn: ou=people, o=sesta.com, o=basedn
```

#### OID

2.16.840.1.113730.3.1.1072

# iplanet-am-user-alias-list

# Origin

Sun ONE Identity Server

# **Syntax**

string, single-valued

# **Object Classes**

iplanet-am-user-service

#### Definition

Defines a list of aliases for the user.

# Example

User jdoe could have an alias of jd, johnd, or jd123456.

```
iplanet-am-user-alias-list: jd
iplanet-am-user-alias-list: johnd
iplanet-am-user-alias-list: jd123456
```

#### OID

1.3.6.1.4.1.42.2.27.9.1.59

# iplanet-am-user-auth-config

#### Origin

Sun ONE Identity Server

# **Syntax**

string, single-valued

# **Object Classes**

```
iplanet-am-user-service
```

Specifies the user authentication configuration method in an XML string. There is no default value.

# **Example**

<AttributeValuePair><Value>com.sun.identity.authentication.modules.ldap.LD
AP REQUIRED </Value></AttributeValuePair>

# OID

1.3.6.1.4.1.42.2.27.9.1.58

# iplanet-am-user-auth-modules

# Origin

Sun ONE Identity Server

# **Syntax**

string, multi-valued

# **Object Classes**

iplanet-am-user-service

#### Definition

Not currently used.

# Example

#### OID

2.16.840.1.113730.3.1.1071

# iplanet-am-user-failure-url

# Origin

Sun ONE Identity Server

# **Syntax**

string, single-valued

#### **Object Classes**

iplanet-am-user-service

#### Definition

Defines the routing taken (URL user is redirected to) if the login fails. Any valid URL can be used.

#### Example

OID

1.3.6.1.4.1.42.2.27.9.1.71

# iplanet-am-user-federation-info

# Origin

Sun ONE Identity Server

# **Syntax**

string, single-valued

# **Object Classes**

iplanet-am-user-service

#### **Definition**

For Sun ONE Identity Server internal use only. Do not use.

Specifies the user account's Federation specific information. This is managed internally by Sun ONE Identity Server's Federation Management module to store user account's Federation related information, and should not be modified outside of that module.

# Example

OID

1.3.6.1.4.1.42.2.27.9.1.74

# iplanet-am-user-federation-info-key

#### Origin

Sun ONE Identity Server

#### Syntax

string, single-valued

# **Object Classes**

iplanet-am-user-service

#### Definition

For Sun ONE Identity Server internal use only. Do not use.

Specifies the user account's Federation information key. This is managed internally by Sun ONE Identity Server's Federation Management module to store the user account's Federation information key, and should not be modified outside of that module.

# Example

#### OID

1.3.6.1.4.1.42.2.27.9.1.73

# iplanet-am-user-login-status

# Origin

Sun ONE Identity Server

# **Syntax**

string, single-valued

# **Object Classes**

iplanet-am-user-service

#### Definition

Specifies the user status. It takes two values:

- Active The user is allowed to authenticate through the Sun ONE Identity Server.
- Inactive The user is not allowed to authenticate through the Sun ONE Identity Server.

# Example

#### OID

2.16.840.1.113730.3.1.1074

# iplanet-am-user-password-reset-force-reset

# Origin

Sun ONE Identity Server

### **Syntax**

boolean, single-valued

### **Object Classes**

iplanet-am-user-service

### **Definition**

Not currently used.

Specifies whether password will be forced to be reset. Values: true, false. Defaults to false.

# Example

### OID

1.3.6.1.4.1.42.2.27.9.1.591

# iplanet-am-user-password-reset-options

# Origin

Sun ONE Identity Server

### **Syntax**

string, single-valued

### **Object Classes**

iplanet-am-user-service

### Definition

Used internally by Sun ONE Identity Server's password reset module. Do not use. Any values assigned to this attribute will be ignored.

### Example

### OID

# iplanet-am-user-password-reset-passwordChanged

# Origin

Sun ONE Identity Server

### **Syntax**

string, single-valued

### **Object Classes**

iplanet-am-user-service

#### Definition

Not used.

## Example

### OID

1.3.6.1.4.1.42.2.27.9.1.592

# iplanet-am-user-password-reset-question-answer

### Origin

Sun ONE Identity Server

### **Syntax**

string, single-valued

### **Object Classes**

iplanet-am-user-service

# **Definition**

Password question and answer used to prompt user who has forgotten their password. The format is question answer.

### Example

iplanet-am-user-password-reset-question-answer:
favorite restaurant Outback

#### OID

# iplanet-am-user-service-status

# Origin

Sun ONE Identity Server

### **Syntax**

dn, single-valued

### **Object Classes**

iplanet-am-user-service

### Definition

Specifies the status of the user for various services.

### Example

### OID

2.16.840.1.113730.3.1.1073

# iplanet-am-user-success-url

### Origin

Sun ONE Identity Server

### **Syntax**

dn, single-valued

### **Object Classes**

iplanet-am-user-service

# **Definition**

Defines the routing taken (URL the user is directed) if the login succeeds. Any valid URL can be used.

### Example

#### OID

# preferredLocale

# Origin

Sun ONE Directory Server

# **Syntax**

cis, single-valued

### **Object Classes**

iPlanetPreferences

#### Definition

Used by Sun ONE Identity Server to store user preference for locale. The values accepted by this attribute are described in the Sun ONE Identity Server Administrator's Guide, chapter 18. Some additional information on locales is located in the Sun ONE Directory Server Reference Manual.

### **Example**

preferredLocale:en-US

#### OID

2.16.840.1.113730.3.1.39

# preferredTimeZone

## Origin

Sun ONE Directory Server

### Syntax

cis, single-valued

### **Object Classes**

iPlanetPreferences

### Definition

Used by Sun ONE Identity Server to store user preference for time zone. Supported time zone names can be found in the appendix under "Standard Time Zones" on page 263.

### Example

preferredTimeZone: America/Los Angeles

OID TBD

# sunAdditionalTemplates

# Origin

Sun ONE Messaging Server 6.0, Sun ONE Calendar Server 6.0

### **Syntax**

cis. multi-valued

# **Object Classes**

inetDomain, sunManagedOrganization

### **Definition**

Specifies relative DN (RDN) sequences, that is DNs that are relative to the organization entry. Values identify entries in the configuration templates part of the ou=services tree below this organization. These are additional templates beyond those specified in the global configuration templates. These are used to specify operations private to an organization.

This attribute must appear in the top entry for this organization.

### Example

### OID

1.3.6.1.4.1.42.2.27.9.1.76

# sunKeyValue

### Origin

Sun ONE Messaging Server 6.0, Sun ONE Calendar Server 6.0

### Syntax

cis, multi-valued

#### **Object Classes**

sunServiceComponent

### Definition

Each value is a "key=value" pair, where the key is the name of the XML element. table lists the keys for search templates.

**Table 4-2** Search Template Keys

Key	Description
attrs	Attribute to retrieve from LDAP entry.
rfc2247Flag	Boolean (ture, false) that tells applications to use the RFC2247 algorithm for constructing the DN of the LDAP entry, instead of performing an LDAP search using the filter specified in the inetDomainSearchFilter attribute.
baseDN	If $rfc2247Flag$ is set to true, and if this key is present, then it must be appended to the algorithmically constructed DN in order to get the DN of the target entry.

For more information on templates and the native and compatibility mode LDAP data models, see Chapter 1, "Overview".

# Example

The following sunKeyValue attributes appear in the default search template for the native mode LDAP data model:

```
sunKeyValue: attrs=objectclass
```

sunKeyValue: attrs=ou

sunKeyValue: attrs=inetDomainStatus

The following sunKeyValue attributes appear in the default search template for compatibility mode (uses the RFC 2247 algorithm for constructing the search DN):

sunKeyValue: attrs=objectclass

sunKeyValue: attrs=ou

sunKeyValue: attrs=inetDomainStatus

sunKeyValue: rfc2247=true

sunKeyValue: baseDN=o=internet

# OID

# sunNameSpaceUniqueAttrs

# Origin

Sun ONE Messaging Server 6.0, Sun ONE Calendar Server 6.0

# **Syntax**

cis, multi-valued

### **Object Classes**

sunNameSpace

#### Definition

Stores the name of an attribute required to be unique across all entries in the subtree.

This attribute allows namespace uniqueness to be enforced. For further explanation of namespaces, see the  $Sun\ Java^{TM}$  Enterprise System Installation Guide and the object class description for sunNameSpace.

# Example

sunNameSpaceUniqueAttrs:uid
sunNameSpaceUniqueAttrs:c

#### OID

1.3.6.1.4.1.42.2.27.9.1.85

# sunOrganizationAlias

# Origin

Sun ONE Identity Server

### **Syntax**

cis, single-valued

### Object Classes

userPresenceProfile

### Definition

Sun ONE Identity Server uses this attribute for authentication. It holds the fully qualified host name for the server the user is logging into.

The format is: server.domain.

### Example

sunOrganizationAlias: seaside.siroe.com

OID

TBD

# sunOverrideTemplates

# Origin

Sun ONE Messaging Server 6.0, Sun ONE Calendar Server 6.0

# **Syntax**

cis, multi-valued

# **Object Classes**

inetDomain, sunManagedOrganization

### **Definition**

Specifies relative DN (RDN) sequences, that is DNs that are relative to the organization entry. Values identify entries in the configuration templates part of the ou=services tree below this organization. These templates override global configuration templates for searches and other operations within this organization.

