

**Oracle® Communications Unified  
Communications Suite**

Schema Reference

Release 8.0

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**ORACLE®**

Oracle Communications Unified Communications Suite Schema Reference, Release 8.0

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# Chapter 1. Communications Suite Schema Reference Overview

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## Communications Suite Schema Reference Overview

Topics:

- [Data Model for LDAP Schema 2](#)
- [Data Model for Oracle LDAP Schema 1](#)
- [Messaging Server Schema Overview](#)
- [Calendar Server Schema Overview](#)

### Data Model for LDAP Schema 2

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

In addition, there are two ways to structure the LDAP data model: native mode (the preferred way) using only an Organization Tree, and compatibility mode (for backwards compatibility with earlier versions of Sun Java™ System or iPlanet™ LDAP based products) using both a DC Tree and an Organization Tree. The LDAP data model for compatibility mode is essentially the same as data model for the Oracle LDAP Schema 1. Provisioning your LDAP differs depending on whether you chose the native or compatibility mode at installation time.

Use the Communications Suite Delegated Administrator (a command-line utility and a console) to add, modify and delete users, groups and domains.

For a discussion of the differences in LDAP data models between the native and compatibility modes (and LDAP Schema 1), see [Directory Information Tree Requirements](#).

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

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

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

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

The following table also includes the classes used by Access Manager in these types of entries. Access Manager classes are shown in italicized font. The object classes and attributes defined for Access Manager are subject to change.

#### Native Mode Entry types and Corresponding Object Classes

Types	Core Classes	Shared Classes	Server Specific Classes
Domain	organization domain sunManagedOrganization sunNameSpace	none	mailDomain  icsCalendarDomain
User	person inetUser organizationalPerson inetOrgPerson	ipUser userPresenceProfile iplanet-am-managed -person	inetMailUser inetLocalMailRecipient
Group	groupOfUniqueNames iplanet-am -managed-group	iplanet-am-managed -filtered-group iplanet-am-managed -assignable-group iplanet-am-managed -static-group	inetMailGroup inetLocalRecipient
Resource	inetResource	none	icsCalendarResource

The following table shows the core classes, shared classes and server specific classes for the four types of entries for compatibility mode: DC Tree domains, Organization Tree domains, users and groups.

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

The following table also includes the classes used by Access Manager in these types of entries.

### Compatibility Mode Entry types and Corresponding Object Classes

Types	Core Classes	Shared Classes	Server Specific Classes
DC Tree Domain	domain inetDomain	none	mailDomain icsCalendarDomain
Org Tree Domain	organization sunManagedOrganization sunNameSpace	none	
User	person inetUser organizationalPerson inetOrgPerson	ipUser userPresenceProfile iplanet-am-managed-person	inetMailUser inetLocalMailRecipient
Group	groupOfUniqueNames iplanet-am-managed -group	iplanet-am-managed -filtered-group iplanet-am-managed -assignable-group iplanet-am-managed -static-group	inetMailGroup inetLocalRecipient
Resource	inetResource	icsCalendarResource	

## Data Model for Oracle LDAP Schema 1

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

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

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

For more information on RFC 2798, RFC 2252, and internet standards, use the following URL:  
<http://www.imc.org/rfcs.html>

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

### Two-DIT Entry types and Corresponding Object Classes

Types	Core Classes	Shared Classes	Server Specific Classes
DC Tree Domain	domain inetDomain	none	mailDomain nsManagedDomain icsCalendarDomain
Org Tree Domain	organization	none	nsManagedDomain
User	person inetUser organizationalPerson inetOrgPerson	ipUser userPresenceProfile	inetMailUser inetLocalMailRecipient nsManagedPerson
Group	groupOfUniqueNames	none	inetMailGroup inetLocalRecipient inetMailGroupManagement nsManagedMailingList
Family Account	inetManagedGroup	none	nsManagedDept
Resource	inetResource	none	icsCalendarResource

## Messaging Server Schema Overview

The basic 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 Messaging Server are defined in this manual.

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

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

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

- [Managed Group](#)
- [Store Administrator](#)

## 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` can be used for holding subscriber type attributes for the user, but it is not required for creating Messaging Server users.

### Email Groups

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

### Email Routing

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

## Personal Address Book

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

### Personal Address Book

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

### Personal Address Book Group

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

### Personal Address Book Person

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

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

## Domains



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

This section discusses the following:

- [Hosted Domain Entries](#)
- [Domain Aliases](#)
- [Domain Organizations](#)

## Hosted Domain Entries

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

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

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

## Domain Aliases

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

For LDAP Schema 2, compatibility mode, the DC Tree domain alias nodes are still present, and can be provisioned using the Delegated Administrator.

For Delegated Administrator, see the [Delegated Administrator Administration Guide](#).

## Domain Organizations

To support a managed domain organization in LDAP Schema 1, the auxiliary object classes `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. The resulting structures are not domains. They are usually denoted with the attribute `organizationalUnit` (`ou`).

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

## Delegation of Management

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

## Managed Group

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

## Store Administrator

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

## Calendar Server Schema Overview

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

The following table shows the calendar-specific object classes and their attributes. In addition, Calendar Server also uses one non-calendar object class, `inetResource`.

### Calendar-Specific Object Classes

Object Classes	Required Attributes	Allowed Attributes
<code>icsAdministrator</code> (not currently used)	none	<code>icsAdminRole</code> , <code>icsExtended</code> , <code>icsExtendedGroupPrefs</code>
<code>icsCalendarDomain</code> (not all attributes are currently used)	none	
<code>icsCalendarDWPHost</code> (not currently implemented)	none	<code>cn</code> , <code>description</code> , <code>icsDomainNames</code> , <code>icsDWPHost</code> , <code>icsExtended</code> , <code>icsRegularExpressions</code> , <code>icsStatus</code>
<code>icsCalendarGroup</code>	<code>groupid</code> , <code>icsStatus</code>	<code>icsCalendar</code> , <code>icsDefaultacl</code> , <code>icsDWPHost</code> , <code>icsSecondaryowners</code> , <code>icsStatus</code> , <code>icsTimezone</code> , <code>mail</code>
<code>icsCalendarResource</code> (not all attributes are currently used)	none	<code>cn</code> , <code>icsAlias</code> , <code>icsCalendar</code> , <code>icsCapacity</code> , <code>icsContact</code> , <code>icsDefaultacl</code> , <code>icsDWPHost</code> , <code>icsExtended</code> , <code>icsExtendedResourcePrefs</code> , <code>icsGeo</code> , <code>icsPartition</code> , <code>icsPreferredHost</code> , <code>icsQuota</code> , <code>icsSecondaryowners</code> , <code>icsStatus</code> , <code>icsTimezone</code> , <code>mailAlternateAddress</code> , <code>mail</code> , <code>owner</code> , <code>uid</code>

# Chapter 2. Access Manager LDAP Object Classes and Attributes

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## Access Manager LDAP Object Classes and Attributes

This information describes LDAP object classes and attributes for Sun Java System Access Manager implementing LDAP Schema 2. The objects and attributes are listed alphabetically.

Note that the Access Manager schema is subject to change.

Topics:

- [Object Classes](#)
- [Attributes](#)

### Object Classes

This section describes the following Access Manager object classes:

- [iplanet-am-managed-assignable-group](#)
- [iplanet-am-managed-filtered-group](#)
- [iplanet-am-managed-filtered-role](#)
- [iplanet-am-managed-group](#)
- [iplanet-am-managed-group-container](#)
- [iplanet-am-managed-org-unit](#)
- [iplanet-am-managed-people-container](#)
- [iplanet-am-managed-person](#)
- [iplanet-am-managed-role](#)
- [iplanet-am-managed-static-group](#)
- [iplanet-am-user-service](#)
- [iPlanetPreferences](#)
- [sunISManagedOrganization](#)

#### **iplanet-am-managed-assignable-group**

##### **Supported by**

Access Manager

##### **Definition**

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

##### **Superior Class**

`iplanet-am-managed-group`

##### **Object Class Type**

auxiliary

**OID**

2.16.840.1.113730.3.2.182

**Required Attributes**

none

**Allowed Attributes**

Inherits attributes from superior class.

**iplanet-am-managed-filtered-group****Supported by**

Access Manager

**Definition**

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

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

**Superior Class**

`iplanet-am-managed-group`

**Object Class Type**

auxiliary

**OID**

2.16.840.1.113730.3.2.181

**Required Attributes**

none

**Allowed Attributes**

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

**iplanet-am-managed-filtered-role****Supported by**

Access Manager

**Definition**

Specifies the attributes necessary to define administrator roles and their ACIs. The list of all users assigned this role is a dynamic list; that is, the list can be retrieved only by performing a search filtered by the role name. For further information on roles, see the Access Manager documentation at [http://download.oracle.com/docs/cd/B28196\\_01/idmanage.htm](http://download.oracle.com/docs/cd/B28196_01/idmanage.htm).

### **Superior Class**

`iplanet-am-managed-role`

### **Object Class Type**

auxiliary

### **OID**

1.3.6.1.4.1.42.2.27.9.2.74

### **Required Attributes**

none

### **Allowed Attributes**

This class inherits the attributes of its superior class, see [iplanet-am-managed-role](#).

## **iplanet-am-managed-group**

### **Supported by**

Access Manager

### **Definition**

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

### **Superior Class**

### **Object Class Type**

auxiliary

### **OID**

2.16.840.1.113730.3.2.180

### **Required Attributes**

none

### **Allowed Attributes**

[inetGroupStatus](#)

## **iplanet-am-managed-group-container**

### **Supported by**

Access Manager

### **Definition**

The Access Manager class that defines the groups container under each Messaging Server hosted domain.

### **Superior Class**

### **Object Class Type**

auxiliary

### **OID**

2.16.840.1.113730.3.2.189

### **Required Attributes**

none

### **Allowed Attributes**

none

## **iplanet-am-managed-org-unit**

### **Supported by**

Access Manager

### **Definition**

This class is used by Access Manager to manage organizational units. It uses the same attributes as `sunManagedOrganization` and for all intents and purposes functions as any other organization managed by Access Manager.

Do not use this class for the domain organizations, or people and group containers in Messaging Server. Even though the attribute that holds the container name is organizational unit (`ou`), the proper Access Manager class to use is either [iplanet-am-managed-group-container](#), or [iplanet-am-managed-people-container](#).

### **Superior Class**

### **Object Class Type**

auxiliary

### **OID**

2.16.840.1.113730.3.2.186

## Required Attributes

none

## Allowed Attributes

[businessCategory](#), [iplanet-am-service-status](#), [telephoneNumber](#), [sunOverrideTemplates](#), [sunPreferredDomain](#), [seeAlso](#)

## iplanet-am-managed-people-container

### Supported by

Access Manager

### Definition

The Access Manager class that defines the people container under each Messaging Server hosted domain.

### Superior Class

### Object Class Type

auxiliary

### OID

2.16.840.1.113730.3.2.187

### Required Attributes

none

### Allowed Attributes

none

## iplanet-am-managed-person

### Supported by

Access Manager

### Definition

Specifies Access Manager attributes used to manage users.

