Schema Reference Manual

Sun ™ ONE Messaging and Collaboration

iPlanet ™ Messaging Server 5.2; Sun ONE Calendar Server 5.1.1

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Contents

About This Manual

This manual serves as a reference for schema information for Sun™ ONE Messaging and Collaboration products using LDAP, specifically iPlanet™ Messaging Server and Sun ONE Calendar Server. Note that Sun ONE is the brand formally known as iPlanet. During this transition period you will see both brands mentioned in this manual. Both iPlanet and Sun ONE are brands of Sun Microsystems, Inc.

Topics covered in this chapter include:

- Who Should Use This Manual
- What You Need to Know
- How This Manual is Organized
- Typographical Conventions
- Where to Find This Manual Online

Who Should Use This Manual

You should use this manual if you want to provision iPlanet 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 Sun ONE /iPlanet 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.

Readers are expected to have a basic understanding of LDAP, Directory Server, and email or calendar concepts.

What You Need to Know

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

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

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

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

  For a list of time zone names, see Appendix A, Standard Time Zones.

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"
- Appendix A, "General Information"
- Glossary

Typographical 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.

Italicized Font

Italicized font is used to represent book titles and text that you enter using information that is unique to your messaging server. It is used for server paths and names and account IDs.

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

server-root / msg-*instance* / ...

In these situations, server-root represents the directory path in which you install the server, and msg-*instance* represents the server instance (or default host machine name) you use when you install it. For example, if you install your server in the directory `/usr/iplanet/server5` and use the server instance `tango`, the actual path is:

```
/usr/iplanet/server5/msg-tango/
```

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 iPlanet Messaging Server documentation, use the URL:

http: / / docs.sun.com / prod / s1msgsrv

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

http://docs.sun.com/prod/s1.s1cals

Chapter 1

Overview

This chapter give an overview of Sun™ ONE/iPlanet™ schema. It contains the following sections:

- Basic Data Model
- iPlanet Messaging Server Schema Overview
- Sun ONE Calendar Server Schema Overview

Basic Data Model

The basic data model of the 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). Table 1-1. depicts these relationships.

Table 1-1 Entry Types and Corresponding Object Classes

Types	Core Classes	Shared Classes	Messaging Server Classes	Calendar Server Classes
DC Tree Domain	domain, inetDomain	N/A	mailDomain, nsManagedDomain	N/A
Org Tree Domain	organization	N/A	nsManagedDomain	N/A
User	person, inetUser, organizational Person, inetOrg Person	ipUser, userPresence Profile	inetMailUser, inetLocalMailRecipient, nsManagedPerson	icsCalendarUser, icsCalendarDWPHost

Table 1-1 Entry Types and Corresponding Object Classes

Types	Core Classes	Shared Classes	Messaging Server Classes	Calendar Server Classes
Group	groupOfUnique Names	N/A	inetMailGroup, inetLocalRecipient, inetMailGroupManagement, nsManagedMailList	N/A
Family Account	inetManagedGroup	N/A	nsManagedDept	N/A
Resource	inetResource	N/A	N/A	icsCalendarResource, icsCalendarDWPHost

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

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

iPlanet Messaging Server Schema Overview

The basic iPlanet 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 iPlanet Messaging Server are defined in this Schema Reference.

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.

iPlanet 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
- Hosted Domain and Domain Organization
    - Hosted Domain
    - Domain Alias
    - Mail Domain
    - Domain Organization
- 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`, `inetMailGroupManagement`, 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`.

Hosted Domain and Domain Organization

LDAP entries created by `domain` can be enabled for messaging services by overlaying the entry with `inetDomain`, `inetDomainAlias`, `inetDomainOrg`, and `mailDomain`. Optionally, to hold attributes suitable for overriding the default behavior of `mailDomain` and for stored certmaps, `inetDomainAuthInfo` can be used.

Hosted Domain

The base entry created by `domain` is extended by overlaying `inetDomain`, `mailDomain`, and optionally `inetDomainAuthInfo` to create a hosted domain node suitable for mail services for the hosted organization. There must be an instance of `inetDomain` for each hosted domain.

Domain Alias

LDAP entries may be created in the `domain` component tree that point at other hosted domain objects. There must be an instance of inetDomainAlias for each alias entry. The hosted domain is linked to the aliased domain by the attribute `aliasedObjectName`.

Mail Domain

LDAP entries created by `domain` and `inetDomain` can be enabled for the hosted domain using the object class `mailDomain`.There must be an instance of `mailDomain` for each hosted domain.

If more than one hosted domain refers to the same organization subtree, an instance of `inetDomainAuthInfo` must exist to contain search filter, domain certmap and canonical domain name information for each hosted domain.

Domain Organization

To support a managed domain organization, the auxiliary object class `inetDomainOrg` is used in conjunction with the structural class `organization`. A domain organization is usually created as a way of introducing hierarchy beneath a customer subtree and assigning administrators for that domain organization.

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, departments, and family members.

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 `inetManagedGroup`, 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 of the group 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, and discusses the Directory Information Tree (DIT) layout.

Calendar Object Classes and Their Attributes

Table 1-2 shows the calendar-specific object classes and their attributes. In addition, Sun ONE Calendar Server also uses one non-calendar object class, inetResource.