This attribute must appear in the top entry for this organization.

# Example

### OID

1.3.6.1.4.1.42.2.27.9.1.77

# sunPreferredDomain

### Origin

Sun ONE Messaging Server 6.0, Sun ONE Calendar Server 6.0

### **Syntax**

cis, single-valued

### **Object Classes**

iplanet-am-managed-org-unit, sunManagedOrganization

#### Definition

Specifies the DNS domain name used to lookup an organization entry when a unique matching organization is required.

When a value for this is available, provisioners should set it so as to enable applications to look up organizations using a domain name.

The domain name value of this attribute must be unique across all organizations in the directory, including the domains named in associatedDomain.

This attribute is for use with native mode data model LDAPs only; it must not be used in DC Tree nodes.

In the native mode LDAP data model, this attribute serves the same function as inetCanonicalDomainName used to in compatibility mode. If you are running in compatibility mode, do not use this attribute.

# Example

sunPreferredDomain:sesta.com

#### OID

2.16.840.1.113730.3.1.1086

# sunPreferredOrganization

### Origin

Sun ONE Messaging Server 6.0, Sun ONE Calendar Server 6.0

### Syntax

cis, single-valued

### **Object Classes**

iplanet-am-managed-org-unit, sunManagedOrganization

#### Definition

Specifies the DNS name used to lookup an organization entry when a unique matching organization is required.

When a value for this is available, provisioners should set it so as to enable applications to look up organizations using the organization's name.

This attribute is for use with native mode data model LDAPs only; it must not be used in DC Tree nodes.

# Example

sunPreferredOrganization:sesta.com

#### OID

1.3.6.1.4.1.42.2.27.9.1.75

# sunRegisteredServiceName

### Origin

Sun ONE Identity Server

### **Syntax**

string, multi-valued

# **Object Classes**

iplanet-am-managed-org-unit, sunManagedOrganization

### Definition

Defines the set of names of the registered services. The following services are defined for Messaging Server and Calendar Server:

Service Name	Description
DomainMailService	Mail service definition for domains.
DomainCalendarService	Calendar service definition for domains.
UserMailService	Mail service definition for users.
UserCalendarService	Calendar service definition for users.
GroupMailService	Mail service definition for groups.

For informational purposes: The following services are used by Sun ONE Identity Server for authentication with SSO (Single Sign-On). These services must be registered to the root suffix node. This step is done by Identity Server as part of its installation process. The services are:

- PlanetAMAuthService
- iPlanetAMAuthLDAPService

- iPlanetAMPolicyConfigService
- iPlanetAMAuthenticationDomainConfigService
- iPlanetAMProviderConfigService

Any one can create a new service and load it into Identity Server. For information on how to do this, see the Sun ONE Identity Server documentation at:

http://docs.sun.com/

# Example

sunRegisterdServiceName: DomainMailService

#### OID

1.3.6.1.4.1.42.2.27.9.1.593

# sunServiceId

# Origin

Sun ONE Messaging Server 6.0, Sun ONE Calendar Server 6.0

### **Syntax**

cis, single valued

# Object Classes

sunServiceComponent

### Definition

The kind of template being created. For search templates, the value is StuctureUmsObjects. (At this time search templates are the only publicly defined template.)

### Example

sunServiceId:StructureUmsObjects

### OID

# sunSmsPriority

# Origin

Sun ONE Identity Server

### **Syntax**

cis, single valued

### **Object Classes**

sunServiceComponent

### **Definition**

Stores the priority of the service with respect to its siblings.

# **Example**

sunSmsPriority:

### OID

1.3.6.1.4.1.42.2.27.9.1.81

# sunXmlKeyValue

### Origin

Sun ONE Identity Server

### **Syntax**

cis, single valued

# **Object Classes**

sunServiceComponent

### **Definition**

Not currently used.

### Example

### OID

# iPlanet Delegated Administrator for Messaging Classes and Attributes

This chapter describes LDAP object classes and attributes for iPlanet Delegated Administrator for Messaging implementing Sun ONE LDAP Schema v.1. The objects and attributes are listed alphabetically.

The chapter is divided into two sections:

- "Object Classes" on page 229
- "Attributes" on page 238

# **Object Classes**

This chapter describes the following object classes used by Delegated Administrator and those object classes only used in Sun ONE LDAP Schema v.1.

- "inetDomainOrg" on page 230
- "inetMailGroupManagement" on page 231
- "inetManagedGroup" on page 231
- "nsManagedDept" on page 232
- "nsManagedDeptAdminGroup" on page 233
- "nsManagedDomain" on page 233
- "nsManagedFamilyGroup" on page 234
- "nsManagedISP" on page 235
- "nsManagedMailList" on page 235

- "nsManagedOrgUnit" on page 236
- "nsManagedPerson" on page 237
- "nsUniquenessDomain" on page 237

# inetDomainOrg

# Supported by

iPlanet Messaging Server 5.0

#### Definition

Used for Sun ONE LDAP Schema v.1. Auxiliary class for supporting a Sun ONE Delegated Manager for Messaging managed domain organization.

This object class is used in conjunction with the structural class organization to define a domain organization. A domain organization is usually created as a way of introducing hierarchy beneath a customer subtree and assigning administrators for that domain organization. To create a suborganization beneath the parent tree and designate a set of administrators for that suborganization, you would create a domain organization node by using organizationalUnit and inetDomainOrg object classes. For example, siroe.com could have a customer subtree with the DN:

ou=east,o=siroe.com,o=basedn.

How to provision a domain organization for Sun ONE LDAP Schema v.1 is described in the *iPlanet Messaging Server 5.2 Provisioning Guide*.

### Superior Class

top

# **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.132

### **Required Attributes**

N/A

### Allowed Attributes

domOrgMaxUsers, domOrgNumUsers

# inetMailGroupManagement

# Supported by

iPlanet Messaging Server 5.0

#### Definition

Used for Sun ONE LDAP Schema v.1 only. Used to extend the base entry created by <code>groupOfUniqueNames</code>. <code>inetMailGroupManagement</code> is used to store attributes for managing a distribution list by using Delegated Administrator for Messaging. This object class is used in conjunction with <code>inetMailGroup</code> and <code>inetLocalMailRecipient</code>. The attributes in this object class have no operational impact on the messaging server's MTA or message access/message store.

# Superior Class

top

# **Object Class Type**

auxiliary

### OID

2.16.840.1.113730.3.2.149

### Required Attributes

N/A

#### Allowed Attributes

mgrpAddHeader, mgmanDenySubscribe, mgmanGoodbyeText, mgmanHidden, mgmanIntroText, mgmanJoinability, mgmanMemberVisibility, mgmanVisibility, multiLineDescription

# inetManagedGroup

### Supported by

iPlanet Messaging Server 5.0

## Definition

Used to define a managed group. If a managed group is just a department or family group, then the structural class to use is top, but it can also be used to make a statically defined group (from <code>groupOfUniqueNames</code>) and make that a managed group.

### **Superior Class**

top

# **Object Class Type**

auxiliary

### OID

2.16.840.1.113730.3.2.137

### Required Attributes

cn

#### Allowed Attributes

description, mnggrpAdditionPolicy, mnggrpBillableUser, mnggrpCurrentUsers, mnggrpDeletionPolicy, mnggrpMailQuota, mnggrpMaxUsers, mnggrpStatus, mnggrpUserClassOfServices, nsdaModifiableBy, owner

# nsManagedDept

# Supported by

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

#### Definition

This object class is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Stores information for a non-administrator group.

### **Superior Class**

groupOfUniqueNames

### **Object Class Type**

auxiliary

#### OID

2.16.840.1.113730.3.2.88

### **Required Attributes**

N/A

### **Allowed Attributes**

nsMaxDepts, nsMaxUsers, nsNumDepts, nsNumUsers, nsdaModifiableBy, owner

# nsManagedDeptAdminGroup

# Supported by

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

### Definition

This object class is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Stores information for a group of administrators for iPlanet Delegated Administrator.

### **Superior Class**

top

**Object Class Type** 

### OID

2.16.840.1.113730.3.2.111

# **Required Attributes**

objectClass

### **Allowed Attributes**

N/A

# nsManagedDomain

### Supported by

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

### **Definition**

This object class is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Used only for versions of Messaging Server using iPlanet Delegated Administrator. It contains information necessary to administer domains.

### **Superior Class**

top

**Object Class Type** 

#### OID

2.16.840.1.113730.3.2.86

### Required Attributes

objectClass

### **Allowed Attributes**

nswcalDisallowAccess, nsMaxDepts, nsMaxDomains, nsMaxMailLists, nsMaxUsers, nsNumDepts, nsNumDomains, nsNumMailLists, nsNumUsers, nsdaModifiableBy, owner

# nsManagedFamilyGroup

### Supported by

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2

# Definition

This object class is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Stores information for a family group managed by a delegated administrator. The family group is like a Group, with a few differences. It was added primarily to support Delegated Administrator deployments using Sun Internet Message Service (SIMS) 4.0.

### **Superior Class**

top

### OID

### Required Attribute

objectClass

#### Allowed Attributes

nsMaxUsers, nsNumUsers, nsdaModifiableBy, owner

# nsManagedISP

## Supported by

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2

### Definition

This object class is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Tracks the number of sub-organizations that can be created under this object.