### Superior Class

### Object Class Type

auxiliary

### OID

2.16.840.1.113730.3.2.184

### **Required Attributes**

none

### **Allowed Attributes**

[iplanet-am-modifiable-by](#), [iplanet-am-role-aci-description](#), [iplanet-am-static-group-dn](#),  
[iplanet-am-user-account-life](#)

## **iplanet-am-managed-role**

### **Supported by**

Access Manager

### **Definition**

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

### **Superior Class**

### **Object Class Type**

auxiliary

### **OID**

2.16.840.1.113730.3.2.179

### **Required Attributes**

none

### **Allowed Attributes**

[iplanet-am-role-aci-description](#), [iplanet-am-role-aci-list](#), [iplanet-am-role-any-options](#),  
[iplanet-am-role-description](#), [iplanet-am-role-managed-container-dn](#), [iplanet-am-role-service-options](#),  
[iplanet-am-role-type](#)

## **iplanet-am-managed-static-group**

### **Supported by**

Access Manager

### **Definition**

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



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

### **Superior Class**

`iplanet-am-managed-group`

### **Object Class Type**

auxiliary

### **OID**

2.16.840.1.113730.3.2.183

### **Required Attributes**

none

### **Allowed Attributes**

none (inherits from `iplanet-am-managed-group`)

## **iplanet-am-user-service**

### **Supported by**

Access Manager

### **Definition**

This class contains the Access Manager attributes necessary to manage user accounts.

### **Superior Class**

### **Object Class Type**

auxiliary

### **OID**

2.16.840.1.113730.3.2.176

### **Required Attributes**

none

### **Allowed Attributes**

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

## **iPlanetPreferences**

### **Supported by**

Directory Server

### **Definition**

Used by Access Manager. While Messaging Server does not use this object class, it is necessary for Access Manager.

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

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

### **Superior Class**

### **Object Class Type**

auxiliary

### **OID**

Unassigned

### **Required Attributes**

none

### **Allowed Attributes**

`preferredLanguage`, `preferredLocale`, `preferredTimeZone`

## **sunISManagedOrganization**

### **Supported by**

Calendar Server 6.0, Messaging Server 6.0

### **Definition**

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

The attribute holds the fully qualified login host name.

### **Superior Class**

### **Object Class Type**

auxiliary

## OID

Unassigned

## Required Attributes

none

## Allowed Attributes

sunOrganizationAlias

## Attributes

This section describes the following Access Manager attributes:

- associatedDomain
- inetGroupStatus
- iplanet-am-group-subscribable
- iplanet-am-modifiable-by
- iplanet-am-role-aci-description
- iplanet-am-role-aci-list
- iplanet-am-role-any-options
- iplanet-am-role-description
- iplanet-am-role-managed-container-dn
- iplanet-am-role-service-options
- iplanet-am-role-type
- iplanet-am-service-status
- iplanet-am-static-group-dn
- iplanet-am-user-account-life
- iplanet-am-user-admin-start-dn
- iplanet-am-user-alias-list
- iplanet-am-user-auth-config
- iplanet-am-user-auth-modules
- iplanet-am-user-failure-url
- iplanet-am-user-federation-info
- iplanet-am-user-federation-info-key
- iplanet-am-user-login-status
- iplanet-am-user-password-reset-force-reset
- iplanet-am-user-password-reset-options
- iplanet-am-user-password-reset-passwordChanged
- iplanet-am-user-password-reset-question-answer
- iplanet-am-user-service-status
- iplanet-am-user-success-url
- preferredLocale
- preferredTimeZone
- sunAdditionalTemplates
- sunKeyValue
- sunNameSpaceUniqueAttrs
- sunOrganizationAlias
- sunOverrideTemplates
- sunPreferredDomain
- sunPreferredOrganization
- sunRegisteredServiceName
- sunServiceId
- sunSmsPriority
- sunXmlKeyValue

## associatedDomain

### Origin

LDAP Schema 2

### Syntax

dn, multi-valued

### Object Classes

inetDomain,, [sunManagedOrganization](#)

### Definition

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

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

### Example

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

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

### OID

Unassigned

## inetGroupStatus

### Origin

Access Manager

### Syntax

cis, single-valued

### Object Classes

[iplanet-am-managed-group](#)

### Definition

This is a status for groups only in Delegated Administrator, and does not apply to Messaging Server or Calendar Server. It holds the current status of the group: `active`, `inactive`, or `deleted` for all services. It is used by Access Manager to manage groups. Status changes can be made to a group's status using the `commcli` interface, or by directly changing the LDAP entry for the group.

The MTA does not consider `inetGroupStatus` by default. If you want to have `inetGroupStatus` checked, you need to add to the MTA options something like:

```
LDAP_USER_STATUS=inetUserStatus
LDAP_GROUP_STATUS=inetGroupStatus
LDAP_USER_MAIL_STATUS=mailUserStatus
LDAP_GROUP_MAIL_STATUS=inetMailGroupStatus
```

You only need to specify `LDAP_GROUP_STATUS`, but if you are changing one of these settings from the default, it is worthwhile noting them all.

### Example

```
inetGroupStatus: active
```

### OID

1.3.6.1.4.1.42.2.27.9.1.588

### **iplanet-am-group-subscribable**

#### Origin

Access Manager

#### Syntax

boolean, single-valued

#### Object Classes

[iplanet-am-managed-group](#)

#### Definition

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

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

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

### Example

```
iplanet-am-group-subscribable: true
```

### OID

2.16.840.1.113730.3.1.1085

### **iplanet-am-modifiable-by**

#### Origin

Access Manager

### Syntax

dn, multi-valued

### Object Classes

[iplanet-am-managed-person](#)

### Definition

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

### Example

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

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

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

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

### OID

2.16.840.1.113730.3.1.1094

## iplanet-am-role-aci-description

### Origin

Access Manager

### Syntax

string, multi-valued

### Object Classes

[iplanet-am-managed-person](#)

### Definition

Description of the ACI that belongs to this role.

### Example

No example given.

### OID

2.16.840.1.113730.3.1.1081

## iplanet-am-role-aci-list

### Origin

Access Manager

### Syntax

string, multi-valued

### Object Classes

[iplanet-am-managed-role](#)

### Definition

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

### Example

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

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

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

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

### OID

2.16.840.1.113730.3.1.1082

## **iplanet-am-role-any-options**

### **Origin**

Access Manager

### **Syntax**

string, multi-valued

### **Object Classes**

[iplanet-am-managed-role](#)

### **Definition**

Not currently used.

### **Example**

No example given.

### **OID**

2.16.840.1.113730.3.1.1084

## **iplanet-am-role-description**

### **Origin**

Access Manager

### **Syntax**

string, multi-valued

### **Object Classes**

[iplanet-am-managed-role](#)

### **Definition**

An optional description of the role being defined.

### **Example**

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

### **OID**

2.16.840.1.113730.3.1.1080

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



## Origin

Access Manager

## Syntax

dn, multi-valued

## Object Classes

[iplanet-am-managed-role](#)

## Definition

Defines the container this role resides in.

## Example

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

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

## OID

2.16.840.1.113730.3.1.977

## iplanet-am-role-service-options

### Origin

Access Manager

### Syntax

string, multi-valued

### Object Classes

[iplanet-am-managed-role](#)

### Definition

Not currently used.

### Example

No example given.

### OID

2.16.840.1.113730.3.1.1083

## iplanet-am-role-type

## Origin

Access Manager

## Syntax

string, multi-valued

## Object Classes

[iplanet-am-managed-role](#)

## Definition

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

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

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

## Example

```
iplanet-am-role-type: 1
```

## OID

2.16.840.1.113730.3.1.1079

## **iplanet-am-service-status**

This attribute is aliased to [sunRegisteredServiceName](#). Use that attribute instead.

## **iplanet-am-static-group-dn**

### Origin

Access Manager

### Syntax

dn, multi-valued

### Object Classes

[iplanet-am-managed-group](#)

## Definition

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

This attribute is usually created as a user is added to a group.

For example, Delegated Administrator will create a "uniquemember:" entry in the group, with a dn of the user, and in the user a "iplanet-am-static-group-dn": with a dn of the group.

## Example

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

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

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

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

## OID

2.16.840.1.113730.3.1.1094

## iplanet-am-user-account-life

### Origin

Access Manager

### Syntax

date string, single-valued

### Object Classes

[iplanet-am-user-service](#)

### Definition

Specifies the account expiration date in the following format:

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

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

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

### Example

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

**OID**

2.16.840.1.113730.3.1.976

**iplanet-am-user-admin-start-dn****Origin**

Access Manager

**Syntax**

dn, single-valued

**Object Classes**

[iplanet-am-user-service](#)

**Definition**

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

**Example**

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

**OID**

2.16.840.1.113730.3.1.1072

**iplanet-am-user-alias-list****Origin**

Access Manager

**Syntax**

string, single-valued

**Object Classes**

[iplanet-am-user-service](#)

**Definition**

Defines a list of aliases for the user.

## Example

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

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

## OID

1.3.6.1.4.1.42.2.27.9.1.59

## iplanet-am-user-auth-config

### Origin

Access Manager

### Syntax

string, single-valued

### Object Classes

[iplanet-am-user-service](#)

### Definition

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

## Example

```
<AttributeValuePair\><Value\>  
  com.sun.identity.authentication.modules.ldap.LDAP_REQUIRED  
</Value\></AttributeValuePair\>
```

## OID

1.3.6.1.4.1.42.2.27.9.1.58

## iplanet-am-user-auth-modules

### Origin

Access Manager

### Syntax

string, multi-valued

### Object Classes

[iplanet-am-user-service](#)

**Definition**

Not currently used.

**Example**

No example given.

**OID**

2.16.840.1.113730.3.1.1071

**iplanet-am-user-failure-url**

**Origin**

Access Manager

**Syntax**

string, single-valued

**Object Classes**

[iplanet-am-user-service](#)

**Definition**

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

**Example**

No example given.

**OID**

1.3.6.1.4.1.42.2.27.9.1.71

**iplanet-am-user-federation-info**

**Origin**

Access Manager

**Syntax**

string, single-valued

**Object Classes**

[iplanet-am-user-service](#)

## Definition

For Access Manager internal use only. Do not use.

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

## Example

No example given.

## OID

1.3.6.1.4.1.42.2.27.9.1.74

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

### Origin

Access Manager

### Syntax

string, single-valued

### Object Classes

[iplanet-am-user-service](#)

## Definition

For Access Manager internal use only. Do not use.

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

## Example

No example given.

## OID

1.3.6.1.4.1.42.2.27.9.1.73

## **iplanet-am-user-login-status**

### Origin

Access Manager

### Syntax

string, single-valued

## Object Classes

[iplanet-am-user-service](#)

### Definition

Specifies the user status. It takes two values:

- `Active` - The user is allowed to authenticate through the Access Manager.
- `Inactive` - The user is not allowed to authenticate through the Access Manager.

### Example

No example given.

### OID

2.16.840.1.113730.3.1.1074

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

### Origin

Access Manager

### Syntax

boolean, single-valued

## Object Classes

[iplanet-am-user-service](#)

### Definition

Not currently used.

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

### Example

No example given.