Table 1-2 Calendar-Specific Object Classes

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

Table 1-2 Calendar-Specific Object Classes *(Continued)*

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

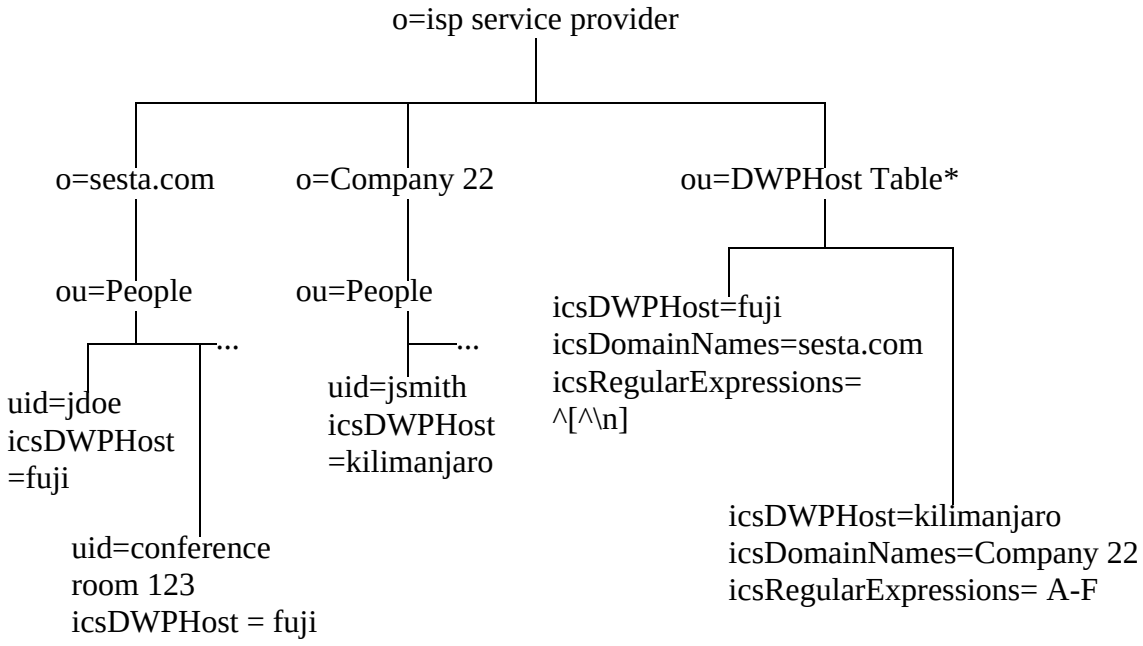
Table 1-2 Calendar-Specific Object Classes *(Continued)*

Object Classes	Required Attributes	Allowed Attributes
icsCalendarUser	N/A	cn, givenName, icsAllowedServiceAcess, icsCalendar, icsCalendarOwned, icsDefaultSet, icsDoubleBook, icsDWPHost, icsExtended, icsExtendedUserPrefs, icsFirstDay, icsFreeBusy, icsGeo, icsPartition, icsPreferredHost, icsQuota, icsSet, icsStatus, icsSubscribed, icsTimezone, mail, nswcalDisallowAccess, preferredLanguage, sn, uid, userPassword Note: icsPartition is not currently implemented.

Directory Information Tree (DIT) Layout

Whether DWP servers are per domain resources, cross-domain resources, or a combination, the following DIT describes what Calendar Server schema looks like. DWP server entries can reside anywhere in LDAP because each entry contains a domain name. Figure 1-1 shows a sample Directory Information Tree (DIT) Layout for Sun ONE Calendar Server.

Figure 1-1 Directory Information Tree Layout



*The DN of ou=DWPHostTable will be stored in `ics.conf`. ou=DWPHostTable is optional.

Chapter 2

Object Classes

This chapter describes LDAP object classes for Sun™ ONE/ iPlanet™ products. The objects are listed alphabetically.

List of Object Classes

This chapter describes the following object classes for Sun ONE Messaging and Collaboration products:

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), 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.

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
Reserved; not implemented.

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

Superior Class

Object Class Type
structural

OID
1.3.6.1.4.1.42.2.27.9.2.4

Required Attributes
N / A

Allowed Attributes
`icsAllowedServiceAcess`, `icsAllowRights`, `icsAnonymousAllowWrite`, `icsAnonymousCalendar`, `icsAnonymousDefaultSet`, `icsAnonymousLogin`, `icsAnonymousSet`,`icsDefaultSet`, `icsDomainAllowed`, `icsDomainNames`, `icsDomainAllowed`, `icsDWPBackEndHosts`, `icsExtended`, `icsExtendedDomainPrefs`, `icsMandatorySubscribed`, `icsMandatoryView`, `icsPreferredHost`, `icsQuota`, `icsRecurrenceBound`, `icsRecurrenceDate`, `icsSessionTimeout`, `icsSourceHtml`, `icsStatus`, `icsTimezone`

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
Specifies a calendar group.

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

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.

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
`cn`, `icsAlias`, `icsCalendar`, `icsCapacity`, `icsContact`, `icsDoubleBook`, `icsDWPHost`, `icsExtended`, `icsExtendedResourcePrefs`, `icsGeo`, `icsPartition`, `icsPreferredHost`, `icsQuota`, icsStatus, `icsTimezone`, `uid`

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

Object Class Type
structural

OID
1.3.6.1.4.1.42.2.27.9.2.2

Required Attributes
N / A

Allowed Attributes
`cn`, `givenName`, `icsAllowedServiceAcess`, `icsCalendar`, `icsCalendarOwned`, `icsDefaultSet`, `icsDoubleBook`, `icsDWPHost`, `icsExtended`, `icsExtendedUserPrefs`, `icsFirstDay`, `icsFreeBusy`, `icsGeo`, `icsPartition`, `icsPreferredHost`, `icsQuota`, `icsSet`, `icsStatus`, `icsSubscribed`, `icsTimezone`, `mail`, `nswcalDisallowAccess`, `preferredLanguage`, `sn`, `uid`, `userPassword`

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
Auxiliary class for Nortel and Sun / Netscape Alliance interoperability specification compliant services like mail, Radius, and calendar. Used to extend the base entry created by `domain`. It represents a hosted domain account and is used in conjunction with `mailDomain` and (optionally `inetDomainAuthInfo`) for creating a hosted domain node suitable for mail services for the hosted organization. This object class must be used for all hosted domain entries.

Superior Class
top

Object Class Type
auxiliary

OID
2.16.840.1.113730.3.2.129

Required Attributes
N / A

Allowed Attributes
`inetDomainBaseDN`, `inetDomainStatus`

inetDomainAlias

Supported by
iPlanet Messaging Server 5.0

Definition
Structural class for creating domain alias entries in the directory. Entries may be created in the domain component tree that point at other hosted domain objects. Such domain alias entries must use 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.

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`

inetDomainOrg

Supported by
iPlanet Messaging Server 5.0

Definition
Auxiliary class for supporting a 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. For example, `siroe.com` could have a customer subtree with the DN `o=Siroe Inc.,o=ISP`. 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 `organization` and `inetDomainOrg` object classes.