# **Superior Class**

top

## OID

2.16.840.1.113730.3.2.85

### Required Attribute

objectClass

### Allowed Attributes

nsNumDomains

# nsManagedMailList

### Supported by

iPlanet Messaging Server 5.0;deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2

### Definition

This object class is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Stores information for a mail list created by enabled users. A mail list must contain this object class in order to be managed by Delegated Administrator.

# **Superior Class**

top

**Object Class Type** 

#### OID

2.16.840.1.113730.3.2.90

### Required Attributes

objectClass

### **Allowed Attributes**

nsMaxUsers, nsNumUsers, nsdaModifiableBy, owner

# nsManagedOrgUnit

# Supported by

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

#### Definition

This object class is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Stores information for a Delegated Administrator managed organizational unit.

### **Superior Class**

top

#### OID

2.16.840.1.113730.3.2.87

## **Required Attributes**

objectClass

### **Allowed Attributes**

nsdaModifiableBy, owner

# nsManagedPerson

# Supported by

iPlanet Messaging Server 5.0; deprecated for Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2

### **Definition**

This object class is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Stores information about a user. A user entry must contain this object class in order to be managed by Delegated Administrator.

# **Superior Class**

top

# **Object Class Type**

#### OID

2.16.840.1.113730.3.2.91

### **Required Attributes**

objectClass

### **Allowed Attributes**

memberOf, nsdaCapability, nsdaDomain, nsSearchFilter, nsdaModifiableBy,
owner

# nsUniquenessDomain

### Supported by

iPlanet Messaging Server 5.0; deprecated for Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2

#### **Definition**

Sun ONE LDAP Schema v.1 object class in support of Delegated Administrator for Messaging. If you are still using Sun ONE LDAP Schema v.1, then this object is still valid; otherwise it is deprecated.

This object class is a marker to identify the subtree where the uniqueness of uid should be enforced. The uid uniqueness plugin used this to determine the scope or sphere of influence for enforcing uniqueness.

### Superior Class

top

### OID

2.16.840.1.113730.3.2.115

# **Required Attributes**

objectClass

### **Allowed Attributes**

N/A

# **Attributes**

- "domainUidSeparator" on page 239
- "domOrgMaxUsers" on page 240
- "domOrgNumUsers" on page 241
- "memberOfManagedGroup" on page 241
- "mgmanAllowSubscribe" on page 242
- "mgmanDenySubscribe" on page 243
- "mgmanGoodbyeText" on page 243
- "mgmanHidden" on page 244
- "mgmanIntroText" on page 244
- "mgmanJoinability" on page 245
- "mgmanMemberVisibility" on page 245
- "mgmanVisibility" on page 247
- "mnggrpAdditionPolicy" on page 247
- "mnggrpBillableUser" on page 248
- "mnggrpCurrentUsers" on page 248

- "mnggrpDeletionPolicy" on page 249
- "mnggrpMailQuota" on page 249
- "mnggrpMaxUsers" on page 250
- "mnggrpStatus" on page 250
- "mnggrpUserClassOfServices" on page 251
- "nsDefaultMaxDeptSize" on page 251
- "nsMaxDepts" on page 252
- "nsMaxDomains" on page 252
- "nsMaxMailLists" on page 253
- "nsMaxUsers" on page 254
- "nsNumDepts" on page 254
- "nsNumDomains" on page 255
- "nsNumMailLists" on page 255
- "nsNumUsers" on page 256
- "nsSearchFilter" on page 257
- "nsdaCapability" on page 257
- "nsdaDomain" on page 258
- "nsdaModifiableBy" on page 258
- "preferredMailMessageStore" on page 259

# domainUidSeparator

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

inetDomainOrg

#### Definition

This attribute is used only for Sun ONE LDAP Schema v.1.

This attribute is used by the messaging server to override the default mailbox (MB) home. When present, this attribute specifies that compound user identifications (UIDs) are used in this domain and this attribute specifies the separator. For instance, if + is the separator, the mailbox names in this domain are obtained by replacing the right most occurrence of + in the uid with @. To map an internal mailbox name to the UID, the right most occurrence of @ is replaced with a + in the mailbox name.

While substitution of an @ for the UID separator is sufficient to generate a mailbox name, this may not be the same as any of the user's actual email addresses.

### NOTE

Format of internal mailbox names is uid@domain, where "domain" is DNS domain mapping to the namespace. The only exception to this rule is mailbox names for users in default domain where only the uid is used to construct internal mailbox names. See inetCanonicalDomainName on how the default value of domain name used can be overridden in specific cases.

The MTA option used to override this attribute's value is LDAP\_DOMAIN\_ATTR\_UID\_SEPARATOR.

### Example

domainUIDSeparator: #

## OID

2.16.840.1.113730.3.1.702

# domOrgMaxUsers

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

# **Object Classes**

inetDomainOrg

### Definition

This attribute is used only for Sun ONE LDAP Schema v.1.

Maximum number of user entries in a domain organization.

# Example

domOrgMaxUser: 500

OID

2.16.840.1.113730.3.1.697

# domOrgNumUsers

# Origin

iPlanet Messaging Server 5.0

# **Syntax**

cis, single-valued

# **Object Classes**

inetDomainOrg

### **Definition**

Number of current user entries in a domain organization.

### Example

domOrgNumUsers: 345

### OID

2.16.840.1.113730.3.1.698

# member Of Managed Group

# Origin

iPlanet Messaging Server 5.0

## **Syntax**

dn, single-valued

### **Object Classes**

ipUser

### Definition

Family accounts are not supported in Sun ONE LDAP Schema v.2. Use this only if you are using Sun ONE LDAP Schema v.1.

Specifies the DN of the family account of which this user is a member.

# Example

memberOfManagedGroup: cn=Addams Family, ou=groups,o=sesta.com,o=isp

# OID

2.16.840.1.113730.3.1.704

# mgmanAllowSubscribe

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, multi-valued

### **Object Classes**

inetMailGroupManagement

### Definition

Domain name(s) or email addresses of users allowed to subscribe to this mailing list.

### Example

mgmanAllowSubscribe:sesta.com (Every user at sesta.com would be able to subscribe to the list.)

### OID

# mgmanDenySubscribe

# Origin

iPlanet Messaging Server 5.0

# **Syntax**

cis, multi-valued

### **Object Classes**

inetMailGroupManagement

### Definition

Domain name(s) or email addresses of users not allowed to subscribe to this list. The mgmanDenySubscribe attribute takes precedence over mgmanAllowSubscribe.

### Example

mgmanDenySubscribe:siroe.com

#### OID

2.16.840.1.113730.3.1.791

# mgman Good by e Text

# Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single valued

### **Object Classes**

inetMailGroupManagement

### **Definition**

Reserved.

### Example

TBD.

### OID

# mgmanHidden

# Origin

iPlanet Messaging Server 5.0

# **Syntax**

cis, single-valued

### **Object Classes**

inetMailGroupManagement

### Definition

Used with iPlanet Delegated Administrator for Messaging only.

A boolean flag specifying whether or not the group should appear in lists that are requested by people other than the group owners. A value of true corresponds with a hidden group, that is, the list is not visible. A value of false means that the list is visible. A missing value is the same as a value of false.

# Example

mgmanHidden:true

### OID

2.16.840.1.113730.3.1.792

# mgmanIntroText

#### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

inetMailGroupManagement

### Definition

Reserved.

# Example

TBD.

### OID

2.16.840.1.113730.3.1.796

# mgmanJoinability

# Origin

iPlanet Messaging Server 5.0

# **Syntax**

cis, single-valued

# **Object Classes**

inetMailGroupManagement

### **Definition**

Used for Sun ONE LDAP Schema v.1 only. Specifies who can subscribe to the group. The allowed values are ANYONE, ALL, and NONE (If this attribute is not specified, the default is NONE):

- ANYONE Enables anyone to subscribe.
- ALL Enables anyone authenticated to the directory (or Sun ONE Delegated Adminstrator for Messaging) to subscribe.
- NONE Only owner can add members to a closed distribution list.

### Example

mgmanJoinability:All

#### OID

2.16.840.1.113730.3.1.793

# mgmanMemberVisibility

### Origin

iPlanet Messaging Server 5.0

### Syntax

cis, single-valued

### **Object Classes**

inetMailGroupManagement

#### Definition

Only used in Sun ONE LDAP Schema v.1 with iPlanet Delegated Administrator for Messaging.

Defines who has rights to view the group membership list (expand the group). This attribute has the keyword values: none, all, true, anyone. No matter what the setting of this attribute, group owners always retain the right to view (and modify) membership.

However, if this attribute is checked in the case of group expansion as part of an SMTP EXPN command (that is, not as part of an administrative tool that can easily identify whether or not the client is the group owner), then a value of none ends up operating as if the list is unconditionally disabled. This is because SMTP doesn't provided a means of establishing a client's identity, such as "owner".

The following table lists the keywords and gives a description of each:

**Table 5-1** Rights Keywords

Rights	Description
anyone	Enables anyone to expand the group (see the members in the mailing list). Also, the MTA returns the addresses of members when an EXPN is performed.
all or true	The user has to successfully authenticate to the directory (or iPlanet Delegated Administrator for Messaging) before expansion is allowed.
none	Expansion is not allowed.

Unrecognized values are interpreted as none.

If the attribute is not present, the MTA option EXPANDABLE\_DEFAULT controls whether the expansion is allowed.

NOTE LDAP\_EXPANDABLE is the MTA option used to specify a different attribute name for this function.