### OID

1.3.6.1.4.1.42.2.27.9.1.591

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

### Origin

Access Manager

### Syntax



string, single-valued

### **Object Classes**

[iplanet-am-user-service](#)

### **Definition**

Used internally by Access Manager's password reset module. Do not use. Any values assigned to this attribute will be ignored.

### **Example**

No example given.

### **OID**

1.3.6.1.4.1.42.2.27.9.1.589

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

### **Origin**

Access Manager

### **Syntax**

string, single-valued

### **Object Classes**

[iplanet-am-user-service](#)

### **Definition**

Not used.

### **Example**

No example given.

### **OID**

1.3.6.1.4.1.42.2.27.9.1.592

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

### **Origin**

Access Manager

### **Syntax**

string, single-valued

## Object Classes

[iplanet-am-user-service](#)

### Definition

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

### Example

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

### OID

1.3.6.1.4.1.42.2.27.9.1.590

## iplanet-am-user-service-status

### Origin

Access Manager

### Syntax

dn, single-valued

### Object Classes

[iplanet-am-user-service](#)

### Definition

Specifies the status of the user for various services.

### Example

No example given.

### OID

2.16.840.1.113730.3.1.1073

## iplanet-am-user-success-url

### Origin

Access Manager

### Syntax

dn, single-valued

## Object Classes

[iplanet-am-user-service](#)

### Definition

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

### Example

No example given.

### OID

1.3.6.1.4.1.42.2.27.9.1.71

## preferredLocale

### Origin

Directory Server

### Syntax

cis, single-valued

## Object Classes

[iPlanetPreferences](#)

### Definition

Used by Access Manager to store user preference for locale. The values accepted by this attribute are described in the *Sun Java System Access Manager Administration Guide*, chapter 18. Some additional information on locales is located in the *Directory Server Reference Manual*.

### Example

```
preferredLocale:en-US
```

### OID

2.16.840.1.113730.3.1.39

## preferredTimeZone

### Origin

Directory Server

### Syntax

cis, single-valued

## Object Classes

## iPlanetPreferences

### Definition

Used by Access Manager to store user preference for time zone. Supported time zone names can be found in the appendix under [Standard Time Zones](#).

### Example

```
preferredTimeZone: America/Los Angeles
```

### OID

Unassigned

## sunAdditionalTemplates

### Origin

Messaging Server 6.0, Calendar Server 6.0

### Syntax

cis, multi-valued

### Object Classes

inetDomain, sunManagedOrganization

### Definition

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

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

### Example

No example given.

### OID

1.3.6.1.4.1.42.2.27.9.1.76

## sunKeyValue

### Origin

Messaging Server 6.0, Calendar Server 6.0

### Syntax

cis, multi-valued

## Object Classes

[sunServiceComponent](#)

### Definition

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

#### Search Template Keys

Key	Description
attrs	Attribute to retrieve from LDAP entry.
rfc2247Flag	Boolean (true, false) that tells applications to use the RFC 2247 algorithm for constructing the DN of the LDAP entry, instead of performing an LDAP search using the filter specified in the <code>inetDomainSearchFilter</code> attribute.
baseDN	If <code>rfc2247Flag</code> is set to true, and if this key is present, then it must be appended to the algorithmically constructed DN in order to get the DN of the target entry.

For more information on templates and the native and compatibility mode LDAP data models, see [Communications Suite Schema Reference Overview](#).

### Example

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

```
sunKeyValue:attrs=objectclasssunKeyValue:
  attrs=ousunKeyValue:attrs=inetDomainStatus
```

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

```
sunKeyValue:attrs=objectclasssunKeyValue:
  attrs=ousunKeyValue:attrs=inetDomainStatussunKeyValue:
  rfc2247=truesunKeyValue: basedn=o=internet
```

### OID

1.3.6.1.4.1.42.2.27.9.1.83

## sunNameSpaceUniqueAttrs

### Origin

Messaging Server 6.0, Calendar Server 6.0

### Syntax

cis, multi-valued

## Object Classes

[sunNameSpace](#)

### Definition

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

This attribute allows namespace uniqueness to be enforced. For further explanation of namespaces, see the object class description for [sunNameSpace](#).

### Example

```
sunNameSpaceUniqueAttrs:uid  
sunNameSpaceUniqueAttrs:c
```

### OID

1.3.6.1.4.1.42.2.27.9.1.85

## sunOrganizationAlias

### Origin

Access Manager

### Syntax

cis, single-valued

## Object Classes

[userPresenceProfile](#)

### Definition

Access Manager uses this attribute for authentication. It holds the fully qualified host name for the server the user is logging into.

The format is: *server.domain*.

### Example

```
sunOrganizationAlias: seaside.siroe.com
```

### OID

Unassigned

## sunOverrideTemplates

### Origin

Messaging Server 6.0, Calendar Server 6.0

### Syntax

cis, multi-valued

### Object Classes

`inetDomain`, `sunManagedOrganization`

### Definition

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

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

### Example

No example given.

### OID

1.3.6.1.4.1.42.2.27.9.1.77

## sunPreferredDomain

### Origin

Messaging Server 6.0, Calendar Server 6.0

### Syntax

cis, single-valued

### Object Classes

`iplanet-am-managed-org-unit`, `sunManagedOrganization`

### Definition

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

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

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

This attribute is for use with Schema 2 native mode LDAP directories only; it must not be used in DC Tree nodes.

### **Example**

`sunPreferredDomain:sesta.com`

### **OID**

2.16.840.1.113730.3.1.1086

## **sunPreferredOrganization**

### **Origin**

Messaging Server 6.0, Calendar Server 6.0

### **Syntax**

cis, single-valued

### **Object Classes**

[iplanet-am-managed-org-unit](#), [sunManagedOrganization](#)

### **Definition**

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

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

This attribute is for use with Schema 2 native mode LDAP directories only; it must not be used in DC Tree nodes.

### **Example**

`sunPreferredOrganization:sesta.com`

### **OID**

1.3.6.1.4.1.42.2.27.9.1.75

## **sunRegisteredServiceName**

### **Origin**

Access Manager

### **Syntax**

string, multi-valued

### **Object Classes**



iplanet-am-managed-org-unit, sunManagedOrganization

## Definition

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

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

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

- PlanetAMAuthService
- iPlanetAMAuthLDAPService
- iPlanetAMPolicyConfigService
- iPlanetAMAuthenticationDomainConfigService
- iPlanetAMProviderConfigService

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

```
http://docs.sun.com/
```

## Example

```
sunRegisteredServiceName: DomainMailService
```

## OID

1.3.6.1.4.1.42.2.27.9.1.593

## sunServiceId

## Origin

Messaging Server 6.0, Calendar Server 6.0

## Syntax

cis, single-valued

## Object Classes

[sunServiceComponent](#)

### Definition

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

### Example

```
sunServiceId:StructureUmsObjects
```

### OID

1.3.6.1.4.1.42.2.27.9.1.79

## sunSmsPriority

### Origin

Access Manager

### Syntax

cis, single-valued

## Object Classes

[sunServiceComponent](#)

### Definition

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

### Example

```
sunSmsPriority:
```

### OID

1.3.6.1.4.1.42.2.27.9.1.81

## sunXmlKeyValue

### Origin

Access Manager

### Syntax

cis, single-valued

## Object Classes

sunServiceComponent

**Definition**

Not currently used.

**Example**

No example given.

**OID**

1.3.6.1.4.1.42.2.27.9.1.84

# Chapter 3. Communications Suite Clients LDAP Object Classes and Attributes

---

## Oracle Communications Unified Communications Suite Clients: LDAP Object Classes and Attributes

This information describes LDAP object classes and attributes for the Communications Suite clients: Convergence and Communications Express.

Topics:

- [Object Classes for Convergence and Communications Express](#)
- [Attributes for Communications Suite Clients](#)

### Object Classes for Convergence and Communications Express

One object class is used to provision Convergence and Communications Express: [sunUCPreferences](#).

#### sunUCPreferences

##### Definition

Used to extend a user entry with attributes required for storing Communications Express preferences.

##### Superior Class

top

##### Object Class Type

auxiliary

##### OID

Unknown

##### Required Attributes

None

##### Allowed Attributes

[sunUCTheme](#), [sunUCDefaultEmailHandler](#), [sunUCDateFormat](#), [sunUCDateDelimiter](#), [sunUCTimeFormat](#), [sunUCTimeZone](#), [sunUCExtendedClientPrefs](#), [sunUCExtendedUserPrefs](#):, [sunAbnInitialized](#), [sunAbnInitialized](#), [sunCallInitialized](#), [sunDefaultApplication](#)

### Attributes for Communications Suite Clients

The following attributes are used by Convergence and Communications Express to provision users:

- [sunUCTheme](#)
- [sunUCDefaultEmailHandler](#)
- [sunUCDateFormat](#)
- [sunUCDateDelimiter](#)
- [sunUCTimeFormat](#)
- [sunUCTimeZone](#)
- [sunUCExtendedClientPrefs](#)
- [sunUCExtendedUserPrefs](#)
- [sunUCMailSendProfiles](#)
- [sunAbnInitialized](#)
- [sunCallInitialized](#)
- [sunDefaultApplication](#)

## **sunUCTheme**

### **Origin**

Communications Express 6 2005Q1

### **Syntax**

Single-value

### **Object Class**

[sunUCPreferences](#)

### **Definition**

Specifies the name of user interface theme used to display all localizable resources. The list of resources include text labels, icons, color schemes, and so on. Communications Express 6.0 supports only domain-wide themes and not user-specific themes.

### **OID**

Unknown

## **sunUCDefaultEmailHandler**

### **Origin**

Communications Express 6 2005Q1

### **Syntax**

Single-value

### **Object Class**

[sunUCPreferences](#)

### **Definition**

Specifies the default mail handler for all mail links. The valid values are as follows:

`uc` - If the value is `uc`, Communication Express' mail compose feature is used to compose a new message.

`desktop` - If the value is `desktop`, the default `mailto:` handler as specified by the desktop operating system is used to compose a new message.

## **OID**

Unknown

## **sunUCDateFormat**

### **Origin**

Communications Express 6 2005Q1

### **Syntax**

Single-value

### **Object Class**

[sunUCPreferences](#)

### **Definition**

Specifies date display and input format. Valid formats are: `Y/M/D`, `M/D/Y` and `D/M/Y`.

## **OID**

Unknown

## **sunUCDateDelimiter**

### **Origin**

Communications Express 6 2005Q1

### **Syntax**

Single-value

### **Object Class**

[sunUCPreferences](#)

### **Definition**

Delimiter is the character that separates date, month and year in the date. The options available are: `."`, `/"`, `-"`.

## **OID**

Unknown

## **sunUCTimeFormat**

### **Origin**

Communications Express 6 2005Q1

### **Syntax**

Single-value

### **Object Class**

[sunUCPreferences](#)

### **Definition**

Specifies the time display format. Valid formats are: 12 hour clock, 24 hour clock

### **OID**

Unknown

## **sunUCTimeZone**

### **Origin**

Communications Express 6 2005Q1

### **Syntax**

Single-value

### **Object Class**

[sunUCPreferences](#)

### **Definition**

Specifies the time zone used to normalize all time/date information in the client.