Superior Class
`top`

Object Class Type
auxiliary

OID
2.16.840.1.113730.3.2.132

Required Attributes
N / A

Allowed Attributes
`domOrgMaxUsers`, `domOrgNumUsers`

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 (intraorganizational) 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 `groupOfUniqueNames` to define a group of mail recipients. `inetMailGroup` is used to store attributes of a mailing list. It is used in conjunction with `inetLocalMailRecipient` and `inetMailGroupManagement` (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`, `mgrpAddHeader`, `mgrpAllowedBroadcaster`, `mgrpAllowedDomain`, `mgrpAuthPassword`, `mgrpBroadcasterPolicy`, `mgrpDeliverTo`, `mgrpDisallowedBroadcaster`, `mgrpDisallowedDomain`, `mgrpErrorsTo`, `mgrpModerator`, `mgrpMsgMaxSize`, `mgrpMsgPrefixText`, `mgrpMsgRejectAction`, `mgrpMsgRejectText`, `mgrpMsgSuffixText`, `mgrpNoDuplicateChecks`, `mgrpRemoveHeader`, `mgrpRequestTo`, `mgrpRFC822MailMember`, `preferredLanguage`

inetMailGroupManagement

Supported by
iPlanet Messaging Server 5.0

Definition
Used to extend the base entry created by `groupOfUniqueNames`. `inetMailGroupManagement` is used to store attributes for managing a distribution list by using Delegated Administrator for Messaging. This object class is used in conjunction with `inetMailGroup` and `inetLocalMailRecipient`. 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
mgmanAllowSubscribe, mgmanDenySubscribe, mgmanGoodbyeText, mgmanHidden, mgmanIntroText, mgmanJoinability, mgmanMemberVisibility, mgmanVisibility, multiLineDescription

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

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 `groupOfUniqueNames`) 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`

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
audio, businessCategory, carLicense, departmentNumber, displayName, employeeNumber, employeeType, givenName, homePhone, homePostalAddress, initials, jpegPhoto, labeledURI, mail, manager, mobile, o, pager, photo, roomNumber, secretary, uid, userCertificate, x500UniqueIdentifier, preferredLanguage, userSMIMECertificates, userPKCS12

Note that not all of these attributes are supported by Sun ONE Messaging and Collaboration products.

inetResource

Supported by
iPlanet Calendar Server 5.1

Definition
Specifies a resource.

Superior Class

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

Definition
Used to extend the base entry created by `inetOrgPerson`. It represents a user account and is used in conjunction with `inetMailUser` and `ipUser` for creating a mail account. This can be used with `icsUser` for creating a calendar account.

Superior Class
`top`

Object Class Type
auxiliary

OID
2.16.840.1.113730.3.2.130

Required Attributes
N / A.

Allowed Attributes
`inetUserHttpURL`, `inetUserStatus`, `memberOf`, `uid`, `userPassword`

ipUser

Supported by
iPlanet Messaging Server 5.0

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.

Superior Class
`top`

Object Class Type
auxiliary

OID
2.16.840.1.113730.3.2.135

Required Attributes
N / A

Allowed Attributes
`inetCOS`, `memberOfManagedGroup`, `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.

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`, `mailQuota`, `mailRoutingHosts`, `mailRoutingSmartHost`, `preferredLanguage`, `preferredMailHost`, `preferredMailMessageStore`

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

nsManagedDept

Supported by
iPlanet Messaging Server 5.0

Definition
Stores information for a nonadministrator group. Every nonadministrator group must contain this object class in order to be managed by iPlanet Delegated Administrator.

Superior Class
groupOfUniqueNames

Object Class Type

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

Definition
Stores information for a group of administrators.

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

Definition
Stores information for an organization. All organizations must contain this object class in order to be managed by iPlanet Delegated Administrator.

Superior Class
top

Object Class Type

OID
2.16.840.1.113730.3.2.86

Required Attributes
objectClass

Allowed Attributes
nsDefaultMaxDeptSize, nsMaxDepts, nsMaxDomains, nsMaxMailLists, nsMaxUsers, nsNumDepts, nsNumDomains, nsNumMailLists, nsNumUsers, nsdaModifiableBy, owner

nsManagedFamilyGroup

Supported by
iPlanet Messaging Server 5.0

Definition
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
2.16.840.1.113730.3.2.89

Required Attribute
objectClass

Allowed Attributes
nsMaxUsers, nsNumUsers, nsdaModifiableBy, owner

nsManagedISP

Supported by

iPlanet Messaging Server 5.0

Definition
Tracks the number of suborganizations 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

Definition
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

Definition
Stores information for a 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

Definition
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

Definition
This object class was used as a marker to identify the subtree where the uniqueness of uid should be enforced. The uid uniqueness plugin uses 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

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, 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`

Chapter 3

Attributes

This chapter describes attributes required or allowed by LDAP object classes for Sun™ ONE/iPlanet™ products. The attributes are listed alphabetically.

List of Attributes

This chapter describes the following attributes for Sun ONE Messaging and Collaboration products:

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 by the directory server to identify alias entries in the directory. Contains the distinguished name of the entry for which it is an alias.

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`

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 `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
If the domain alias entry DN is `dc=sesta, dc=fr, o=internet`, then the value of `dc` is `sesta`.

OID
0.9.2342.19200300.100.1.25

description

Origin
LDAP

Syntax
cis

Object Classes
`icsCalendarDWPHost`, `icsCalendarResource`, `groupOfUniqueNames`, `inetManagedGroup`, `pab`, `pabGroup`

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
`inetDomainAuthInfo`

Definition
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.

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
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

facsimileTelephoneNumber

Origin
iPlanet Calendar Server 5.1

Syntax
tel, single-valued

Object Classes
`icsCalendarResource`, `inetResource`

Definition
Fax telephone number for resources.

Example
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

icsAllowedServiceAcess

Origin
Not currently used.

Syntax
cis, single-valued (see mailAllowedServiceAccess)

Object Classes

`icsCalendarDomain`, `icsCalendarUser`

Definition

Specifies which calendar access protocols are allowed using access filters (rules). If no rules are specified, then the user or domain is allowed access to all protocols 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.