### Example

mgmanMemberVisibility:all

#### OID

# mgmanVisibility

# Origin

iPlanet Messaging Server 5.0

# **Syntax**

cis, single-valued

### **Object Classes**

inetMailGroupManagement

Definition

Example

OID

2.16.840.1.113730.3.1.794

# mnggrp Addition Policy

# Origin

iPlanet Messaging Server 5.0

# **Syntax**

cis, single-valued

### **Object Classes**

inetOrgPerson

### Definition

Reserved.

### Example

TBD.

### OID

# mnggrpBillableUser

# Origin

iPlanet Messaging Server 5.0

### **Syntax**

dn, single-valued

### **Object Classes**

inetOrgPerson

### **Definition**

DN of the user who is responsible for paying the bills for this family account or group of users.

# **Example**

mnggrpBillableUser: uid=John,ou=people,o=sesta.com,o=isp

### OID

2.16.840.1.113730.3.1.711

# mnggrpCurrentUsers

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

int, single-valued

### **Object Classes**

inetOrgPerson

### **Definition**

Current number of users allowed in the managed group. Intended for reporting purposes only. No operational impact.

### Example

mnggrpCurrentUsers: 20

#### OID

# mnggrpDeletionPolicy

# Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single valued

### **Object Classes**

inetOrgPerson

### Definition

Reserved.

# Example

TBD.

## OID

2.16.840.1.113730.3.1.709

# mnggrpMailQuota

### Origin

iPlanet Messaging Server 5.0

## **Syntax**

int, single-valued

### **Object Classes**

inetOrgPerson

# **Definition**

Cumulative disk quota allowed for all users in the managed group. A value of -1 specifies that there is no limit on space used by users in the managed group. Intended for reporting purposes only. No operational impact.

# Example

mnggrpMailQuota:-1

### OID

# mnggrp Max Users

# Origin

iPlanet Messaging Server 5.0

# **Syntax**

int, single-valued

### **Object Classes**

inetOrgPerson

### Definition

Maximum number of users allowed in the managed group.

# Example

30

# OID

2.16.840.1.113730.3.1.713

# mnggrpStatus

### Origin

iPlanet Messaging Server 5.0

### **Syntax**

cis, single-valued

# **Object Classes**

inetOrgPerson

# **Definition**

Reserved.

# Example

TBD.

### OID

# mnggrpUserClassOfServices

# Origin

iPlanet Messaging Server 5.0

# **Syntax**

cis, multi-valued

### **Object Classes**

inetOrgPerson

### Definition

Reserved.

## Example

TBD.

## OID

2.16.840.1.113730.3.1.716

# ns Default Max Dept Size

### Origin

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

### **Syntax**

int, single-valued

# **Object Classes**

nsManagedDomain

### **Definition**

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Specifies the default size (in number of users) of a newly created department managed by Delegated Administrator.

## Example

nsDefaultMaxDeptSize:20

## OID

2.16.840.1.113730.3.1.562

# nsMaxDepts

# Origin

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

### **Syntax**

int, single-valued

# **Object Classes**

organization, nsManagedDomain

#### Definition

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Used with Delegated Administrator. Specifies the maximum number of group entries that can be created under this object.

### Example

nsMaxDepts:200

#### OID

2.16.840.1.113730.3.1.557

# nsMaxDomains

# Origin

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

## **Syntax**

int, single-valued

### **Object Classes**

nsManagedDomain

#### Definition

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

For use with Delegated Administrator. Specifies the maximum number of suborganizations allowed to be created under this object.

# Example

nsMaxDomains:50

#### OID

2.16.840.1.113730.3.1.561

# nsMaxMailLists

# Origin

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

### **Syntax**

int, single valued

## **Object Classes**

nsManagedDomain

#### Definition

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

For use with Delegated Administrator. Specifies the maximum number of mailing lists that can be created under this entry.

# Example

nsMaxMailLists:200

#### OID

2.16.840.1.113730.3.1.559

# nsMaxUsers

# Origin

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

### **Syntax**

int, single-valued

#### **Object Classes**

organization

#### Definition

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

For use with Delegated Administrator. Specifies the maximum number of users that can be created under this entry.

# Example

nsMaxUsers:750

#### OID

2.16.840.1.113730.3.1.555

# nsNumDepts

#### Origin

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

### **Syntax**

int, single-valued

## **Object Classes**

organization, nsManagedDomain

#### Definition

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

For use with Delegated Administrator. Tracks the number of nested departments that exist under this object.

## Example

nsNumDepts:35

#### OID

2.16.840.1.113730.3.1.556

# nsNumDomains

### Origin

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

## **Syntax**

int, single-valued

# **Object Classes**

nsManagedDomain

#### Definition

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Used by Delegated Administrator. Tracks the number of suborganizations that exist under this object.

#### Example

nsNumDomains:5

#### OID

2.16.840.1.113730.3.1.560

# nsNumMailLists

#### Origin

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

### Syntax

int, single-valued

# **Object Classes**

nsManagedDomain

## **Definition**

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Used by Delegated Administrator. Tracks the number of mail lists that exist under this object.

## Example

nsNumMailLists:200

#### OID

2.16.840.1.113730.3.1.558

# nsNumUsers

#### Origin

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

#### **Syntax**

int, single-valued

#### **Object Classes**

organization, nsManagedDomain

#### Definition

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Tracks the number of users that can be created under this object.

#### Example

nsNumUsers:2000

#### OID

2.16.840.1.113730.3.1.554

# nsSearchFilter

# Origin

Not currently used; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

## **Syntax**

cis, single-valued

# **Object Classes**

nsManagedPerson

### Definition

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Reserved for future development for Delegated Administrator.

## Example

#### OID

2.16.840.1.113730.3.1.564

# nsdaCapability

### Origin

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

### **Syntax**

cis, single-valued

## **Object Classes**

nsManagedPerson

## **Definition**

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Specifies whether a user can create a mail list. Supports Delegated Administrator.

## Example

#### OID

2.16.840.1.113730.3.1.563

# nsdaDomain

### Origin

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

# **Syntax**

cis, single

## **Object Classes**

nsManagedPerson

## **Definition**

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Specifies the user's organization, for Delegated Administrator.

# Example

### OID

2.16.840.113730.3.1.600

# nsdaModifiableBy

#### Origin

iPlanet Messaging Server 5.0; deprecated in Sun ONE Messaging Server 6.0 with Sun ONE LDAP Schema v.2.

#### **Syntax**

dn, single-valued

### **Object Classes**

inetOrgPerson

#### Definition

This attribute is deprecated for Sun ONE LDAP Schema v.2, it is supported only for Sun ONE LDAP Schema v.1.

Used by Delegated Administrator. Specifies who has modify access to the object in which this attribute appears. DN of the administrator's group used with ACIs to grant rights to manage other groups.

## Example

nsdaModifiableBy: cn=service administrators,ou=group,o=isp

#### OID

2.16.840.1.113730.3.1.565

# preferredMailMessageStore

### Origin

iPlanet Messaging Server 5.0

#### **Syntax**

cis, single-valued

#### **Object Classes**

mailDomain

#### Definition

Used by Sun ONE Messaging Server Delegated Administrator for Sun ONE LDAP Schema v.1 only.

Used to set the mailMessageStore attribute of newly created users. If missing, Delegate Administrator leaves the mailMessageStore attribute empty and the access server assumes that the user's mailbox is in the default partition of the server instance.

#### Example

preferredMailMessageStore: primary

#### OID

2.16.840.1.113730.3.1.762

preferredMailMessageStore

# **General Information**

This appendix covers the following topics:

- LDAP Overview
- Attribute Syntax
- Object Identifiers
- Standard Time Zones

# LDAP Overview

Sun™ Open Net Environment (ONE) Messaging Server and Sun™ ONE Calendar Server products include object classes and attributes defined by the Lightweight Directory Access Protocol (LDAP) and extensions to the standard LDAP schema that extend the basic functionality of LDAP.

Initially developed at the University of Michigan, LDAP is a lightweight version of the X.500 Directory Access Protocol. LDAP has become an Internet standard for directory services running over TCP/IP.

One or more LDAP servers contain the data that make up the LDAP directory. An LDAP directory stores information in object-oriented hierarchies of entries. Each entry is uniquely identified by a distinguished name, or DN. The DN consists of the comma-separated sequence of attributes and values that specify the unique location of an entry within the directory information tree. This provides a path of names tracing the entry back to the top of the directory hierarchy.

# Attribute Syntax

Directory data is represented as attribute-value pairs. Any specific piece of information is associated with a descriptive attribute.

Each attribute has a corresponding syntax definition. The syntax definition describes the type of information provided by the attribute.

**Table A-1** Syntax Types

Syntax Method	Abbreviation	Definition
Binary	bin	Attribute values are binary
Boolean	boolean	Two values possible: Yes or No, True or False, On or Off
Case Exact String	ces	Values are case sensitive
Case Ignore String	cis	Values are not case sensitive
Telephone	tel	Telephone numbers (identical to cis, but blanks and dashes (-) are ignored
Distinguished Name	dn	Indicates values are DNs
Integer	int	Values are numbers
Operational	operational	Not displayed in search results

Required and allowed attributes for each object class are included in the object class listing.