In Delegated Administrator 6.4 (Communications Suite 6), new users with calendar service are created with `sunUCTimeZone` having the same value of `icsTimezone`.

### **OID**

Unknown

## **sunUCExtendedClientPrefs**

### **Origin**

Sun Convergence

### **Syntax**

cis, multivalued

## Object Class

sunUCPreferences

### Definition

Defines Convergence client-specific options for a domain. It also defines the default values of user options for users within the domain.

The `sunUCEExtendedClientPrefs` attribute stores client preferences for a domain at the domain level; its corresponding attribute for individual users is `sunUCEExtendedUserPrefs`. Options for an individual user can be extended by using the `sunUCEExtendedUserPrefs` attribute in the individual user's LDAP entry.

The following table lists the properties available with `sunUCEExtendedClientPrefs`, their definitions, and their values.

#### Extended Client Preferences

Property	Value	Description
ClientCustomizationEnabled	true, false (boolean)	Enables or disables customization for the end user.
MailCheckInterval	integer	Specifies the interval, in seconds, that Convergence waits before checking for incoming mail.
MailAutoSaveInterval	integer	Specifies the interval, in seconds, that Convergence automatically saves the end user's current draft of a message.
MailDefaultTags	string	Specifies the default tags available to end users in the domain.
DictLocale	string	Defines the default language to be presented to end users in the domain.
AntiSpamServiceURL	string	Identifies the url location of the anti-spam service used for the domain.
AutoLogoutTimeout	integer	Specifies the idle time, in minutes, before the end user's current session times out (for all users in the domain).
SmartTimeZones	string	Specifies the smart time zones available to end users in the domain.
MainPage	string	Specifies the configured main page in the Convergence UI. For example <code>sunUCEExtendedClientPrefs: mainpage=/iwc_static /layout/my-mainpage.html</code> . If this attribute is not configured, then the default main page is loaded, as configured by the <code>client.mainpage</code> Convergence configuration option.

#### Example



```
sunUCExtendedClientPrefs:ClientCustomizationEnabled=false
sunUCExtendedClientPrefs:MailCheckInterval=300
sunUCExtendedClientPrefs:MailAutoSaveInterval=60
sunUCExtendedClientPrefs:MailDefaultTags=work,personal
sunUCExtendedClientPrefs:DictLocale=en_US
sunUCExtendedClientPrefs:AntiSpamServiceURL=some_antispam_url
sunUCExtendedClientPrefs:AutoLogoutTimeout=15
sunUCExtendedClientPrefs:SmartTimeZones=APAC
```

## OID

1.3.6.1.4.1.42.2.27.9.1.931

## sunUCExtendedUserPrefs

### Origin

Convergence 1.0, Communications Express 6 2005Q1

### Syntax

cis, multivalued

### Object Class

[sunUCPreferences](#)

### Definition

Defines end user preferences in the Convergence UI. The user chooses preferences by specifying options in the User Options tab. Used to extend stored client preferences.

The `sunUCInitialized` sub-attribute is a set of attribute=value pairs that can be set for `sunUCExtendedUserPrefs`. The `sunUCInitialized` sub-attribute specifies whether the user has previously logged into Communications Express. When a user logs in for the first time, this value is set to true. If this entry is absent in LDAP, the value is set to false.

### *Extended User Preferences*

Property	Value	Description
ClientCustomizationEnabled	true, false (boolean)	Enables or disables customization for the end user.
smartTZenabled	true, false (boolean)	Allows the end user to enable or disable the smart Time zone feature for the client.
theme	string	Specifies a standard theme (such as "classic") or a customized theme. The theme determines the UI look and feel---the icons, colors, banners, fonts used in the UI. The administrator can create customized UI themes and make them available to end users. End users can choose from a selection of site-defined themes. User choices persist across sessions.
keyboardShortCutEnabled	true, false (boolean)	Allows the end user to enable or disable keyboard shortcuts.
defaultDictionary	string. For example: en, fr	Specifies the language of the default dictionary.
homePage	string. For example: classic	Allows the end user to define a customized start page---that is, a customized display of the UI when the client is launched. For example, the start page may display unread email messages; appointments for the day; overview of the week; unfinished tasks; online chat buddies; related RSS/atom feeds, as well as other UI components.
panelSize		Specifies a custom panel size defined by the end user. The user can resize panels by dragging the mouse; in User Options, the user can specify that the custom size become the default. The custom size persists across user sessions.

### Example

```
sunUCExtendedUserPrefs: smarttzenabled=true
sunUCExtendedUserPrefs: keyboardShortCutEnabled=true
sunUCExtendedUserPrefs: defaultDictionary=en
sunUCExtendedUserPrefs: theme=classic
```

### OID

Unknown

### sunUCMailSendProfiles

### Origin

Convergence 1.0

## Syntax

cis, multi-valued

## Object Class

### Definition

Defines alternate sender identities created or modified by a user of Convergence. A sender identity allows the user to specify settings (attributes) when sending a new message, or replying to or forwarding an existing message. All attributes of the sender identity (email address, signature, vCard, and so on) are applied to the outgoing message.

The user can specify these attributes in the Convergence UI. The user can specify multiple alternate sender identities. They are stored in multiple instances of `sunUCMailSenderProfile`. Each instance of `sunUCMailSenderProfile` is a set of `attribute=value` pairs separated by semicolons.

A sender identity consists of the following attributes:

- User name (the comment part of the RFC 822 address)
- Email address
- Reply-to address (optional): Set a valid RFC 2822 email address to be used in the 'reply-to' header of the message.
- Add Signature: A boolean option to enable the use of a signature.
- Signature: Text (plain text or HTML using the rich text editor) appended to the bottom of all messages sent by the user.
- Add vCard: A boolean option that adds the vCard as an attachment to all messages sent by the user.
- vCard: Various fields of vCard can be set by the user. The fields include: first name, last name, email address, and so on.
- Default: A boolean option that identifies this sender identity as the default identity.

### Example

```
sunUCMailSendProfiles:username=user1;email=email;reply--to=;
addsign=true;signature=signature1;addvcard=true;vcard=vcard1,default=tr

sunUCMailSendProfiles:username=user2;email=emai2;reply--to=replyadd2;
addsign=false;signature=;addvcard=true;vcard=vcard2,default=false
sunUCMailSendProfiles:username=user1;email=emai3;reply--to=replytoadd3;

addsign=false;signature=;addvcard=false;vcard=,default=false
```

## OID

Unknown

## sunAbninitialized

### Origin

Communications Express 6 2005Q1

## Syntax

Single-value

### **Object Class**

[sunUCPreferences](#)

### **Definition**

Specifies if the user has previously logged into the address book component of the client. When a user logs in for the very first time, this value is set to true. This value is set to false if the entry is not present in the LDAP.

### **OID**

Unknown

### **sunCallInitialized**

### **Origin**

Communications Express 6 2005Q1

### **Syntax**

Single-value

### **Object Class**

[sunUCPreferences](#)

### **Definition**

Specifies if the user has previously logged into calendar. When a user logs in for the first time, this value is set to true. This value is set to false if the entry is not present in the LDAP.

### **OID**

Unknown

### **sunDefaultApplication**

### **Origin**

Convergence 2

### **Syntax**

Single-value

### **Object Class**

[sunUCPreferences](#)

### **Definition**

Specifies the default tab that appears to the user upon login to Convergence. A value of `mail` indicates that Convergence opens to the inbox. A value of `calendar` indicates that Convergence opens to the calendar.

**OID**

Unknown

# Chapter 4. Communications Suite Delegated Administrator LDAP Object Classes and Attributes

---

## Oracle Communications Unified Communications Suite Delegated Administrator LDAP Object Classes and Attributes

This information describes LDAP Schema 2 object classes and attributes used by Communications Suite Delegated Administrator.

Communications Suite Delegated Administrator provides web-based console and a command-line utility (`commadmin`) for provisioning (users, groups, resources, organizations) for Messaging Server and Calendar Server in an LDAP Schema 2 directory.

To provision Messaging Server users in an LDAP Schema 1 directory, you must use iPlanet Delegated Administrator, a deprecated tool. For information about object classes and attributes used by iPlanet Delegated Administrator, see [iPlanet Delegated Administrator LDAP Object Classes and Attributes \(Schema 1\)](#).

Topics:

- Object Classes
- `inetGroup`
- `ipGroup`
- `sunDelegatedOrganization`
- `sunMailOrganization`
- `sunManagedProvider`
- `sunSharedDomain`
- Attributes
- `preferredMailHost`
- `preferredMailMessageStore`
- `sunAllowBusinessOrgType`
- `sunAllowMultipleDomains`
- `sunAllowMultipleServices`
- `sunAssignableDomains`
- `sunAvailableDomainNames`
- `sunAvailableServices`
- `sunBusinessOrgBase`
- `sunBusinessRoot`
- `sunEnableGAB`
- `sunExcludeServices`
- `sunIncludeServices`
- `sunMaxGroups`
- `sunMaxUsers`
- `sunNumGroups`
- `sunNumUsers`
- `sunOrgType`
- `sunProviderOrgDN`
- `sunResidentialRoot`

The object classes and attributes are listed alphabetically.

## Object Classes

The following object classes are used by Delegated Administrator to provision users in an LDAP Schema 2 directory:

- [inetGroup](#)
- [ipGroup](#)
- [sunDelegatedOrganization](#)
- [sunMailOrganization](#)
- [sunManagedProvider](#)
- [sunSharedDomain](#)

### inetGroup

#### Supported by

Delegated Administrator

#### Definition

Object class to be added to a group entity to give the group a status attribute, which can be `active`, `inactive`, or `deleted`.

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

#### *Status Attribute Values*

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

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

#### Superior Class

`top`

#### Object Class Type

`auxiliary`

#### OID

`inetGroup-oid`

## Required Attributes

None

## Allowed Attributes

`inetGroupStatus`

## ipGroup

### Supported by

Delegated Administrator

### Definition

Object class to be added to a group entity so that a group service package can be assigned to the group.

### Superior Class

`top`

### Object Class Type

`auxiliary`

### OID

`ipGroup-oid`

## Required Attributes

None

## Allowed Attributes

`inetCos`

## sunDelegatedOrganization

### Supported by

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Definition

Object class that defines the properties of a business organization. For example, one property of `sunDelegatedOrganization` can designate a list of domain names the business organization can use for its users. Also, it can define the list of services designated by the provider organization, as available to the business organization, to be assigned to the users.



## Superior Class

top

## Object Class Type

auxiliary

## OID

Unknown

## Required Attributes

`sunOrgType`

## Allowed Attributes

`preferredLanguage`, `sunAvailableServices`, `sunAvailableDomainNames`, `sunMaxUsers`, `sunNumUsers`, `sunMaxGroups`, `sunNumGroups`, `sunEnableGAB`, `sunAllowMultipleServices`

## sunMailOrganization

### Supported by

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Definition

Object class to be added to a shared business organization that has mail service.

`sunMailOrganization` adds two attributes (`preferredMailHost` and `preferredMailMessageStore`) that specify the mail host and message store partition where mail is stored for all users in the business organization.