Rule Syntax

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

+ (allow filter) means the daemon list services are being granted to the client list.

- (deny filter) means the services are being denied to the client list.

`daemon_list` is a comma separated list of services to which access is being granted or denied.

Legal service names are: `wcap`.

`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 their meanings:

Table 3-1 Legal Wildcards and Their Meanings

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.

Table 3-1 Legal Wildcards and Their Meanings

Wildcards	Meanings
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 daemon list (services): *, 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 daemon 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
`icsAllowedServiceAccess = +wcap:*`

OID
2.16.840.1.113730.3.1.726

icsAllowRights

Origin
iPlanet Calendar Server 5.1

Syntax
cis, single-valued

Object Classes
`icsCalendarDomain`

Definition

A 32-bit integer, evaluated as bit fields that disallow specific user rights. If the field is set (1), the right is not allowed. If the bit is not set (0), the right is allowed.

Bit definitions:

0	Allow / disallow creation of calendars.
1	Allow / disallow deletion of calendars.
2	Allow / disallow publicly writable calendars.
3	Allow / disallow publicly readable calendars.
4	Allow / disallow changing of user preferences.
5	Allow / disallow changing of user password.
6	Allow / disallow changing of user default calendar.
7	Allow / disallow CALID as URL.
8	Allow / disallow double booking of user calendars.
9	Allow / disallow double booking of resource calendars.
10–15	Reserved.

Example

OID

2.16.840.1.113730.3.1.727

icsAnonymousAllowWrite

Origin

iPlanet Calendar Server 5.1

Syntax

boolean (Yes or No)

Object Classes

`icsCalendarDomain`

Definition
Specifies if anonymous users can write events in public calendars.

Example
`icsAnonymousAllowWrite = Yes`

OID
2.16.840.1.113730.3.1.728

icsAnonymousCalendar

Origin
iPlanet Calendar Server 5.1

Syntax
ces

Object Classes
`icsCalendarDomain`

Definition
Calendar ID for anonymous users.

Example
`icsAnonymousCalendar = Guest1`

OID
2.16.840.1.113730.3.1.729

icsAnonymousDefaultSet

Origin
Not implemented.

Syntax
ces, UTF8 encoded

Object Classes
`icsCalendarDomain`

Definition
Default calendar set for anonymous users.

Example

OID
2.16.840.1.113730.3.1.730

icsAnonymousLogin

Origin
iPlanet Calendar Server 5.1

Syntax
boolean (Yes or No)

Object Classes
`icsCalendarDomain`

Definition
Specifies if anonymous login is allowed.

Example
`icsAnonymousLogin = Yes`

OID
2.16.840.1.113730.3.1.798

icsAnonymousSet

Origin
Not implemented.

Syntax
ces, UTF8 encoded

Object Classes
`icsCalendarDomain`

Definition
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.

Example
`icsCalendar = jdoe`

OID
2.16.840.1.113730.3.1.731

icsCalendarOwned

Origin
iPlanet Calendar Server 5.1

Syntax
ces, single-valued

Object Classes
`icsCalendarUser`

Definition
Default calendar for a user or resource.

Example
`icsCalendar = jdoe`

OID
1.3.6.1.4.1.42.2.27.9.1.6

icsCapacity

Origin
iPlanet Calendar Server 5.1

Syntax
int, single-valued

Object Classes

Definition
Reserved, not implemented.

Example

OID
2.16.840.1.113730.3.1.800

icsContact

Origin
iPlanet Calendar Server 5.1

Syntax
cis, UTF8 encoded

Object Classes
`icsCalendarResource`

Definition
Resource contact name. Reserved, not implemented.

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

Object Classes

Definition
Reserved, not implemented.

Default access control applied to this calendar. See “Access Control Entries” in the WCAP Commands chapter of the iPlanet Calendar Server Programmer’s Manual for a detailed description of Access Control Entries.

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:

daemon-list:client-list

where daemon-list is a blank- or comma-separated list of one or more daemon 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:

ALL	Always matches
LOCAL	Matches any host whose name does not contain a dot character.
UNKNOWN	Matches any host whose name or address are unknown. Use this with care.

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 daemon-list and the client-list:

EXCEPT	Matches anything that matches list 1 unless it matches anything in list 2. 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: daemon@host_pattern:client-list.

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

Comma-separated list of all the domain names for which this host holds calendars. If the attribute is empty, no domains are allowed. If a domain is allowed, it must be explicitly listed here.

Example
icsDomainNames = sesta.com, company22.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:

daemon-list:client-list

where daemon-list is a blank- or comma-separated list of one or more daemon 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:

ALL	Always matches
LOCAL	Matches any host whose name does not contain a dot character.
UNKNOWN	Matches any host whose name or address are unknown. Use this with care.
KNOWN	Matches 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 daemon-list and the client-list:

EXCEPT	Matches anything that matches list 1 unless it matches anything in list 2. The expected form: list1 EXCEPT list2. List1 and list2 are comma-separated.

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

icsDoubleBook

Origin

Sun ONE Calendar Server 5.1.1

Syntax

cis, single

Object Classes
`icsCalendarResource`, `icsCalendarUser`

Definition
Not yet implemented.

The function is covered by two `ics.conf` preferences: `resource.allow.doublebook`, and `user.allow.doublebook`. The default setting for resources is “no”, meaning resources can not be double booked. The default setting for users is “yes”, meaning double booking is allowed on user’s calendars.

These settings can be changed by the administrator.

Example

OID

icsDWPBackEndHosts

Origin
Sun ONE Calendar Server 5.1.1

Syntax
cis, multi-valued

Object Classes
`icsCalendarDomain`

Definition
Stores possible back end hosts.

Example
```
icsDWPBackEndHosts = machine1, machine2
```
Machine names can be fully qualified host names.

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 DWP server that stores the calendar and its data.

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.

Example

OID
2.16.840.1.113730.3.1.738

icsExtendedDomainPrefs

Origin
iPlanet Calendar Server 5.1

Syntax
cis, single valued

Object Classes
`icsCalendarDomain`

Definition
For each preference, there is one instance of this attribute.