Unless otherwise noted, attributes are assumed to be multi-valued, that is, more than one instance of the attribute can be specified. Attributes that are single-valued, that is, only one instance of the attribute can be specified, are noted as such in the Syntax heading, found in each attribute definition.

# Object Identifiers

To meet LDAP and X.500 standards, all attributes and objects should have been assigned Object identifiers (OIDs). An OID is a sequence of integers, typically written as a dot-separated string. The OID identifies who first filed the name of the object or attribute with the standards committee.

In some cases, objects and attributes listed in this document do not have an OID assigned to them yet.

# Standard Time Zones

The following two tables lists the time zones recognized by Calendar and Messaging Servers first in alphabetical order, and then by offset from Universal Time Constant (UTC).

Note that in some countries, like Israel, day-light savings time is not always observed every year. The decision is made year-by-year. Also, some individual states in the United States do not observe day-light savings time.

This means that some time offsets will not be accurate unless the definitions are updated as needed in the respective systems (see individual product documentation for information about adjusting time zone offsets).

The following table lists the time zones in alphabetical order.

Time Zone Name	Offset	
Africa/Amman	+0300	
Africa/Cairo	+0300	
Africa/Casablanca	-0000	
Africa/Johannesburg	+0200	
Africa/Lagos	+0100	
Africa/Tripoli	+0100	
Africa/Windhoek	+0300	
America/Adak	-0900	
America/Anchorage	-0800	
America/Buenos_Aires	-0300	
America/Caracas	-0300	
America/Chicago	-0500	
America/Costa_Rica	-0600	
America/Cuiaba	-0300	
America/Denver	-0600	
America/Godthab	-0200	
America/Grand_Turk	-0400	
America/Halifax	-0300	
America/Havana	-0400	
America/Indianapolis	-0500	

Time Zone Name	Offset
America/Los_Angeles	-0700
America/Miquelon	-0200
America/New_York	-0400
America/Phoenix	-0700
America/Port-au-Prince	-0400
America/Santiago	-0300
America/Sao_Paulo	-0200
America/St_Johns	-0230
Asia/Alma-Ata	+0700
Asia/Anandyr	+1400
Asia/Aqtau	+0500
Asia/Aqtobe	+0600
Asia/Baku	+0500
Asia/Bangkok	+0700
Asia/Beirut	+0300
Asia/Bishkek	+0600
Asia/Calcutta	+0530
Asia/Dacca	+0600
Asia/Irkutsk	+0900
Asia/Jerusalem	+0300
Asia/Kabul	+0430
Asia/Kamchatka	+1300
Asia/Karachi	+0500
Asia/Katmandu	+0545
Asia/Krasnoyarsk	+0800
Asia/Magadan	+1200
Asia/Novosibirsk	+0700
Asia/Rangoon	+0630
Asia/Riyadh	+0300
Asia/Shanghai	+0800
Asia/Taipei	+0800

Time Zone Name	Offset
Asia/Tehran	+0400
Asia/Tokyo	+0900
Asia/Ulan_Bator	+0800
Asia/Vladivostok	+1100
Asia/Yakutsk	+1000
Asia/Yekaterinburg	+0600
Asia/Yerevan	+0400
Atlantic/Azores	-0000
Atlantic/Cape_Verde	-0100
Atlantic/South_Georgia	-0200
Atlantic/Stanley	-0300
Australia/Adelaide	+1030
Australia/Brisbane	+1000
Australia/Darwin	+0930
Australia/Hobart	+1100
Australia/Lord_Howe	+1100
Australia/Perth	+0800
Australia/Sydney	+1100
Europe/Bucharest	+0300
Europe/Istanbul	+0300
Europe/London	+0100
Europe/Minsk	+0300
Europe/Moscow	+0400
Europe/Paris	+0200
Europe/Riga	+0300
Europe/Samara	+0500
Europe/Simferopol	+0400
Europe/Warsaw	+0200
Pacific/Apia	-1100
Pacific/Auckland	+1300
Pacific/Chatham	+1345

Time Zone Name	Offset	
Pacific/Easter	-0500	
Pacific/Fiji	+1200	
Pacific/Gambier	-0900	
Pacific/Guadalcanal	+1100	
Pacific/Honolulu	-1000	
Pacific/Kiritimati	+1400	
Pacific/Marquesas	-0930	
Pacific/Norfolk	+1130	
Pacific/Noumea	+1200	
Pacific/Pitcairn	-0830	
Pacific/Rarotonga	-0930	
Pacific/Tongatapu	+1300	

The following table lists the time zones by standard-time offset.

Offset	Time Zone Name
-1100	Pacific/Apia
-1000	Pacific/Honolulu
-0900	America/Adak
-0930	Pacific/Rarotonga
-0930	Pacific/Marquesas
-0900	Pacific/Gambier
-0830	Pacific/Pitcairn
-0800	America/Anchorage
-0700	America/Los_Angeles
-0700	America/Phoenix
-0600	America/Denver
-0600	America/Costa_Rica
-0500	America/Chicago
-0500	Pacific/Easter
-0500	America/Indianapolis

Offset	Time Zone Name
-0400	America/New_York
-0400	America/Havana
-0400	America/Port-au-Prince
-0400	America/Grand_Turk
-0300	America/Caracas
-0300	America/Cuiaba
-0300	America/Halifax
-0300	America/Santiago
-0300	Atlantic/Stanley
-0300	America/Buenos_Aires
-0230	America/St_Johns
-0200	America/Sao_Paulo
-0200	America/Miquelon
-0200	America/Godthab
-0200	Atlantic/South_Georgia
-0100	Atlantic/Cape_Verde
-0000	Atlantic/Azores
-0000	Africa/Casablanca
+0100	Europe/London
+0100	Africa/Lagos
+0100	Africa/Tripoli
+0200	Europe/Paris
+0200	Europe/Warsaw
+0200	Africa/Johannesburg
+0300	Europe/Bucharest
+0300	Europe/Istanbul
+0300	Africa/Cairo
+0300	Africa/Amman
+0300	Europe/Riga
+0300	Asia/Beirut
+0300	Africa/Windhoek

Offset	Time Zone Name
+0300	Europe/Minsk
+0300	Asia/Jerusalem
+0300	Asia/Riyadh
+0400	Europe/Simferopol
+0400	Europe/Moscow
+0400	Asia/Yerevan
+0400	Asia/Tehran
+0430	Asia/Kabul
+0500	Asia/Aqtau
+0500	Asia/Baku
+0500	Europe/Samara
+0500	Asia/Karachi
+0530	Asia/Calcutta
+0545	Asia/Katmandu
+0600	Asia/Aqtobe
+0600	Asia/Bishkek
+0600	Asia/Yekaterinburg
+0600	Asia/Dacca
+0630	Asia/Rangoon
+0700	Asia/Alma-Ata
+0700	Asia/Novosibirsk
+0700	Asia/Bangkok
+0800	Asia/Krasnoyarsk
+0800	Asia/Shanghai
+0800	Australia/Perth
+0800	Asia/Taipei
+0800	Asia/Ulan_Bator
+0900	Asia/Irkutsk
+0900	Asia/Tokyo
+0930	Australia/Darwin
+1000	Asia/Yakutsk

Offset	Time Zone Name
+1000	Australia/Brisbane
+1030	Australia/Adelaide
+1100	Australia/Sydney
+1100	Australia/Hobart
+1100	Asia/Vladivostok
+1100	Australia/Lord_Howe
+1100	Pacific/Guadalcanal
+1130	Pacific/Norfolk
+1200	Pacific/Noumea
+1200	Asia/Magadan
+1200	Pacific/Fiji
+1300	Pacific/Auckland
+1300	Asia/Kamchatka
+1300	Pacific/Tongatapu
+1345	Pacific/Chatham
+1400	Asia/Anandyr
+1400	Pacific/Kiritimati

Standard Time Zones

# Glossary

**access control** A method for controlling access to a server or to folders and files on a server.

**Access Control Entry (ACE)** A single item of information from an access control list. Also called access control information.

**Access Control Information (ACI)** See Access Control Entry. Information from an access control entry.

**Access Control List (ACL)** A set of data associated with a directory that defines the permissions that users and/or groups have for accessing it. Contains zero or more ACEs.

**access control rules** Rules specifying user permissions for a given set of directory entries or attributes.

**access domain** Limits access to certain Messaging Server operations from within a specified domain. For example, an access domain can be used to limit where mail for an account can be collected.

**account** Information that defines a specific user or user group. This information includes the user or group name, valid email address or addresses, and how and where email is delivered.

administration domain A region of administrative control. See also domain.

**administration privileges** A set of privileges that define a users administrative role.

**administration server administrator** User who has administrative privileges to start or stop a server even when there is no Directory Server connection. The administration server administrator has restricted server tasks (typically only Restart Server and Stop Server) for all servers in a local server group. When an administration server is installed, this administrator's entry is automatically created locally (this administrator is not a user in the user directory).

**administrator** A user with a defined set of administrative privileges. See also configuration administrator, Directory Manager, administration server administrator, server administrator, message store administrator, top-level administrator, domain administrator, organization administrator, family group administrator, mail list owner.

**alias** An alternate name of an email address.

**allowed attributes** The attributes that optionally can be present in entries using a particular object class, but are not required to be present. See also attributes, required attributes.

**alternate address** A secondary address for an account, generally a variation on the primary address. In some cases it is convenient to have more than one address for a single account.

attributes LDAP data is represented as attribute-value pairs. Any specific piece of information is associated with a descriptive attribute. See also allowed attributes, required attributes.

**AUTH** An SMTP command enabling an SMTP client to specify an authentication method to the server, perform an authentication protocol exchange, and, if necessary, negotiate a security layer for subsequent protocol interactions.

**authentication** (1) The process of proving the identity of a client user to a server or, (2) The process of proving the identity of the server to a client or another server.

**base DN** A distinguished name entry in the directory from which searches will occur. Also known as a search base. For example, ou=people, o=siroe.com.