You can only add the `sunMailOrganization` object class to a shared business organization (defined as "shared" with the `sunOrgType` attribute).

Do not add `sunMailOrganization` to a full domain business organization (defined as "full" with the `sunOrgType` attribute). For a full domain business organization, add the `mailDomain` object class, which also uses the `preferredMailHost` and `preferredMailMessageStore` attributes for provisioning the preferred mail host and message store for the domain.

## Superior Class

top

## Object Class Type

auxiliary

## OID

oid-sunMailOrganization

### **Required Attributes**

none

### **Allowed Attributes**

preferredMailHost, preferredMailMessageStore

## **sunManagedProvider**

### **Supported by**

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### **Definition**

Object class used for storing the properties of a provider organization. Following are some of the properties maintained by `sunManagedProvider`:

- Types of business organizations this provider can create
- Where to create the business organizations
- Services available to this provider
- Domain names that can be used by the shared business organizations created under this provider organization

### **Superior Class**

top

### **Object Class Type**

auxiliary

### **OID**

oid-sunManagedProvider

### **Required Attributes**

None

### **Allowed Attributes**

sunAllowBusinessOrgType, sunBusinessOrgBase, sunIncludeServices, sunExcludeServices, sunAssignableDomains, sunAllowMultipleDomains, sunProviderOrgDN

## **sunSharedDomain**

## Supported by

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

## Definition

Object class to designate a domain that can be shared across multiple business organizations (such as `sesta.com`).

The `sunSharedDomain` object class can designate a hosted domain as a shared domain. Underneath this shared domain, there can be multiple Provider Organizations. Under the Provider Organizations you can create multiple Business Organizations, all sharing the same namespace as the shared domain.

## Superior Class

top

## Object Class Type

auxiliary

## OID

oid-sunSharedDomain

## Required Attributes

none

## Allowed Attributes

none

## Attributes

The following attributes are used by Delegated Administrator to provision users in an LDAP Schema 2 directory:

- `preferredMailHost`
- `preferredMailMessageStore`
- `sunAllowBusinessOrgType`
- `sunAllowMultipleDomains`
- `sunAllowMultipleServices`
- `sunAssignableDomains`
- `sunAvailableDomainNames`
- `sunAvailableServices`
- `sunBusinessOrgBase`
- `sunBusinessRoot`
- `sunEnableGAB`
- `sunExcludeServices`
- `sunIncludeServices`
- `sunMaxGroups`
- `sunMaxUsers`
- `sunNumGroups`

- [sunNumUsers](#)
- [sunOrgType](#)
- [sunProviderOrgDN](#)
- [sunResidentialRoot](#)
- [sunServicesRoot](#)

## preferredMailHost

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax

cis, single-valued

### Object Classes

[mailDomain](#), [sunMailOrganization](#)

### Definition

If you are provisioning an LDAP Schema 2 directory with Communications Suite Delegated Administrator, use the following definition:

Sets the mail host name for new users in this business organization. When a user is created, the `mailHost` attribute of the user entry is filled by the value of `preferredMailHost`.

The `preferredMailHost` attribute is required when the business organization has a mail service.

If this is a full business organization, `preferredMailHost` is an attribute of the `mailDomain` object class. If this is a shared business organization, `preferredMailHost` is an attribute of the `sunMailOrganization` object class.

If you are provisioning an LDAP Schema 1 directory with iPlanet Delegated Administrator:

See [preferredMailHost](#) for a definition of how to use this attribute with Schema 1.

### Example

```
preferredMailHost: mail.siroe.com
```

### OID

2.16.840.1.113730.3.1.761

## preferredMailMessageStore

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

## Syntax

cis, single-valued

## Object Classes

[mailDomain](#), [sunMailOrganization](#)

## Definition

If you are provisioning an LDAP Schema 2 directory with Communications Suite Delegated Administrator, use the following definition:

Sets the message store partition name for new users in this business organization. When a user is created, the `mailMessageStore` attribute of the user entry is filled by the value of `preferredMailMessageStore`.

If the `preferredMailMessageStore` attribute is 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.

If this is a full business organization, `preferredMailMessageStore` is an attribute of the `mailDomain` object class. If this is a shared business organization, `preferredMailMessageStore` is an attribute of the `sunMailOrganization` object class.

If you are provisioning an LDAP Schema 1 directory with iPlanet Delegated Administrator:

See [preferredMailMessageStore](#) for a definition of how to use this attribute with Schema 1.

## Example

```
preferredMailMessageStore: primary
```

## OID

2.16.840.1.113730.3.1.762

## sunAllowBusinessOrgType

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax

cis, multi-valued

### Object Class

[sunManagedProvider](#)

### Definition

Defines the types of business organizations this provider administrator can create.

This is a required attribute.

Allowed values:

- `shared`--- Designates a business organization that is assigned to a shared domain. Multiple business organizations can be part of a shared domain. The business organization being created shares its namespace with the other organizations in the domain.
- `full`--- Designates a business organization that is a full-fledged domain with an authorized domain name and its own unique namespace.

The `sunAllowBusinessOrgType` attribute can enable the provider to create

- Only shared business organizations (`shared` value only)
- Only business organizations that are real, full-fledged domains (`full` value only)
- Both shared and full-fledged business organizations (`shared` and `full` values)

## Example

```
sunAllowBusinessOrgType: shared
```

```
sunAllowBusinessOrgType: full
```

## OID

```
oid-sunAllowBusinessOrgType
```

## sunAllowMultipleDomains

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax

`cis`, single-valued

### Object Class

[sunManagedProvider](#)

### Definition

Determines whether this provider organization can create business organizations that permit multiple domain names or a single domain name for their users.

The `sunAllowMultipleDomains` attribute applies only to business organizations created in shared domains. If a business organization is created as a domain with its own namespace, it can always have multiple domain names specified with the `associatedDomain` attribute.

If the `sunAllowMultipleDomains` attribute is not present, the LDAP semantics allow multiple domain

names for the users of the business organizations. (The default value is true.)

Allowed values: true, false

### Example

```
sunAllowMultipleDomains: true
```

### OID

oid-sunAllowMultipleDomains

## sunAllowMultipleServices

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax

cis, single-valued

### Object Class

[sunDelegatedOrganization](#)

### Definition

NOTE: This attribute is not being used for this release.

Enables you to assign multiple classes-of-service to users in this business organization.

Allowed values: true, false

Default value: true

If `sunAllowMultipleServices` has a value of false, users in this business organization can have at most one class-of-service.

### Example

```
sunAllowMultipleServices: false
```

### OID

oid-sunAllowMultipleServices

## sunAssignableDomains

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

## Syntax

cis, multi-valued

## Object Class

[sunManagedProvider](#)

## Definition

Specifies a list of domain names the provider administrator can choose from when assigning domains to business organizations in this provider organization. This list is derived from the domain names specified in the `sunPreferredDomain` and `associatedDomain` attributes of the parent or ancestor shared domain node.

If the `sunAssignableDomains` attribute is not present, all of the `sunPreferredDomain` and `associatedDomain` attributes are available to be assigned to business organizations by this provider.

## Example

```
sunAssignableDomains: sesta.com sunAssignableDomains: siroe.com
sunAssignableDomains: varius.com
```

## OID

oid-sunAssignableDomains

## sunAvailableDomainNames

## Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

## Syntax

cis, multi-valued

## Object Class

[sunDelegatedOrganization](#)

## Definition

Specifies a list of domain names available for use by the business organization. This list is a subset of domain names derived from the `sunAssignableDomains` attribute in the provider organization.

If the `sunAvailableDomainNames` attribute is not present, all domains from the `sunAssignableDomains` attribute in the provider organization are available for use by this business organization.

## Example



sunAvailableDomainNames: sesta.comsunAvailableDomainNames: siroe.com

## OID

oid-sunAvailableDomainNames

## sunAvailableServices

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax

cis, multi-valued

### Object Class

[sunDelegatedOrganization](#)

### Definition

Specifies a list of Service Packages available to the business organization for its users and groups. Also specifies the number of instances of each named class-of-service.

This is a required attribute.

### Format

The value of the attribute has two possible formats:

#### Limited Allocation

*servicename:number:number\_assigned*

- *number* is the number of service packages allocated to the organization
- *number\_assigned* is the number of service packages assigned to users or groups in the organization. If no service packages have been assigned, the value of *number\_assigned* is -1.

#### Unlimited

*servicename*

If you specify *servicename* only--if you do not specify the *number* of services allocated and assigned--an unlimited number of that service is available to the business organization.

### Example

```
sunAvailableServices:Gold:10:--1
sunAvailableServices:Mercury:20:5
sunAvailableServices:Silver
```

In this example, 10 Gold services are available to the organization, 0 have been assigned. 20 Mercury services are available to the organization, 5 have been assigned. An unlimited number of Silver services are available to the organization.

## OID

oid-sunAvailableServices

## sunBusinessOrgBase

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax

dn, single-valued

### Object Class

[sunManagedProvider](#)

### Definition

Contains the DN for the node underneath which all full domains for this provider organization are to be created.

You can assign this attribute only if the `sunAllowBusinessOrgType` attribute was provisioned to allow full domains (`sunAllowBusinessOrgType: full`).

### Example

```
sunBusinessOrgBase: o=providerorgDomainsRoot,o=Business,o=userGroupRoot
```

## OID

oid-sunBusinessOrgBase

## sunBusinessRoot

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax

dn, single-valued

## Object Class

[sunManagedLocation](#)

## Definition

Holds the DN of the root entry that contains the business organization tree.

## Example

```
sunBusinessRoot: o=Business,o=userGroupRoot
```

## OID

oid-sunBusinessRoot

## sunEnableGAB

## Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

## Syntax

cis, single-valued

## Object Class

[sunDelegatedOrganization](#)

## Definition

Enables use of a global address book for this business organization.

Allowed values: true, false

Default value: false

## Example

```
sunEnableGAB: true
```

## OID

oid-sunEnableGAB

## sunExcludeServices

## Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

## Syntax

cis, multi-valued

## Object Class

[sunManagedProvider](#)

## Definition

Specifies a list of classes-of-service that will be excluded from the business organizations in this provider organization.

If both the `sunIncludeServices` and `sunExcludeServices` attributes are specified, only `sunIncludeServices` takes effect. If neither attribute is present, all classes-of-service found underneath the container specified with the `sunServicesRoot` attribute will also be available to the business organizations in this provider organization.

## Example

```
sunExcludeServices: Bronze
```

## OID

oid-sunExcludeServices

## sunIncludeServices

## Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

## Syntax

cis, multi-valued

## Object Class

[sunManagedProvider](#)

## Definition

Specifies a list of the classes-of-service available to business organizations in this provider organization.

The complete list of classes-of-service available in this directory is found underneath the container specified with the `sunServicesRoot` attribute.

If the `sunIncludeServices` attribute is not present, all classes-of-service specified underneath the

class-of-service container will also be available to the business organizations in this provider organization.

### **Example**

```
sunIncludeServices: Gold
```

### **OID**

```
oid-sunIncludeServices
```

## **sunMaxGroups**

### **Origin**

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### **Syntax**

integer, single-valued

### **Object Class**

[sunDelegatedOrganization](#)

### **Definition**

Specifies the maximum number of groups that can be created in this business organization.