Example
icsExtendedDomainPrefs =

OID
2.16.840.1.113730.3.1.739

icsExtendedGroupPrefs

Origin
iPlanet Calendar Server 5.1

Syntax
cis

Object Classes
`icsAdministrator`

Definition
Extensions for calendar group preferences.

Example

OID
2.16.840.1.113730.3.1.740

icsExtendedResourcePrefs

Origin
iPlanet Calendar Server 5.1

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 following are the preferences and their values

Preferences	Values	Definitions
ceAllCalendarTZIDS	a standard time zone	Time zone TZID for this calendar.
ceClock	`12, 24`	Defines whether a 12- or 24-hour clock is used.

Preferences	Values	Definitions

ceColorSet	`pref_group1`
	`pref_group2`
	`pref_group3`
	`pref_group4`
	`pref_group7`
		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: `/` or `-`	The single character used to delimit displayed date elements (M,D,Y). 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		
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 For a list of time zones, see Standard Time Zones.	Time zone to use when a calendar does not have one assigned to it.

Preferences	Values	Definitions

ceDefaultView	`dayview`
	`weekview`
	`monthview`
	`yearview`
	`groupview`
		View to be presented at log in.
		If this parameter is not present, `overview` is used as the default.
		(groupview is the Comparison view on the user interface)

ceExludeSatSun		
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	`pref_font_size_group_2` (normal) `pref_font_size_group_1` (larger) `pref_font_size_group_3` (smaller)	Defines three font sizes for the user interface. In the interface they are defined as: `normal`, `larger`, `smaller`.
ceGroupInviteAll		
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

Preferences	Values	Definitions
ceSingleCalendarTZID	any valid time zone For a list of valid time zones, see Standard Time Zones.	Lists the time zone assigned to this calendar. If the parameter is not sent, the default time zone is used. For example: America/Los_Angeles
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= cdDateSeparator=/
icsextendeduserprefs= ceDayHead=10
icsextendeduserprefs= ceDayTail=17
icsextendeduserprefs= ceDefaultAlarmEmail=jdoe@sesta.com
icsextendeduserprefs= ceDefaultAlarmStart=P30H
icsextendeduserprefs= cdDefaultTZID=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
iPlanet Calendar Server 5.1

Syntax
ces, single-valued

Object Classes

Definition
Reserved, not implemented.

Example

OID
2.16.840.1.113730.3.1.744

icsGeo

Origin
iPlanet Calendar Server 5.1

Syntax
cis single-valued

Latitude; longitude

Object Classes

Definition
Geographical location of user or resource.Reserved, not implemented.

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

OID
2.16.840.1.113730.3.1.745

icsMandatorySubscribed

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

icsMandatoryView

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
iPlanet Calendar Server 5.1.1

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
iPlanet Calendar Server 5.1

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
2.16.840.1.113730.3.1.749

icsQuota

Origin
iPlanet Calendar Server 5.1

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.

Example
`icsRecurrenceBound = 60`

OID
2.16.840.1.113730.3.1.750

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.

Example

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 six parts of this attribute's value are:

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

2.16.840.1.113730.3.1.753

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.

Example

OID
2.16.840.1.113730.3.1.754

icsStatus

Origin
iPlanet Calendar Server 5.1

Syntax
cis, single-valued

Object Classes

Definition
Reserved, not implemented.

Calendar status, with one of these valid values:

active	This user calendar, resource, or domain are valid.
inactive	This user calendar, resource, or domain can't be used.

deleted	This user calendar, resource, or domain is marked for deletion. 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. All the entries remain in the directory, but object classes having to do only with calendar 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.

The absence of this attribute implies 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

OID
2.16.840.1.113730.3.1.755

icsSubscribed

Origin
iPlanet Calendar Server 5.1

Syntax
ces, multi-valued

Object Classes
`icsCalendarUser`

Definition
List of calendar IDs to which this user is subscribed.

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, resource, or domain. Specifically a valid time zone from the list found in “Object Identifiers,” on page 190.

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
This attribute is a fully qualified domain name. 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 it.)

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.

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 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
(DC tree) DN of the customer's Organization subtree where all user/group entries are stored. This attribute must be present and point to a valid Organization subtree DN. Messaging Server components 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
2.16.840.1.113730.3.1.690

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 when searching for users in the subtree specified in `inetDomainBaseDN`. 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).
- `%V`–Domain part of the login string .

If this attribute is missing, it is equivalent to `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 alternative 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 `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
Specifies the global status of a domain. 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:

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.

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`).

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 the mail group: `active`, `inactive`, or `deleted`. Messages are delivered to the members of the mailing list if the status is `active`. A status of `inactive` results in a transient failure on messages sent to the mailing list. A status of `deleted` means that the mailing list can be purged from the directory. Messages sent to this group will return permanent failure messages. A missing value implies status is `active`. An illegal value is treated as `inactive`.

There are three status attributes that interact with each other: `inetDomainStatus`, `mailDomainStatus`, 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.

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
Current status of resource, with a value of either: active, inactive, or deleted.

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

Origin
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

inetSubscriberResponse

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

Syntax
cis, single-valued

Object Classes
`inetUser`

Definition
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

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 by a specified user account. This attribute takes one of three values:

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.

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`).

Example
`inetUserStatus=inactive`

OID
2.16.840.1.113730.3.1.692

mail

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single-valued

Object Classes
`inetLocalMailRecipient`, `icsCalendarResource`, `icsCalendarUser`

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

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 Sun™ ONE.

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

Origin
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 *iPlanet Messaging Server Administrator’s Guide.*

Rule Syntax

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

+ (allow filter) means the daemon list services are being granted to the client list.

- (deny filter) means the services are being denied to the client list.

daemon_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 their meanings:

Table 3-2 Legal Wildcards and Their Meanings

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 daemon list (services): *, 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 daemon 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.

```
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.