**bind DN** A distinguished name used to authenticate to the Directory Server when performing an operation.

calendar identifier (calid) Identifies a calendar in the database. Must be A-Z, a-z, 0-9 (alphanumeric). A fully qualified calendar identifier consists of three parts, with the first two parts being optional: uid is the user's unique identifier in the authentication name space. domain is the domain to which the user belongs. calid is the local identifier for the calendar, where "local" means that it is unique within the uid@domain name space. The format is: [uid]@[domain]:calid

**CNAME record** A type of DNS record that maps a domain name alias to a domain name.

cn LDAP alias for common name.

**CLI** Command-Line Interface.

**command-line interface** Command that can be executed from the command line. Also called utility.

**configuration administrator** Person who has administrative privileges to manage servers and configuration directory data in the entire Sun™ ONE. The configuration administrator has unrestricted access to all resources in the Sun ONE topology. This is the only administrator who can assign server access to other administrators. The configuration administrator initially manages administrative configuration until the administrators group and its members are in place.

**Configuration Directory Server** A Directory Server that maintains configuration information for a server or set of servers.

**data store** A store that contains directory information, typically for an entire directory information tree.

**DC Tree** Domain Component tree. A directory information tree that mirrors the DNS network syntax. An example of a distinguished name in a DC Tree would be cn=billbob,dc=bridge,dc=net,o=internet.

**Delegated Administrator for Messaging** A set of interfaces (GUI and utilities) that allow domain administrators to add and modify users and groups to a hosted domain.

**directory context** The point in the directory tree information at which a search begins for entries used to authenticate a user and password for message store access. See also base DN.

**directory entry** A set of directory attributes and their values identified by its distinguished name. Each entry contains an object class attribute that specifies the kind of object the entry describes and defines the set of attributes it contains.

**directory information tree** The tree-like hierarchical structure in which directory entries are organized. Also called a DIT. DITs can be organized along the DNS (DC Trees) or Open Systems Interconnect networks (OSI trees).

**directory lookup** The process of searching the directory for information on a given user or resource, based on that user or resource's name or other characteristic.

**Directory Manager** User who has administrative privileges to the directory server database. Access control does not apply to this user (think of the directory manager as the directory's superuser).

**directory schema** The set of rules that defines the data that can be stored in the directory.

**Directory Server** The Sun ONE directory service based on LDAP. See also directory service, Lightweight Directory Access Protocol, Configuration Directory Server, User/Groups Directory Server.

**directory service** A logically centralized repository of information about people and resources within an organization. See also Lightweight Directory Access Protocol.

**distinguished name** The comma-separated sequence of attributes and values that specify the unique location of an entry within the directory information tree. Often abbreviated as DN.

**DIT** See directory information tree.

**DN** See distinguished name.

**dn** LDAP alias for distinguished name. See also distinguished name.

DNS See Domain Name System.

**DNS alias** A host name that the DNS server recognizes as pointing to a different host—specifically a DNS CNAME record. Machines always have one real name, but they can have one or more aliases. For example, www.siroe.domain might be an alias that points to a real machine called realthing. siroe.domain where the server currently exists.

**DNS database** A database of domain names (host names) and their corresponding IP addresses.

**DNS domain** A group of computers whose host names share a common suffix, the domain name. Syntactically, an Internet domain name consists of a sequence of names (labels) separated by periods (dots), for example, corp.mktng.siroe.com. See also **domain**.

**domain** Resources under control of a single computer system. See also administration domain, DNS domain, hosted domain, virtual domain.

**domain name space** The name space within which identifiers for users, resources and groups are unique. A given identifier can be used in different domains.

**domain administrator** User who has administrative privileges to create, modify, and delete mail users, mail lists, and family accounts in a hosted domain by using the Delegated Administrator for Messaging and Collaboration GUI or CLIs. By default, this user can act as a message store administrator for all messaging servers in the topology.

**domain alias** A domain entry that points to another domain. By using aliases, hosted domains can have several domain names.

**domain hosting** The ability to host one or more domains on a shared messaging server. For example, the domains siroe.com and sesta.org might both be hosted on the sirce net mail server. Users send mail to and receive mail from the hosted domain—the name of the mail server does not appear in the email address.

**domain name** (1) A host name used in an email address. (2) A unique name that defines an administrative organization. Domains can contain other domains. Domain names are interpreted from right to left. For example, siroe.com is both the domain name of the Siroe Company and a subdomain of the top-level com domain. The siroe.com domain can be further divided into subdomains such as corp.siroe.com, and so on. See also host name, fully qualified domain name.

**Domain Name System (DNS)** A distributed name resolution software that allows computers to locate other computers on a network or the Internet by domain name. The system associates standard IP addresses with host names (such as www.siroe.com). Machines normally get this information from a DNS server. DNS servers provide a distributed, replicated, data query service for translating hostnames into Internet addresses. See also A record. MX record. CNAME record.

**domain organization** A subdomain below a hosted domain in the Organization Tree. Domain organizations are useful for companies that wish to organize their user and group entries along departmental lines.

**dynamic group** A mail group defined by an LDAP search URL. Users usually join the group by setting an LDAP attribute in their directory entry.

**family group administrator** User who has administrative privileges to add and remove family members in a family group. This user can grant family group administrative access to other members of group.

**fully qualified domain name (FQDN)** The unique name that identifies a specific Internet host. See also domain name.

**group** A group of LDAP mail entries that are organized under a distinguished name. Usually used as a mail list, but may also be used to grant certain administrative privileges to members of the group. See also dynamic group, static group.

**GUI** Graphical User Interface

**host** The machine on which one or more servers reside.

**hosted domain** An email domain that is outsourced by an ISP. That is, the ISP provides email domain hosting for an organization by operating and maintaining the email services for that organization. A hosted domain shares the same Messaging Server host with other hosted domains. In earlier LDAP-based email systems, a domain was supported by one or more email server hosts. With Messaging Server, many domains can be hosted on a single server. For each hosted domain, there is an LDAP entry that points to the user and group container for the domain. Hosted domains are also called virtual hosted domains or virtual domains. See also domain, virtual domain.

host name The name of a particular machine within a domain. The host name is the IP host name, which might be either a "short-form" host name (for example, mail) or a fully qualified host name. The fully qualified host name consists of two parts: the host name and the domain name. For example, mail.siroe.com is the machine mail in the domain siroe.com. Host names must be unique within their domains. Your organization can have multiple machines named mail, as long as the machines reside in different subdomains; for example, mail.corp.siroe.com and mail.field.siroe.com. Host names always map to a specific IP address. See also domain name, fully qualified domain name, IP address.

**Identity Server** (IS) The Sun ONE product responsible for implementing Sun ONE Schema, v.2. It is used for SSO authentication and contains administrative tools. The User Management Utility uses the IS SDK as the backend of its command line utilities.

**INBOX** The name reserved for a user's default mailbox for mail delivery. INBOX is the only folder name that is case insensitive. For example: INBOX, Inbox, and inbox are all valid names for a users default mailbox.

**Internet** The name given to the worldwide network of networks that uses TCP/IP protocols.

**Internet Protocol (IP)** The basic network-layer protocol on which the Internet and intranets are based.

**internet protocol address** See IP address.

IP See Internet Protocol.

**IP address** A set of numbers, separated by dots, such as 198.93.93.10, that specifies the actual location of a machine on an intranet or the Internet. A 32-bit address assigned to hosts using TCP/IP.

**knowledge information** Part of the directory service infrastructure information. The directory server uses knowledge information to pass requests for information to other servers.

**LDAP** See Lightweight Directory Access Protocol.

**LDAP Data Interchange Format (LDIF)** The format used to represent Directory Server entries in text form.

**LDAP filter** A method of specifying a set of entries, based on the presence of a particular attribute or attribute value.

**LDAP referrals** An LDAP entry that consists of a symbolic link (referral) to another LDAP entry. An LDAP referral consists of an LDAP host and a distinguished name. LDAP referrals are often used to reference existing LDAP data so that this data does not have to be replicated. They are also used to maintain compatibility for programs that depend on a particular entry that may have been moved.

**LDAP search string** A string with replaceable parameters that defines the attributes used for directory searches. For example, an LDAP search string of "uid=%s" means that searches are based on the user ID attribute.

**LDAP Server** A software server that maintains an LDAP directory and services queries to the directory. The Sun ONE Directory Services are implementations of an LDAP Server.

**LDBM** LDAP Data Base Manager.

**LDIF** See LDAP Data Interchange Format.

**Lightweight Directory Access Protocol (LDAP)** Directory service protocol designed to run over TCP/IP and across multiple platforms. A simplification of the X.500 Directory Access Protocol (DAP) that allows a single point of management for storage, retrieval, and distribution of information, including user profiles, mail lists, and configuration data across Sun ONE servers. The Sun ONE Directory Server uses the LDAP protocol.

**local part** The part of an email address that identifies the recipient. See also domain part.

mailbox A place where messages are stored and viewed. See also folder.

mail list A list of email addresses to which a message can be sent by way of a mail list address. Sometimes called a group.

mail list owner A user who has administrative privileges to add members to and delete members from the mail list.

managed object A collection of configurable attributes, for example, a collection of attributes for the directory service.

**master directory server** The directory server that contains the data that will be replicated.

**member** A user or group who receives a copy of an email addressed to a mail list. See also mail list, expansion, moderator, and owner.

**message quota** A limit defining how much disk space a particular folder can consume.

**Messaging Server administrator** The administrator whose privileges include installation and administration of an Sun ONE Messaging Server instance.

**name resolution** The process of mapping an IP address to the corresponding name. See also DNS.

**namespace** The tree structure of an LDAP directory. See also directory information tree.

**naming attribute** The final attribute in a directory information tree distinguished name. See also relative distinguished name.