To enable the business organization to contain an unlimited number of groups, specify a value of -1.

Allowed values are integers.

### **Example**

```
sunMaxGroups: 20
```

### **OID**

```
oid-sunMaxGroups
```

## **sunMaxUsers**

### **Origin**

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### **Syntax**

integer, single-valued

## Object Class

[sunDelegatedOrganization](#)

### Definition

Specifies the maximum number of users who can be created in this business organization.

To enable the business organization to contain an unlimited number of users, specify a value of -1.

Allowed values are integers.

### Example

```
sunMaxUsers: 50
```

### OID

oid-sunMaxUsers

## sunNumGroups

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax

integer, single-valued

## Object Class

[sunDelegatedOrganization](#)

### Definition

Specifies the current number of groups in this business organization.

Allowed values are integers.

### Example

```
sunNumGroups: 8
```

### OID

oid-sunNumGroups

## sunNumUsers

### Origin

## Syntax

integer, single-valued

## Object Class

[sunDelegatedOrganization](#)

## Definition

Specifies the current number of users in this business organization.

Allowed values are integers.

NOTE: This number is maintained by Delegated Administrator. Manual changes to the number of users (using `ldapmodify`) will not be reflected in the count.

## Example

```
sunNumUsers: 12
```

## OID

oid-sunNumUsers

## sunOrgType

## Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

## Syntax

cis, single-valued

## Object Class

[sunDelegatedOrganization](#)

## Definition

Determines whether this business organization is part of a shared domain (`shared`) or is a full-fledged domain with its own namespace (`full`).

This is a required attribute.

Allowed values:

- `shared---` Designates a business organization that is assigned to a shared domain. Multiple business organizations can be part of a shared domain. This business organization shares its

- namespace with the other organizations in the domain.
- `full`--- Designates a business organization that is a full-fledged domain with an authorized domain name and its own unique namespace.

## Example

```
sunOrgType: shared  
sunorgtype: full
```

## OID

```
oid-sunOrgType
```

## sunProviderOrgDN

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax

dn, single-valued

### Object Class

[sunManagedProvider](#)

### Definition

Contains the base DN that points to the business organization for this provider organization. The users of this provider organization are created in this business organization.

The provider organization cannot have any user entries directly under the provider organization node. All users in the provider organization must be managed in the separate business organization identified by the `sunProviderOrgDN` attribute. This business organization is like any other business organization.

## Example

```
sunProviderOrgDN: o=providerorg,o=sesta.com,o=sharedDomainsRoot,o=Business
```

## OID

```
oid-sunProviderOrgDN
```

## sunResidentialRoot

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax



dn, single-valued

## **Object Class**

[sunManagedLocation](#)

## **Definition**

Holds the DN of the root entry that contains the residential tree.

## **Example**

```
sunResidentialRoot: o=Residential,o=userGroupRoot
```

## **OID**

Unknown

# Chapter 5. Communications Suite Schema 2 LDAP Object Classes and Attributes

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## Oracle Communications Unified Communications Suite Schema 2 LDAP Object Classes

This information describes Schema 2 LDAP object classes and attributes.

Topics:

- [sunManagedOrganization](#)
- [sunNameSpace](#)
- [sunServiceComponent](#)

### **sunManagedOrganization**

#### **Supported by**

Calendar Server 6.0, Messaging Server 6.0

#### **Definition**

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

#### **Superior Class**

#### **Object Class Type**

auxiliary

#### **OID**

2.16.840.1.113730.3.2.185

#### **Required Attributes**

none

#### **Allowed Attributes**

[inetdomainstatus](#), [parentOrganization](#)

### **sunNameSpace**

#### **Supported by**

Access Manager

## Definition

Used for LDAP Schema 2 only. Required to be present at the root of a subtree representing a namespace. Access Manager enforces the uniqueness attribute for namespaces.

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

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



### Note

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

## Superior Class

## Object Class Type

auxiliary

## OID

1.3.6.1.4.1.42.2.27.9.2.29

## Required Attributes

none

## Allowed Attributes

[sunNameSpaceUniqueAttrs](#)

## sunServiceComponent

## Supported by

Calendar Server 6.0, Messaging Server 6.0

## Definition

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

The entry is named by its required `ou` attribute.

## Superior Class

## Object Class Type

auxiliary

**OID**

1.3.6.1.4.1.42.2.27.9.2.27

**Required Attributes**

organizationalUnitName (ou)

**Allowed Attributes**

description, sunKeyValue, sunServiceId, sunSmsPriority, sunXmlKeyValue

# Chapter 6. Instant Messaging LDAP Object Classes and Attributes

---

## Oracle Communications Instant Messaging Server Classes and Attributes

This information describes LDAP object classes and attributes used by Sun Java System Instant Messaging.

Topics:

- Instant Messaging Object Classes
- sunIMConference
- sunIMNews
- sunIMStoredMessage
- sunIMUser
- sunPresenceUser
- Instant Messaging Attributes
- sunIMConferenceAffiliations
- sunIMConferenceConfiguration
- sunIMConferenceRoster
- sunIMMessageContent
- sunIMMessageID
- sunIMNewsAffiliations
- sunIMNewsConfiguration
- sunIMNewsMetaData
- sunIMNewsRoster
- sunIMProperties
- sunIMPrivateSettings
- sunIMRoster
- sunIMUserConferenceRoster
- sunIMUserNewsRoster
- sunIMUserProperties
- sunIMUserPrivateSettings
- sunIMUserRoster
- sunPresenceAccessDenied
- sunPresenceAccessPermitted
- sunPresenceDefaultAccess
- sunPresenceDevices
- sunPresenceEntityAccessDenied
- sunPresenceEntityAccessPermitted
- sunPresenceEntityDefaultAccess
- sunPresenceEntityDevices
- sunPresencePrivacy
- sunPresenceUserPrivacy

### Instant Messaging Object Classes

This section describes the following Instant Messaging object classes:

- sunIMConference
- sunIMNews

- [sunIMStoredMessage](#)
- [sunIMUser](#)
- [sunPresenceUser](#)

## **sunIMConference**

### **Supported by**

Instant Messaging 7.2

### **Definition**

Contains conference room properties.

If `iim.userprops.store` is set to `ldap`, when a new conference room is created, an entry for the conference room is added to the directory. The conference room entry will contain the `sunIMConference` object class.

The conference entry is created under `$iim_ldap.conferencecontainer,$iim_ldap.searchbase`. (Here `$val` refers to the corresponding property in the `iim.conf` file.) The default value of `$iim_ldap.conferencecontainer` is `ou=sunConferences`.

### **Superior Class**

`top`

### **Object Class Type**

`auxiliary`

### **OID**

1.3.6.1.4.1.42.2.27.9.2.107

### **Required Attributes**

`none`

### **Allowed Attributes**

[sunIMConferenceAffiliations](#), [sunIMConferenceConfiguration](#)

## **sunIMNews**

### **Supported by**

Instant Messaging 7.2

### **Definition**

Contains news channel properties.

If `iim.userprops.store` is set to `ldap`, when a news channel is created, an entry for the news channel is added to the directory. The news channel entry will contain the `sunIMNews` object class.

The news channel entry is created under `$iim_ldap.newscontainer`, `$iim_ldap.searchbase`. (Here `$val` refers to the corresponding property in the `iim.conf` file.) The default value of `$iim_ldap.newscontainer` is `ou=sunNews`.

## Superior Class

top

## Object Class Type

auxiliary

## OID

1.3.6.1.4.1.42.2.27.9.2.108

## Required Attributes

none

## Allowed Attributes

[sunIMNewsAffiliations](#), [sunIMNewsConfiguration](#), [sunIMNewsMetaData](#)

## sunIMStoredMessage

### Supported by

Instant Messaging 7.2

### Definition

Contains stored message properties.

If `iim.userprops.store` is set to `ldap`, when a new stored message is created, an entry for the stored message is added to the directory. The stored message entry will contain the `sunIMStoredMessage` object class.

The stored message entry is created under `$iim_ldap.storedmessagecontainer`, `$iim_ldap.searchbase`. (Here `$val` refers to the corresponding property in the `iim.conf` file.) The default value of `$iim_ldap.storedmessagecontainer` is `ou=sunStoredMessages`.

## Superior Class

top

## Object Class Type

auxiliary

## OID

1.3.6.1.4.1.42.2.27.9.2.109

## Required Attributes

none

## Allowed Attributes

[sunIMMessageContent](#), [sunIMMessageID](#)

## sunIMUser

### Supported by

Instant Messaging 7.2

### Definition

Provides user services to IM users (contains user properties). Added to user entries under the base DN specified when you run the `imadmin assign services` command or when you assign IM service to users in Delegated Administrator.

### Superior Class

top

### Object Class Type

auxiliary

## OID

1.3.6.1.4.1.42.2.27.9.2.106

## Required Attributes

none

## Allowed Attributes

[sunIMConferenceRoster](#), [sunIMNewsRoster](#), [sunIMProperties](#), [sunIMPrivateSettings](#), [sunIMRoster](#), [sunIMUserConferenceRoster](#), [sunIMUserNewsRoster](#), [sunIMUserProperties](#), [sunIMUserPrivateSettings](#), [sunIMUserRoster](#)

## sunPresenceUser

### Supported by



## Definition

Provides presence service to IM users (contains user presence properties). Added to user entries under the base DN specified when you run the `imadmin assign services` command or when you assign IM service to users in Delegated Administrator.

## Superior Class

top

## Object Class Type

auxiliary

## OID

1.3.6.1.4.1.42.2.27.9.2.105

## Required Attributes

none

## Allowed Attributes

sunPresenceAccessDenied, sunPresenceAccessPermitted, sunPresenceDefaultAccess, sunPresenceDevices, sunPresenceEntityAccessDenied, sunPresenceEntityAccessPermitted, sunPresenceEntityDefaultAccess, sunPresenceEntityDevices, sunPresencePrivacy, sunPresenceUserPrivacy

## Instant Messaging Attributes

This section describes the following Instant Messaging attributes:

- sunIMConferenceAffiliations
- sunIMConferenceConfiguration
- sunIMConferenceRoster
- sunIMMessageContent
- sunIMMessageID
- sunIMNewsAffiliations
- sunIMNewsConfiguration
- sunIMNewsMetaData
- sunIMNewsRoster
- sunIMProperties
- sunIMPrivateSettings
- sunIMRoster
- sunIMUserConferenceRoster
- sunIMUserNewsRoster
- sunIMUserProperties
- sunIMUserPrivateSettings
- sunIMUserRoster
- sunPresenceAccessDenied
- sunPresenceAccessPermitted

- [sunPresenceDefaultAccess](#)
- [sunPresenceDevices](#)
- [sunPresenceEntityAccessDenied](#)
- [sunPresenceEntityAccessPermitted](#)
- [sunPresenceEntityDefaultAccess](#)
- [sunPresenceEntityDevices](#)
- [sunPresencePrivacy](#)
- [sunPresenceUserPrivacy](#)

## **sunIMConferenceAffiliations**

### **Origin**

Instant Messaging 7.2

### **Syntax**

cis, single-valued

### **Object Classes**

[sunIMConference](#)

### **Definition**

Reserved. Not implemented.