```
mailAllowedServiceAccess= +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:

```
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 catch-all 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. Please see details on how a user's primary domain can be overridden by the use of `msgVanityDomainUser` to designate vanity domains (also known as "lightweight domains") for any user.

Example
`mailAlternateAddress=thief@florizel.com`

OID
2.16.840.1.113730.3.1.13

mailAntiUBEService

Origin
iPlanet Messaging Server 5.2

Syntax
cis, multi-valued

Object Classes
`inetMailUser`

Definition
This attribute can have two 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.

The customer can choose to use this attribute by specifying in the `option.dat` file:
`LDAP_OPTIN=mailAntiUBEService`

Example
`mailAntiUBEService=virus`

`mailAntiUBEService=spam`

OID

mailAutoReplyMode

Origin
iPlanet Messaging Server 5.0 (for reply mode), iPlanet Messaging Server 5.2 p1 (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` – This mode is not fully implemented (it was partially implemented for iPlanet Messaging Server 5.2 p1) and has been deprecated.

  Echo the original message with the added `mailAutoReplyText` or `mailAutoReplyTextInternal` to the original sender.

- `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 value is `0` then a response is sent back every time a message is received. Auto-reply response 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.

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”).

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.

This attribute can be set by using the MTA option `LDAP_REPROCESS`.

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 is not set, the default for users is to process immediately (as if the value is “No”). The default for groups (such as mailing lists) is controlled by the MTA option `DEFER_GROUP_PROCESSING`, which defaults to 1 (yes).

Example
`mailDeferProcessing=No`

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`.

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/group entry, supporting multiple delivery paths for inbound messages. Values will apply differently depending on whether the attribute is used in `inetMailGroup` or `inetMailUser`. Valid values are:

`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.
- `forward` – Specifies that messages will be forwarded. The forwarding address is specified in the attribute `mailForwardingAddress`.
- `hold` – A recipient is temporarily halted from receiving messages.
- `mailbox` – Deliver messages to the user's IMAP/POP store.
- `native` – Deliver messages to the user's `/var/mail` store INBOX. The store is in Berkeley mailbox format.

`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 inetMailUser and inetMailGroup:

- 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.

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 *iPlanet Messaging Server Administrator’s Guide*.

Rule Syntax

"+" or "-" <daemon_list>":"<client_list>

+ (allow filter) means the daemon list services are being granted to the client list.

- (deny filter) means the services are being denied to the client list.

`daemon_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 their meanings:

Table 3-3 Legal Wildcards and Their Meanings

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 daemon list (services): *, `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 daemon 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.

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. .

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.

Example

OID
TBD

mailDomainMsgQuota

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."

Example

OID
TBD

mailDomainSieveRuleSource

Origin
iPlanet Messaging Server 5.2

Syntax
cis, single-valued (RFC 3028 sieve filter)

Object Classes
`mailDomain`

Definition
Sieve filter for all users in the domain.

Example

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`.:

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.

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.

Example
`mailDomainStatus=active`

OID
2.16.840.1.113730.3.1.770

mailDomainWelcomeMessage

Origin
iPlanet Messaging Server 5.0

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 addresses don’t get rewritten to the primary mail address in the header.

Example

OID

TBD

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.

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
Fully qualified host name of the MTA that is the final destination of messages sent to this recipient.

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`.

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. Value of `0` (or not specified) means system default quota, `-1` means no limit on number of messages. During server configuration, quota enforcement must be turned on for `mailMsgQuota` to take effect. Both soft and hard quotas can be set (See *iPlanet Message Server Administration Guide*).

Example
`mailMsgQuota=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. Resolved reference also provides the program parameters and execution permissions. Used in conjunction with the `mailDeliveryOption=program`. The program approval process is documented further in the *iPlanet Messaging Server Administrator's Guide*, Chapter 3.

Example
`mailProgramDeliveryInfo=procmail`

OID
2.16.840.1.113730.3.1.20

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. A value of negative one (`-1`) means no limit on space usage. A value of zero (`0`) means no disk space allowed for the user's mailbox.

If the value is not specified (the value is a blank), 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 In older versions of the Messaging Server, -2 could be used to designate the system default quota. This is no longer the recommended method of specifying the system default quota.

Example

```
mailQuota=5000000
```

or for the system default quota:

```
mailQuota=
```

OID

2.16.840.1.113730.3.1.21

mailRejectText

Origin

Syntax

ces, multi-valued

Object Classes

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.

Example

OID

TBD

mailRoutingAddress

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single valued

Object Classes
`inetLocalMailRecipient`

Definition
Reserved.

Example
TBD.

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 user 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).

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

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 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.

Example
`mailRoutingSmartHost=mail.siroe.com`

OID
2.16.840.1.113730.3.1.760

mailSieveRuleSource

Origin
iPlanet Messaging Server 5.0

Syntax
cis, multi-valued

Object Classes
`inetMailUser`

Definition
The iPlanet Delegated Adminstrator for Messaging provides an interface for modifying this attribute. However, if you add a SIEVE rule without using iPlanet Delegated Adminstrator for Messaging, subsequent use to create / modify SIEVE rules for that user may produce unstable SIEVE rules.

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). The latter form is produced by the Web filter construction interface. Special code is used to order the values and glue them together properly.

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 user'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)
Template=(template-name) Name=(rule name)
```

Only the `Order` field is used by the messaging server. The other fields are added as markers for fields that might be useful for the user interface. 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.

Example

```
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 me large attachments.
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 states (missing value implies status is `inactive`):

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.

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.

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

Syntax
dn, multi-valued

Object Classes
`inetAdmin`, `inetUser`

Definition
Specifies the DN of a mailing list to which a user belongs. Indicates group membership as a backpointer.

Example
`memberOf=cn=Administrators,ou=groups o=sesta.com,o=siroe-isp.com`

OID
1.2.840.113556.1.2.102

memberOfManagedGroup

Origin
iPlanet Messaging Server 5.0

Syntax
dn, single-valued

Object Classes
`ipUser`

Definition
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

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
`abab=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

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=sestsa.com` (every user at sesta.com would be able to subscribe to the list)

OID
2.16.840.1.113730.3.1.790

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

mgmanGoodbyeText

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single valued

Object Classes
`inetMailGroupManagement`

Definition
Reserved.

Example
TBD.

OID
2.16.840.1.113730.3.1.797

mgmanHidden

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single-valued

Object Classes
`inetMailGroupManagement`

Definition
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
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 iPlanet 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
Defines who has rights to view the group membership list (expand the group). Like the attribute mgmanJoinability, 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.

This attribute is checked in the case of group expansion as part of an SMTP EXPN command.

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	Only group owners can expand the group.

Unrecognized values are interpreted as none.

Example
mgmanMemberVisibility=all

OID
2.16.840.1.113730.3.1.795

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

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 MTA, the values of this attribute are headers. This values of this attribute are used to set header trimming ADD options.

Example
```
mgrpAddHeader=Reply-To: thisgroup@sesta.com
```

OID
2.16.840.1.113730.3.1.781

mgrpAllowedBroadcaster

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`. 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.

Example
```
mgrpAllowedBroadcaster: ldap:///uid=bjensen, o=siroe.com
mgrpAllowedBroadcaster: mailto:sys50@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 `inetMailGroup` entry, then there are no restrictions on who can send messages to the mail group unless the `mgrpAllowedBroadcaster`, `mgrpDisallowedBroadcaster`, and `mgrpDisallowedDomain` attributes are used.