**naming context** A specific suffix of a directory information tree that is identified by its DN. In Sun ONE Directory Server, specific types of directory information are stored in naming contexts. For example, a naming context which stores all entries for marketing employees in the Siroe Corporation at the Boston office might be called ou=mktg, ou=Boston, o=siroe, c=US.

**node** An entry in the DIT.

**object class** A template specifying the kind of object the entry describes and the set of attributes it contains. For example, Sun ONE Directory Server specifies an emailPerson object class which has attributes such as commonname, mail (email address), mailHost, and mailQuota.

**object identifier (OID)** An OID is a sequence of integers, typically written as a dot-separated string. An OID is assigned to each attribute and object class to conform with the LSAP and X.500 standards.

**OID** See object identifier (OID).

**organization administrator** User who has administrative privileges to create, modify, and delete mail users and mail lists in an organization or suborganization by using the Delegated Administrator for Messaging and Collaboration GUI or CLIs.

**OSI tree** A directory information tree that mirrors the Open Systems Interconnect network syntax. An example of a distinguished name in an OSI tree would be cn=billt, o=bridge, c=us.

**personal folder** A folder that can be read only by the owner. See also shared folder.

**port number** A number that specifies an individual TCP/IP application on a host machine, providing a destination for transmitted data.

**protocol** A formal description of messages to be exchanged and rules to be followed for two or more systems to exchange information.

**provisioning** The process of adding, modifying or deleting entries in the Sun ONE Directory Server. These entries include users and groups and domain information.

**RDN** Relative distinguished name. The name of the actual entry itself, before the entry's ancestors have been appended to the string to form the full distinguished name.

**referral** A process by which the directory server returns an information request to the client that submitted it, with information about the Directory Service Agent (DSA) that the client should contact with the request. See also knowledge information.

relative distinguished name See RDN.

**replica directory server** The directory that will receive a copy of all or part of the data.

**required attributes** Attributes that must be present in entries using a particular object class. See also allowed attributes, attributes.

**reverse DNS lookup** The process of querying the DNS to resolve a numeric IP address into the equivalent fully qualified domain name.

**RFC** Request For Comments. The document series, begun in 1969, describes the Internet suite of protocols and related experiments. Not all (in fact very few) RFCs describe Internet standards, but all Internet standards are published as RFCs. See http://www.imc.org/rfcs.html.

**root entry** The top-level entry of the directory information tree (DIT) hierarchy.

**schema** Definitions, including structure and syntax, of the types of information that can be stored as entries in Sun ONE Directory Server. When information that does not match the schema is stored in the directory, clients attempting to access the directory might be unable to display the proper results.

search base See base DN.

**server administrator** Person who performs server management tasks. The server administrator provides restricted access to tasks for a particular server, depending upon task ACIs. The configuration administrator must assign user access to a server. Once a user has server access permissions, that user is a server administrator who can provide server access permissions to users.

**shared folder** A folder that can be read by more than one person. Shared folders have an owner who can specify read access to the folder and who can delete messages from the shared folder. The shared folder can also have a moderator who can edit, block, or forward incoming messages. Only IMAP folders can be shared. See also personal folder.

**SIEVE** A scripting language for filtering mail. Messaging and Collaboration supports the SIEVE rules as specified in RFC 3028 and in the relational extension to SIEVE found in RFC 3431.

**SIMS** Sun Internet Mail Server.

**sn** Aliased directory attribute for surname.

**static group** A mail group defined statically by enumerating each group member. See also dynamic group.

**subdomain** A portion of a domain. For example, in the domain name corp.siroe.com, corp is a subdomain of the domain siroe.com. See also host name, fully qualified domain name.

**subnet** The portion of an IP address that identifies a block of host IDs.

**subordinate reference** The naming context that is a child of the naming context held by your directory server. See also knowledge information.

**synchronization** The update of data by a master directory server to a replica directory server.

TCP See Transmission Control Protocol.

**TCP/IP** See Transmission Control Protocol/Internet Protocol.

**top-level administrator** User who has administrative privileges to create, modify, and delete mail users, mail lists, family accounts, and domains in an entire Messaging Server namespace by using the Delegated Administrator for Messaging and Collaboration GUI or CLIs. By default, this user can act as a message store administrator for all messaging servers in the topology.

**Transmission Control Protocol (TCP)** The basic transport protocol in the Internet protocol suite that provides reliable, connection-oriented stream service between two hosts.

**Transmission Control Protocol/Internet Protocol (TCP/IP)** The name given to the collection of network protocols used by the Internet protocol suite. The name refers to the two primary network protocols of the suite: TCP (Transmission Control Protocol), the transport layer protocol, and IP (Internet Protocol), the network layer protocol.

**UID** (1) User identification. A unique string identifying a user to a system. Also referred to as a userID. (2) Aliased directory attribute for userID (login name).

**upper reference** Indicates the directory server that holds the naming context above your directory server's naming context in the directory information tree (DIT).

**user account** An account for accessing a server, maintained as an entry on a directory server.

**User/Groups Directory Server** A Directory Server that maintains information about users and groups in an organization.

**user entry or user profile** Fields that describe information about each user, required and optional, examples are: distinguished name, full name, title, telephone number, pager number, login name, password, home directory, and so on.

**user folders** A user's email mailboxes.

User Management Utility The Sun ONE command line interface (commadmin) for adding, deleting and modifying users, groups and domains.

**user quota** The amount of space, configured by the system administrator, allocated to a user for email messages.

virtual domain (1) An ISP hosted domain. (2) A domain name added by the Messaging Multiplexor to a client's user ID for LDAP searching and for logging into a mailbox server. See also domain, hosted domain.

# Index

A	В
access reactivate 113 remove 113 suspend 113 access filter user 118, 130	billable user 248 billing, account ID 111 birthday attribute 66 businessCategory, attribute 63
access rights, public folder 145 account ID, billing 111 adminRole, attribute 61	С
aliasedObjectName, attribute 62 allowed broadcaster 158 determining policy 161 allowed disk space 147 attachment quota 125	calCalURI, attribute 63 calendar 63 busy time data 64 default URI 63 calendar groups 99
attributes yntax 262 attributes definitions 61 list of 55 audience 13	calFBURL, attribute 64 catchall address 120 challenge phrase 112 response to 112 cn. attribute 64
authentication 106 automatic response 123 duration 124 internal 124	co, attribute 65 commonName, attribute 66 countryName, attribute 66
autoreply 123, 129 duration 124 internal 124	

ט	E	
daemon_list 131	echo 122	
dataSource, attribute 66	error message 165	
dateOfBirth, attribute 66	<u> </u>	
dc (domain component) domain component node 103		
dc (domain component), attribute 67	F	
delivery paths 128	-	
deny filter 118, 130	facsimileTelephoneNumber, attribute 70	
description, attribute 67	family group	
distinguished name (DN) 105	manager 177	
administrator's group 259	file	
billable user 248	local path 128	
family account 242	filter	
forming, in PAB entries 184	access 118, 130	
mailing list 156	deny 118, 130 forwarded to	
distribution list	moderator 166	
describing 173	moderator 100	
document conventions 15		
documentation		
where to find Messaging Server		
documentation 16	G	
domain	givenName, attribute 71	
primary 172	group	
vanity 172	within organization 176	
domain access reactivate 108	group membership	
remove 108	restrictions 245	
suspend 108	visibility 245	
domain alias entry 67	groupOfUniqueNames, object class 33	
domain component 67	groups, calendar 99	
domain component 67		
domain name		
multiple DC nodes 103		
domain name (DN)	Н	
overriding 69, 240	П	
domain suborganizations 26	host, defined 276	
domain, object class 32	hosted domains 25	
domains, hosted 25		
domainUIDSeparator, attribute 68, 239		
domOrgMaxUsers, attribute 69, 240		
domOrgNumUsers, attribute 70, 241	I	
duplicate deliveries 170		
auphoute delivered 110	icsAdministrator, object class 34	

icsAdminRole, attribute 71	icsSet, attribute 98
icsAlias, attribute 72	icsSourceHtml, attribute 100
icsAllowedServiceAccess, attribute 72	icsStatus, attribute 100
icsAllowRights, attribute 73	icsSubscribed, attribute 102
icsAnonymousAllowWrite, attribute 75	icsTimezone, attribute 102
icsAnonymousCalendar, attribute 76	inetAdmin, object class 38
icsAnonymousDefaultSet, attribute 76	inetCanonicalDomainName, attribute 103