### **Example**

Reserved.

### **OID**

1.3.6.1.4.1.42.2.27.9.1.773

## **sunIMConferenceConfiguration**

### **Origin**

Instant Messaging 7.2

### **Syntax**

cis, single-valued

### **Object Classes**

[sunIMConference](#)

### **Definition**

Reserved. Not implemented.

### **Example**

Reserved

### **OID**

1.3.6.1.4.1.42.2.27.9.1.774

## **sunIMConferenceRoster**

### **Origin**

Instant Messaging 7.2

### **Syntax**

cis, single-valued

### **Object Classes**

[sunIMUser](#)

### **Definition**

Reserved. Not implemented.

### **Example**

Reserved

### **OID**

1.3.6.1.4.1.42.2.27.9.1.771

## **sunIMMessageContent**

### **Origin**

Instant Messaging 7.2

### **Syntax**

cis, single-valued

### **ObjectClasses**

[sunIMStoredMessage](#)

## Definition

Specifies the XMPP message content.

## Example

Reserved

## OID

1.3.6.1.4.1.42.2.27.9.1.778

## sunIMMessageID

### Origin

Instant Messaging 7.2

### Syntax

cis, single-valued

### Object Classes

[sunIMStoredMessage](#)

## Definition

Specifies the XMPP message ID.

## Example

Reserved

## OID

1.3.6.1.4.1.42.2.27.9.1.777

## sunIMNewsAffiliations

### Origin

Instant Messaging 7.2

### Syntax

cis, single-valued

### Object Classes

[sunIMNews](#)

### **Definition**

Specifies the XMPP pubsub channel affiliations.

### **Example**

Reserved

### **OID**

1.3.6.1.4.1.42.2.27.9.1.775

## **sunIMNewsConfiguration**

### **Origin**

Instant Messaging 7.2

### **Syntax**

cis, single-valued

### **Object Classes**

[sunIMNews](#)

### **Definition**

Specifies the XMPP pubsub channel configuration.

### **Example**

Reserved

### **OID**

1.3.6.1.4.1.42.2.27.9.1.776

## **sunIMNewsMetaData**

### **Origin**

Instant Messaging 7.2

### **Syntax**

cis, single-valued

## Object Classes

[sunIMNews](#)

### Definition

Reserved. Not implemented.

### Example

Reserved

### OID

1.3.6.1.4.1.42.2.27.9.1.799

## sunIMNewsRoster

### Origin

Instant Messaging 7.2

### Syntax

cis, single-valued

## Object Classes

[sunIMUser](#)

### Definition

Reserved. Not implemented.

### Example

Reserved

### OID

1.3.6.1.4.1.42.2.27.9.1.772

## sunIMProperties

### Origin

Instant Messagin

### Syntax

cis, single-valued

## Object Classes

[sunIMUser](#)

### Definition

Obsolete

### Example

Obsolete

### OID

1.3.6.1.4.1.42.2.27.9.1.769

## sunIMPrivateSettings

### Origin

Instant Messaging 7.2

### Syntax

cis, single-valued

## Object Classes

[sunIMUser](#)

### Definition

Reserved. Not implemented.

### Example

Reserved

### OID

1.3.6.1.4.1.42.2.27.9.1.768

## sunIMRoster

### Origin

Instant Messaging 7.2

## Syntax

cis, single-valued

## Object Classes

[sunIMUser](#)

## Definition

Reserved. Not implemented.

## Example

Reserved

## OID

1.3.6.1.4.1.42.2.27.9.1.770

## sunIMUserConferenceRoster

## Origin

Instant Messaging 7.2

## Syntax

cis, single-valued

## Object Classes

[sunIMUser](#)

## Definition

Reserved. Not implemented.

## Example

Reserved

## OID

1.3.6.1.4.1.42.2.27.9.1.766

## sunIMUserNewsRoster

## Origin



Instant Messaging 7.2

## **Syntax**

cis, single-valued

## **Object Classes**

[sunIMUser](#)

## **Definition**

Reserved. Not implemented.

## **Example**

Reserved

## **OID**

1.3.6.1.4.1.42.2.27.9.1.767

## **sunIMUserProperties**

### **Origin**

Instant Messaging

### **Syntax**

cis, single-valued

### **Object Classes**

[sunIMUser](#)

### **Definition**

Obsolete

### **Example**

Obsolete

### **OID**

1.3.6.1.4.1.42.2.27.9.1.764

## **sunIMUserPrivateSettings**

## Origin

Instant Messaging 7.2

## Syntax

cis, single-valued

## Object Classes

[sunIMUser](#)

## Definition

Reserved. Not implemented.

## Example

Reserved

## OID

1.3.6.1.4.1.42.2.27.9.1.763

## sunIMUserRoster

## Origin

Instant Messaging 7.2

## Syntax

cis, single-valued

## Object Classes

[sunIMUser](#)

## Definition

Reserved. Not implemented.

## Example

Reserved

## OID

1.3.6.1.4.1.42.2.27.9.1.765

## **sunPresenceAccessDenied**

### **Origin**

Instant Messaging

### **Syntax**

cis, single-valued

### **Object Classes**

[sunPresenceUser](#)

### **Definition**

Obsolete

### **Example**

Obsolete

### **OID**

1.3.6.1.4.1.42.2.27.9.1.760

## **sunPresenceAccessPermitted**

### **Origin**

Instant Messaging

### **Syntax**

cis, single-valued

### **Object Classes**

[sunPresenceUser](#)

### **Definition**

Obsolete

### **Example**

Obsolete

### **OID**

1.3.6.1.4.1.42.2.27.9.1.761

## **sunPresenceDefaultAccess**

### **Origin**

Instant Messaging

### **Syntax**

cis, single-valued

### **Object Classes**

[sunPresenceUser](#)

### **Definition**

Obsolete

### **Example**

Obsolete

### **OID**

1.3.6.1.4.1.42.2.27.9.1.759

## **sunPresenceDevices**

### **Origin**

Instant Messaging 7.2

### **Syntax**

cis, single-valued

### **Object Classes**

[sunPresenceUser](#)

### **Definition**

Reserved. Not Implemented

Administrator-managed presence agents.

### **Example**

Reserved

## OID

1.3.6.1.4.1.42.2.27.9.1.762

## sunPresenceEntityAccessDenied

### Origin

Instant Messaging

### Syntax

cis, single-valued

### Object Classes

[sunPresenceUser](#)

### Definition

Obsolete

### Example

Obsolete

## OID

1.3.6.1.4.1.42.2.27.9.1.755

## sunPresenceEntityAccessPermitted

### Origin

Instant Messaging

### Syntax

cis, single-valued

### Object Classes

[sunPresenceUser](#)

### Definition

Obsolete

### Example

Obsolete

## OID

1.3.6.1.4.1.42.2.27.9.1.756

## sunPresenceEntityDefaultAccess

### Origin

Instant Messaging

### Syntax

cis, single-valued

### Object Classes

[sunPresenceUser](#)

### Definition

Obsolete

### Example

Obsolete

## OID

1.3.6.1.4.1.42.2.27.9.1.754

## sunPresenceEntityDevices

### Origin

Instant Messaging

### Syntax

cis, single-valued

### Object Classes

[sunPresenceUser](#)

### Definition

Reserved. Not implemented.

## Example

Reserved

## OID

1.3.6.1.4.1.42.2.27.9.1.757

## sunPresencePrivacy

### Origin

Instant Messaging 7.2

### Syntax

cis, single-valued

### Object Classes

[sunPresenceUser](#)

### Definition

Reserved. Not implemented.

## Example

Reserved

## OID

1.3.6.1.4.1.42.2.27.9.1.758

## sunPresenceUserPrivacy

### Origin

Instant Messaging

### Syntax

cis, single-valued

### Object Classes

[sunPresenceUser](#)

### Definition

Reserved. Not implemented.

Specifies XMPP privacy profiles.

### **Example**

Reserved

### **OID**

1.3.6.1.4.1.42.2.27.9.1.753



# Chapter 7. iPlanet Delegated Administrator LDAP Object Classes and Attributes (Schema 1)

---

## iPlanet Delegated Administrator Classes and Attributes (Schema 1)

This information describes LDAP object classes and attributes for iPlanet Delegated Administrator for Messaging implementing LDAP Schema 1.

iPlanet Delegated Administrator is a deprecated tool. You can only use it to provision Messaging Server users in an LDAP Schema 1 directory.

To provision users in LDAP Schema 2, you must use the Communications Suite Delegated Administrator. For information about object classes and attributes supported by this new version of Delegated Administrator, see [Communications Suite Delegated Administrator LDAP Object Classes and Attributes](#).

Topics:

- [Object Classes](#)
- [Attributes](#)

## Object Classes

The following object classes are used by iPlanet Delegated Administrator to provision users in an LDAP Schema 1 directory:

- [inetDomainOrg](#)
- [inetMailGroupManagement](#)
- [inetManagedGroup](#)

### inetDomainOrg

#### Supported by

Messaging Server 5.0

#### Definition

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

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

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

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

### Superior Class

top

### Object Class Type

auxiliary

### OID

2.16.840.1.113730.3.2.132

### Required Attributes

none

### Allowed Attributes

domOrgMaxUsers, domOrgNumUsers

## inetMailGroupManagement

### Supported by

Messaging Server 5.0

### Definition

Used for LDAP Schema 1 only. 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

none

### Allowed Attributes

mgrpAddHeader, mgmanDenySubscribe, mgmanGoodbyeText, mgmanHidden, mgmanIntroText, mgmanJoinability, mgmanMemberVisibility, mgmanVisibility, multiLineDescription

## inetManagedGroup

### Supported by

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`

## nsManagedDept

### Supported by

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

### Definition

This object class is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Stores information for a non-administrator group.

### Superior Class

groupOfUniqueNames

### **Object Class Type**

auxiliary

### **OID**

2.16.840.1.113730.3.2.88

### **Required Attributes**

none

### **Allowed Attributes**

nsMaxDepts, nsMaxUsers, nsNumDepts, nsNumUsers, nsdaModifiableBy, owner

## **nsManagedDeptAdminGroup**

### **Supported by**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

### **Definition**

This object class is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Stores information for a group of administrators for iPlanet Delegated Administrator.

### **Superior Class**

top

### **Object Class Type**

Unknown

### **OID**

2.16.840.1.113730.3.2.111

### **Required Attributes**

objectClass

### **Allowed Attributes**

none

## **nsManagedDomain**

### **Supported by**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

## Definition

This object class is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Used only for versions of Messaging Server using iPlanet Delegated Administrator. It contains information necessary to administer domains.