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 value of this attribute is saved if the `mgrpBroadcasterPolicy` attribute is set to require a password. It is checked against the Approved: field once the header is available. The Approved: field will be removed from the header once the check is complete.

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 requires 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.

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. 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. This is used to create a dynamic mailing list.

Example
```
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`. 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.

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.

Example
`mgrpDisallowedDomain=florizel.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 address is set to the value of this attribute.

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.

Example
`mgrpModerator=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.

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.

Example

OID
TBD

mgrpMsgRejectAction

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single-valued

Object Classes
inetMailGroup

Definition
Reserved.

Example

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 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.

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 it is present.

For MTA, the values of this attribute are used to set the header trimming `MAXLINES=-1` option.

Example

OID
2.16.840.1.113730.3.1.801

mgrpRequestTo

Origin
iPlanet Messaging Server 5.0

Syntax
ces, multi-valued

Object Classes
`inetMailGroup`

Definition
LDAP URL or `mailto` identifying the recipient(s) of request-to-be-added messages. A new alias is generated for distribution lists with this attribute. This alias is of the form: *distribution_list_name-request@domain* and the messages sent to this alias are forwarded to the recipients listed in `mgrpRequestsTo`.

Example
`mgrpRequestsTo=jordan@sesta.com`

OID
2.16.840.1.113730.3.1.782

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, but only one of these attributes can be used in any given group.

Example
`mgrpRFC822MailMember=bjensen@siroe.com`

OID
2.16.840.1.113730.3.1.30

mnggrpAdditionPolicy

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single-valued

Object Classes
`inetManagedGroup`

Definition
Reserved.

Example
TBD.

OID
2.16.840.1.113730.3.1.710

mnggrpBillableUser

Origin
iPlanet Messaging Server 5.0

Syntax
dn, single-valued

Object Classes
`inetManagedGroup`

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
`inetManagedGroup`

Definition
Current number of users allowed in the managed group. Intended for reporting purposes only. No operational impact.

Example
`mnggrpCurrentUsers=20`

OID
2.16.840.1.113730.3.1.714

mnggrpDeletionPolicy

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single valued

Object Classes
`inetManagedGroup`

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
`inetManagedGroup`

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
2.16.840.1.113730.3.1.715

mnggrpMaxUsers

Origin
iPlanet Messaging Server 5.0

Syntax
int, single-valued

Object Classes
`inetManagedGroup`

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
`inetManagedGroup`

Definition
Reserved.

Example
TBD.

OID
2.16.840.1.113730.3.1.712

mnggrpUserClassOfServices

Origin
iPlanet Messaging Server 5.0

Syntax
cis, multi-valued

Object Classes
`inetManagedGroup`

Definition
Reserved.

Example
TBD.

OID
2.16.840.1.113730.3.1.716

msgVanityDomain

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single-valued

Object Classes
`msgVanityDomainUser`

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.

Vanity domain name associated with the user. Used only for routing purposes by the MTA. Users still have a primary domain associated with their account and they use that domain to log into the message access services. However, this attribute enables them to have email addresses in the namespace represented by the vanity domain name.

Example

If `msgVanityDomain=sesta.com`, the user can have an address where the domain part is `@sesta.com`.

OID
2.16.840.1.113730.3.1.799

multiLineDescription

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single-valued

Object Classes
`inetMailGroupManagement`

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

nsDefaultMaxDeptSize

Origin
iPlanet Messaging Server 5.0

Syntax
int, single-valued

Object Classes
`nsManagedDomain`

Definition
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

Syntax
int, single-valued

Object Classes
`nsManagedDept`, `nsManagedDomain`

Definition
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

Syntax
int, single-valued

Object Classes
nsManagedDomain

Definition
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

Syntax
int, single valued

Object Classes
nsManagedDomain

Definition
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

Syntax
int, single-valued

Object Classes
`nsManagedDept`

Definition
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

Syntax
int, single-valued

Object Classes
`nsManagedDept`, `nsManagedDomain`

Definition
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

Syntax
int, single-valued

Object Classes
`nsManagedDomain`

Definition
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

Syntax
int, single-valued

Object Classes
`nsManagedDomain`

Definition
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

Syntax
int, single-valued

Object Classes
`nsManagedDept`, `nsManagedDomain`

Definition
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.

Syntax
cis, single-valued

Object Classes
`nsManagedPerson`

Definition
Reserved for future development.

Example

OID
2.16.840.1.113730.3.1.564

nsdaCapability

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single-valued

Object Classes
`nsManagedPerson`

Definition
Specifies whether a user can create a mail list.

Example

OID
2.16.840.1.113730.3.1.563

nsdaDomain

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single

Object Classes
`nsManagedPerson`

Definition
Specifies the user's organization.

Example

OID
2.16.840.113730.3.1.600

nsdaModifiableBy

Origin
iPlanet Messaging Server 5.0

Syntax
dn, single-valued

Object Classes
`inetManagedGroup`, `nsManagedDept`, `nsManagedDomain`

Definition
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

nswcalDisallowAccess

Origin
Netscape™ 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 *pref_name=pref_value*. 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

o

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`

or

`o = Company22 Incorporated`

OID
2.5.4.10

objectClass

Origin

iPlanet Messaging Server 5.0

Syntax
cis

Object Classes
`inetAdmin`, `nsManagedDept`

Definition
Specifies the objects for this object class.

Example
`objectClass = person`

OID
2.5.4.0

organizationName

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single valued

Object Classes
`pabPerson`

Definition
Name of the user's company or organization. Same as o.

Example
`organizationName = Company22 Incorporated`

OID
2.5.4.10

organizationUnitName (see ou)

ou

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single valued

Object Classes
`pabPerson`

Definition
Name of the organizational unit to which the user belongs. Abbreviation for `organizationalUnitName`.

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
`inetManagedGroup`

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

postalAddress

Origin
LDAP

Syntax
cis

Object Classes
`icsCalendarResource`

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(\24) value can be found$in the c:\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

Syntax
RFC 2798, cis, single-valued

Object Classes
icsCalendarUser, mailDomain, inetMailGroup

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.

Example
```
preferredLanguage = fr, en-gb;q=0.8, en;q=0.7
```

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 Delegated Administrator 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

preferredMailMessageStore

Origin
iPlanet Messaging Server 5.0

Syntax
cis, single-valued

Object Classes
`mailDomain`

Definition
Used by Delegated Administrator for Messaging 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
primary

OID
2.16.840.1.113730.3.1.762

seeAlso

Origin
LDAP

Syntax
dn

Object Classes
`groupOfUniqueNames`

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

telephoneNumber

Origin
LDAP

Syntax
tel

Object Classes
`domain`

Definition
Identifies the entry's phone number.

Example
`telephoneNumber = 800-555-1212`

OID
2.5.4.20

uid

Origin
LDAP

Syntax
cis, single-valued

Object Classes
`icsCalendarResource`, `icsCalendarUser`

Definition
Identifies the entry's userid. Abbreviation of userid.

Example
`userid = jdoe`

or

`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

Object Classes
groupOfUniqueNames

Definition
Identifies a member of a group of names where each name was given a uniqueIdentifier to ensure its uniqueness. A value for the uniqueMember attribute is a DN followed by the uniqueIdentifer. (uniqueIdentifers are assigned by the server when a DN has been reused and is intended to detect instances of a reference to a DN that has been deleted.)

Example
In the example below, the uniqueIdentifier is AAAAA.