icsAnonymousLogin, attribute 77	inetCOS (class of service), attribute
icsAnonymousSet, attribute 77	COS definitions 104
icsCalendar, attribute 78	inetDomain, object class 39
icsCalendarDomain, object class 35	inetDomainAlias, object class 40
icsCalendarDWPHost, object class 35	inetDomainAuthInfo, object class 40
icsCalendarGroup object class 36	inetDomainBaseDN, attribute 105
icsCalendarOwned, attribute 78	inetDomainCertMap 106
icsCalendarResource, object class 37	inetDomainCertMap, attribute 106
icsCalendarUser, object class 37	inetDomainOrg, object class 230
icsCapacity, attribute 79	inetDomainSearchFilter, attribute 106
icsContact, attribute 79	inetDomainStatus, attribute 107
icsDefaultAccess, attribute 80	inetLocalMailRecipient, object class 41
icsDefaultSet, attribute 80	inetMailAdministrator, object class 42
icsDomainAllowed, attribute 81	inetMailGroup
icsDomainNames, attribute 82	connection with mgrpDisallowedDomain 164
icsDomainNotAllowed, attribute 83	inetMailGroup, object class 43
icsDWPBackEndHosts, attribute 84	inetMailGroupManagement, object class 231
icsDWPHost, attribute 85	inetMailGroupStatus, attribute 109
icsExtended, attribute 85	inetMailUser, object class 43
icsExtendedDomainPrefs, attribute 86	inetManagedGroup, object class 231
icsExtendedGroupPrefs, attribute 87	inetOrgPerson, object class 44
icsExtendedResourcePrefs, attribute 88	inetResource, object class 45
icsExtendedUserPrefs, attribute 88	inetResourceStatus, attribute 110
icsFirstDay, attribute 92	inetSubscriber, object class 45
icsFreeBusy, attribute 92	inetSubscriberAccountId 110
icsGeo, attribute 93	inetSubscriberAccountId, attribute 111
icsMandatorySubscribed, attribute 93	inetSubscriberChallenge, attribute 112
icsMandatoryView, attribute 94	inetSubscriberResponse, attribute 112
icsPartition, attribute 94	inetUser, object class 46
icsPreferredHost, attribute 95	inetUserHttpURL, attribute 113
icsQuota, attribute 96	inetUserStatus, attribute 113
icsRecurrenceBound, attribute 96	ipUser, object class 47
icsRecurrenceDate, attribute 97	
icsRegularExpressions, attribute 97	

icsSessionTimeout, attribute 98

L	autoreply 122
	mailAutoReplySubject, attribute 123
language	mailAutoReplyText
preferred by user 179	connection to mailAutoReplyMode 122
LDAP overview 261	mailAutoReplyText, attribute 123
list of attributes 55	mailAutoReplyTextInternal, attribute 124
list of object classes	mailAutoReplyTimeOut, attribute 124
object classes list of 31, 189, 229	mailClientAttachmentQuota 125
local path 128	mailClientAttachmentQuota, attribute 125
locale	mailConversionTag, attribute 125
preferred by user 220	mailDeferProcessing, attribute 126
login sequence, replaying 116	mailDeliveryFileURL, attribute 127
login string, reconstructing 116	mailDeliveryOption 128
logili string, reconstructing 110	mailDeliveryOption=forward 141
	mailDeliveryOption=program 145
	mailDeliveryOption, attribute
NA.	mailDeliveryOption=file 128
M	mailDomain, object class 48
mail group	mail Domain Allowed Service Access
message size received 166	connection with mailDomainStatus 138
mail group membership	$mail Domain Allowed Service Access, attribute \ \ 130$
alternative specification method 162	mailDomainMsgMaxBlocks, attribute 134
restrictions 245	mailDomainMsgQuota 134
visibility 245	mailDomainMsgQuota, attribute 134
mail group, allowed incoming mail	mailDomainStatus, attribute 137
by domain 159	mailDomainWelcomeMessage, attribute 139
by user 158 mail group, disallowed incoming mail	mailEquivalentAddress, attribute 139
by domain 164	mailFolderName, attribute 140
by user 163	mailForwardingAddress, attribute 141
mail quota	mailHost
managed group 249	setting up 181
user 147	mailHost, attribute 141
mail, attribute 115	mailing lists
mailAccessProxyPreAuth, attribute 115	allowed membership 242
mailAccessProxyReplay, attribute 116	denied membership 243
mailAdminRole, attribute 117	group appearance on 244
mailAllowedServiceAccess	mailMessageStore
connection with mailDomainStatus 138	setting up 181, 259
mailAllowedServiceAccess, attribute 117	mailMessageStore, attribute 142
mailAlternateAddress, attribute 120	mailMsgMaxBlocks, attribute 143
mailAntiUBEService, attribute 121	mailMsgQuota, attribute 143
mailAutoReplyMode, attribute	mailProgramDeliveryInfo, attribute 144
1 0	mailPublicFolderDefaultRights, attribute 145

mailQuota 147	mgmanGoodbyeText, attribute 243
mailQuota, attribute 147	mgmanHidden, attribute 244
mailRejectText, attribute 148	mgmanIntroText, attribute 244
mailRoutingAddress, attribute 149	mgmanJoinability, attribute 245
mailRoutingHosts, attribute 149	mgmanMemberVisibility, attribute 245
mailRoutingSmartHost, attribute 150	mgmanVisibility, attribute 247
mailSieveRuleSource, attribute 151	mgrpAddHeader, attribute 158
mailSMTPSubmitChannel, attribute 153	mgrpAllowedBroadcaster, attribute 158
mailto syntax 165	mgrpAllowedDomain, attribute 159
mailUserStatus, attribute 153	mgrpAuthPassword, attribute 160
managed group	mgrpBroadcasterPolicy, attribute 161
billable user 248	mgrpDeliverTo, attribute 162
cumulative disk quota 249	mgrpDisallowedBroadcaster, attribute 163
current status 250	mgrpDisallowedDomain, attribute 164
maximum users 250 number of users 248	mgrpErrorsTo, attribute 165
	mgrpModerator, attribute 165
maximum message size allowed to a group 166	mgrpMsgMaxSize, attribute 166
maximum messages allowed	mgrpMsgPrefixText, attribute 167
user 143	mgrpMsgRejectAction, attribute 168
maximum pab entries allowed	mgrpMsgRejectText, attribute 169
user 155	mgrpMsgSuffixText, attribute 169
maximum size message 143	mgrpNoDuplicateCheck, attribute 170
maximum users allowed	mgrpRemoveHeader, attribute 170
domain 69, 240	mgrpRFC822MailMember, attribute 171
managed group 250	mnggrpAdditionPolicy, attribute 247
maxPabEntries, attribute 155	mnggrpBillableUser, attribute 248
memberOf, attribute 155	mnggrpCurrentUsers, attribute 248
memberOfManagedGroup, attribute 241	mnggrpDeletionPolicy, attribute 249
memberOfPAB, attribute 156	mnggrpMailQuota, attribute 249
memberOfPABGroup, attribute 156	mnggrpMaxUsers, attribute 250
memberURL, attribute 157	mnggrpStatus, attribute 250
message delivery, guaranteeing 153	mnggrpUserClassOfServices, attribute 251
message filtering, Sieve rules 152	moderator
message quota 134	messages forwarded to 166
message size	msgVanityDomain, attribute 172
to mailGroup 166	msgVanityDomainUser, object class 49
message store	MTA
partition name 142	host name, final destination 142
Messaging Server	host name, user's domain 150
documentation 16	multiLineDescription, attribute 173
mgmanAllowSubscribe, attribute, 242	

mgmanDenySubscribe, attribute 243

N	organizationUnitName, attribute 176
nickName, attribute 173	ou (organizationUnitName), attribute 176
nsdaCapability, attribute 257	owner, attribute 177
nsdaDomain, attribute 258	
nsdaModifiableBy, attribute 258	
nsDefaultMaxDeptSize, attribute 251	
nsManagedDept, object class 232	Р
nsManagedDeptAdminGroup, object class 233	pab, object class 51
nsManagedDomain, object class 233	pabGroup, object class 52
nsManagedFamilyGroup, object class 234	pabPerson, object class 53
nsManagedISP, object class 235	pabURI, attribute 177
nsManagedMailList, object class 235	personal address book (pab)
nsManagedOrgUnit, object class 236	container 178
nsManagedPerson, object class 237	maximum entries 155
nsMaxDepts, attribute 252	unique name (un) of pab 156
nsMaxDomains, attribute 252	unique name (un) of personal group(s) 156 postalAddress, attribute 179
nsMaxMailingLists, attribute 253	preauthentication 115
nsMaxUsers, attribute 254	1
nsNumDepts, attribute 254	preferredLanguage, attribute 179
nsNumDomains, attribute 255	preferredLocale, attribute 220 preferredMailHost, attribute 180
nsNumMailLists, attribute 255	preferredMailMessageStore, attribute 181, 259
nsNumUsers, attribute 256	privileges, administrative 117
nsSearchFilter, attribute 257	Program approval process 145
nsUniquenessDomain, object class 237	program delivery 144
nswcalDisallowAccess, attribute 174	proxy authentication 117
nswmExtendedUserPrefs, attribute 174	public folder access rights 145
O	Q
o, attribute 175	quota 147
object classes definitions 32	mailClientAttachmentQuota 125 mailDomainMsgQuota 134
object identifiers 262	mailMsgQuota 143
objectClass, attribute 175	mnggrpMailQuota 249
OIDs 262	quota reporting tools
organization subtree 105	mailDomainMsgQuota 135
organization, object class 50	quotas
organizationalUnit, object class 50	hard 144
organizationName, attribute 176	soft 144
organizationUnitName 176	

R references, resolved 145 RFC 1959 163 RFC 2256 40 RFC 2739 63 RFC 2798 179 RFC 822 41, 163, 165 mgrpRFC822MailMember 171 RFC1959 162	sunNameSpaceUniqueAttrs, attribute 223 sunServiceComponent, object class 201 sunServiceId, attribute 227 sunSmsPriority, attribute 228 sunXmlKeyValue, attribute 228 syntax, attributes 262
RFC822 159	Т
alternate email address 120	tag, program 66
rights to manage other groups 259	telephoneNumber, attribute 183 time zones, list of valid 263
S	U
seeAlso, attribute 182	uid, attribute 183
service- specific object classes 19, 21	un, attribute 184
service_list 118	unique name (un)
shared classes 19, 21	personal address book 156
sieve rule 151	personal group 157
Sieve rules, message filters 152	uniqueMember, attribute 185
size limit on MTA blocks units 134	user 70, 241
sn, attribute 182	user identification, compound 68, 107, 239
standard time zones 263	user rules 151
status	userid, attribute 185
internet domain 107	userPassword, attribute 185
internet mail group 109 internet user 113	userPresenceProfile, object class 53, 201
mail domain 137	
mail user 153	
managed group 250	
status attributes	V
interaction between 114, 138, 154	vacationEndDate, attribute 186
subject text 123	vacationStartDate, attribute 187
suborganizations 26	vanity domain
subscriber 112	creating 172
subtree 105	-
sunKeyValue, attribute 221	
sunManagedOrganization, object class 198, 199	
sunNameSpace, object class 199	

# W

Web content publishing 113 white-pages lookup applications 115 who should read 13

292