```
uniqueMember=cn=Jane Doe, ou=Quality Control, o=Company22, AAAAA
```

OID
2.5.4.50

userid (see uid)

userPassword

Origin
LDAP

Syntax
bin, single-valued

Object Classes
`domain`

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 vacationStartDate and vacationEndDate, 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

Appendix A

General Information

This appendix covers the following topics:

- LDAP Overview
- Attribute Syntax
- Object Identifiers
- Standard Time Zones

LDAP Overview

Sun™ ONE / iPlanet™ 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 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

There are 92 time zones:

Africa / Amman
Africa / Cairo
Africa / Casablanca
Africa / Johannesburg
Africa / Lagos
Africa / Tripoli
Africa / Windhoek
America / Adak
America / Anchorage
America / Buenos_Aires
America / Caracas
America / Chicago
America / Costa_Rica
America / Cuiaba
America / Denver
America / Godthab
America / Grand_Turk
America / Halifax
America / Havana
America / Indianapolis
America / Los_Angeles
America / Miquelon
America / New_York
America / Phoenix
America / Port-au-Prince
America / Santiago
America / Sao_Paulo
America / St_Johns
Asia / Alma-Ata
Asia / Anandyr
Asia / Aqtau
Asia / Aqtobe
Asia / Baku
Asia / Bangkok
Asia / Beirut
Asia / Bishkek
Asia / Calcutta
Asia / Dacca
Asia / Irkutsk

Asia/Jerusalem
Asia/Kabul
Asia/Kamchatka
Asia/Karachi
Asia/Katmandu
Asia/Krasnoyarsk
Asia/Magadan
Asia/Novosibirsk
Asia/Rangoon
Asia/Riyadh
Asia/Shanghai
Asia/Tehran
Asia/Tokyo
Asia/Ulan_Bator
Asia/Vladivostok
Asia/Yakutsk
Asia/Yekaterinburg
Asia/Yerevan
Atlantic/Azores
Atlantic/Cape_Verde
Atlantic/South_Georgia
Atlantic/Stanley
Australia/Adelaide
Australia/Brisbane
Australia/Darwin
Australia/Hobart
Australia/Lord_Howe
Australia/Sydney
Europe/Bucharest
Europe/Istanbul
Europe/London
Europe/Minsk
Europe/Moscow
Europe/Paris
Europe/Riga
Europe/Samara
Europe/Simferopol
Europe/Warsaw
Pacific/Apia
Pacific/Auckland
Pacific/Chatham
Pacific/Easter
Pacific/Fiji

Pacific/Gambier
Pacific/Guadalcanal
Pacific/Honolulu
Pacific/Kiritimati
Pacific/Marquesas
Pacific/Norfolk
Pacific/Noumea
Pacific/Pitcairn
Pacific/Rarotonga
Pacific/Tongatapu.

Glossary

access control A method for controlling access to a server or to folders and files on a server.

access control information (ACI) A single item of information from an access control list.

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.

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 administraive 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 iPlanet Messaging Server. (2) The process of proving the identity of iPlanet Messaging 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.

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/iPlanet™ topology. The configuration administrator has unrestricted access to all resources in the Sun ONE/iPlanet 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 and Collaboration. 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 iPlanet 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 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 `siroe.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**.

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 iPlanet 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/iPlanet servers. The iPlanet 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 iPlanet 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 iPlanet 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, iPlanet 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 iPlanet 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 iPlanet 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 language for filtering mail.

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 quota The amount of space, configured by the system administrator, allocated to a user for email messages.

vanity domain A domain name associated with an individual user—not with a specific server or hosted domain. A vanity domain is specified by using the `MailAlternateAddress` attribute. The vanity domain does not have an LDAP entry for the domain name. Vanity domains are useful for individuals or small organizations desiring a customized domain name, without the administration overhead of supporting their own hosted domain. Also called custom domain.

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**.

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