## Superior Class

top

## Object Class Type

Unknown

## OID

2.16.840.1.113730.3.2.86

## Required Attributes

[objectClass](#)

## Allowed Attributes

[nswcalDisallowAccess](#), [nsMaxDepts](#),[nsMaxDomains](#), [nsMaxMailLists](#), [nsMaxUsers](#), [nsNumDepts](#), [nsNumDomains](#), [nsNumMailLists](#), [nsNumUsers](#), [nsdaModifiableBy](#), [owner](#)

## nsManagedFamilyGroup

### Supported by

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2

## Definition

This object class is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Stores information for a family group managed by a delegated administrator. The family group is like a Group, with a few differences. It was added primarily to support Delegated Administrator deployments using Sun Internet Message Service (SIMS) 4.0.

## Superior Class

top

## OID

2.16.840.1.113730.3.2.89

## Required Attribute

[objectClass](#)

## Allowed Attributes

[nsMaxUsers](#), [nsNumUsers](#), [nsdaModifiableBy](#), [owner](#)

## **nsManagedISP**

### **Supported by**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2

### **Definition**

This object class is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

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**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2

### **Definition**

This object class is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Stores information for a mail list created by enabled users. A mail list must contain this object class in order to be managed by Delegated Administrator.

### **Superior Class**

top

### **Object Class Type**

Unknown

### **OID**

2.16.840.1.113730.3.2.90

## Required Attributes

[objectClass](#)

## Allowed Attributes

[nsMaxUsers](#), [nsNumUsers](#), [nsdaModifiableBy](#), [owner](#)

## nsManagedOrgUnit

### Supported by

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

### Definition

This object class is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Stores information for a Delegated Administrator managed organizational unit.

### Superior Class

[top](#)

### OID

2.16.840.1.113730.3.2.87

## Required Attributes

[objectClass](#)

## Allowed Attributes

[nsdaModifiableBy](#), [owner](#)

## nsManagedPerson

### Supported by

Messaging Server 5.0; deprecated for Messaging Server 6.0 with LDAP Schema 2

### Definition

This object class is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Stores information about a user. A user entry must contain this object class in order to be managed by Delegated Administrator.

### Superior Class

[top](#)

### Object Class Type

Unknown

## OID

2.16.840.1.113730.3.2.91

## Required Attributes

[objectClass](#)

## Allowed Attributes

[memberOf](#), [nsdaCapability](#), [nsdaDomain](#), [nsSearchFilter](#), [nsdaModifiableBy](#), [owner](#)

## nsUniquenessDomain

## Supported by

Messaging Server 5.0; deprecated for Messaging Server 6.0 with LDAP Schema 2

## Definition

LDAP Schema 1 object class in support of Delegated Administrator for Messaging. If you are still using LDAP Schema 1, then this object is still valid; otherwise it is deprecated.

This object class is a marker to identify the subtree where the uniqueness of `uid` should be enforced. The `uid` uniqueness plug-in used this to determine the scope or sphere of influence for enforcing uniqueness.

## Superior Class

[top](#)

## OID

2.16.840.1.113730.3.2.115

## Required Attributes

[objectClass](#)

## Allowed Attributes

none

## Attributes

The following attributes are used by iPlanet Delegated Administrator to provision users in an LDAP Schema 1 directory:

- [domainUidSeparator](#)
- [domOrgMaxUsers](#)
- [domOrgNumUsers](#)
- [memberOfManagedGroup](#)
- [mgmanAllowSubscribe](#)



- `mgmanDenySubscribe`
- `mgmanGoodbyeText`
- `mgmanHidden`
- `mgmanIntroText`
- `mgmanJoinability`
- `mgmanMemberVisibility`
- `mgmanVisibility`
- `mnggrpAdditionPolicy`
- `mnggrpBillableUser`
- `mnggrpCurrentUsers`
- `mnggrpDeletionPolicy`
- `mnggrpMailQuota`
- `mnggrpMaxUsers`
- `mnggrpStatus`
- `mnggrpUserClassOfServices`
- `nsdaCapability`
- `nsdaDomain`
- `nsdaModifiableBy`

## domainUidSeparator

### Origin

Messaging Server 5.0

### Syntax

cis, single-valued

### Object Classes

[inetDomainOrg](#)

### Definition

This attribute is used only for LDAP Schema 1.

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

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



#### Note

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

The MTA option used to override this attribute's value is `LDAP_DOMAIN_ATTR_UID_SEPARATOR`.

### Example

domainUIDSeparator: #

### **OID**

2.16.840.1.113730.3.1.702

## **domOrgMaxUsers**

### **Origin**

Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

[inetDomainOrg](#)

### **Definition**

This attribute is used only for LDAP Schema 1.

Maximum number of user entries in a domain organization.

### **Example**

```
domOrgMaxUser: 500
```

### **OID**

2.16.840.1.113730.3.1.697

## **domOrgNumUsers**

### **Origin**

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

## **memberOfManagedGroup**

### **Origin**

Messaging Server 5.0

### **Syntax**

dn, single-valued

### **Object Classes**

[ipUser](#)

### **Definition**

Family accounts are not supported in LDAP Schema 2. Use this only if you are using LDAP Schema 1.

Specifies the DN of the family account of which this user is a member.

### **Example**

memberOfManagedGroup: cn=Addams Family, ou=groups, o=sesta.com, o=isp

### **OID**

2.16.840.1.113730.3.1.704

## **mgmanAllowSubscribe**

### **Origin**

Messaging Server 5.0

### **Syntax**

cis, multi-valued

### **Object Classes**

[inetMailGroupManagement](#)

### **Definition**

Domain name(s) or email addresses of users allowed to subscribe to this mailing list.

### **Example**

mgmanAllowSubscribe:sesta.com (Every user at sesta.com would be able to subscribe to the

list.)

## OID

2.16.840.1.113730.3.1.790

## mgmanDenySubscribe

### Origin

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

Messaging Server 5.0

### Syntax

cis, single-valued

### Object Classes

[inetMailGroupManagement](#)

### Definition

Reserved.

### Example

No example given.

## OID

2.16.840.1.113730.3.1.797

## mgmanHidden

### Origin

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
```

Delegated Administrator 6.4 will set this value. Messaging Express 6.3, Communications Express 6.3, Convergence 1.0 ignore this value when searching for groups.

## OID

2.16.840.1.113730.3.1.792

## mgmanIntroText

### Origin

Messaging Server 5.0

### Syntax

cis, single-valued

### Object Classes

[inetMailGroupManagement](#)

### Definition

Reserved.

### Example

No example given.

## OID

2.16.840.1.113730.3.1.796

## mgmanJoinability

### Origin

Messaging Server 5.0

### Syntax

cis, single-valued

### Object Classes

[inetMailGroupManagement](#)

### Definition

Used for LDAP Schema 1 only. Specifies who can subscribe to the group. The allowed values are ANYONE, ALL, and NONE. If this attribute is not specified, the default is NONE:

- ANYONE– Enables anyone to subscribe.
- ALL– Enables anyone authenticated to the directory (or Delegated Administrator) to subscribe.
- NONE– Only owner can add members to a closed distribution list.

### Example

```
mgmanJoinability:All  
mgmanjoinability: NONE
```

Delegated Administrator 6.4 will set this value.

## OID

2.16.840.1.113730.3.1.793

## mgmanMemberVisibility

### Origin

Messaging Server 5.0

### Syntax

cis, single-valued

### Object Classes

[inetMailGroupManagement](#)

### Definition

Only used in LDAP Schema 1 with iPlanet Delegated Administrator for Messaging.

Defines who has rights to view the group membership list (expand the group). This attribute has the keyword values: `none`, `all`, `true`, `anyone`. No matter what the setting of this attribute, group owners always retain the right to view (and modify) membership.

However, if this attribute is checked in the case of group expansion as part of an SMTP `EXPN` command (that is, not as part of an administrative tool that can easily identify whether or not the client is the group owner), then a value of `none` ends up operating as if the list is unconditionally disabled. This is because SMTP doesn't provide a means of establishing a client's identity, such as "owner".

The following table lists the keywords and gives a description of each:

#### **Rights Keywords**

<b>Rights</b>	<b>Description</b>
<code>anyone</code>	Enables anyone to expand the group (see the members in the mailing list). Also, the MTA returns the addresses of members when an <code>EXPN</code> is performed.
<code>all</code> or <code>true</code>	The user has to successfully authenticate to the directory (or iPlanet Delegated Administrator for Messaging) before expansion is allowed.
<code>none</code>	Expansion is not allowed.

Unrecognized values are interpreted as `none`.

If the attribute is not present, the MTA option `EXPANDABLE_DEFAULT` controls whether the expansion is allowed.



#### **Note**

`LDAP_EXPANDABLE` is the MTA option used to specify a different attribute name for this function.

#### **Example**

```
mgmanMemberVisibility:all
```

#### **OID**

2.16.840.1.113730.3.1.795

#### **mgmanVisibility**

#### **Origin**

Messaging Server 5.0

#### **Syntax**

`cis`, single-valued

#### **Object Classes**

[inetMailGroupManagement](#)

**Definition**

Not available

**Example**

No example given.

**OID**

2.16.840.1.113730.3.1.794

**mnggrpAdditionPolicy****Origin**

Messaging Server 5.0

**Syntax**

cis, single-valued

**Object Classes**

[inetOrgPerson](#)

**Definition**

Reserved.

**Example**

No example given.

**OID**

2.16.840.1.113730.3.1.710

**mnggrpBillableUser****Origin**

Messaging Server 5.0

**Syntax**

dn, single-valued

**Object Classes**

[inetOrgPerson](#)

**Definition**

DN of the user who is responsible for paying the bills for this family account or group of users.



### **Example**

mnggrpBillableUser: uid=John,ou=people,o=sesta.com,o=isp

### **OID**

2.16.840.1.113730.3.1.711

### **mnggrpCurrentUsers**

#### **Origin**

Messaging Server 5.0

#### **Syntax**

integer, single-valued

#### **Object Classes**

[inetOrgPerson](#)

#### **Definition**

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

### **Example**

mnggrpCurrentUsers: 20

### **OID**

2.16.840.1.113730.3.1.714

### **mnggrpDeletionPolicy**

#### **Origin**

Messaging Server 5.0

#### **Syntax**

integer, single-valued

#### **Object Classes**

[inetOrgPerson](#)

#### **Definition**

Reserved.

### **Example**

No example given.

### **OID**

2.16.840.1.113730.3.1.709

## **mnggrpMailQuota**

### **Origin**

Messaging Server 5.0

### **Syntax**

integer, single-valued

### **Object Classes**

[inetOrgPerson](#)

### **Definition**

Cumulative disk quota allowed for all users in the managed group. A value of `-1` specifies that there is no limit on space used by users in the managed group. Intended for reporting purposes only. No operational impact.

### **Example**

```
mnggrpMailQuota:-1
```

### **OID**

2.16.840.1.113730.3.1.715

## **mnggrpMaxUsers**

### **Origin**

Messaging Server 5.0

### **Syntax**

integer, single-valued

### **Object Classes**

[inetOrgPerson](#)

### **Definition**

Maximum number of users allowed in the managed group.

### **Example**

30

## **OID**

2.16.840.1.113730.3.1.713

## **mnggrpStatus**

### **Origin**

Messaging Server 5.0

### **Syntax**

cis, single-valued

### **Object Classes**

[inetOrgPerson](#)

### **Definition**

Reserved.

### **Example**

No example given.

## **OID**

2.16.840.1.113730.3.1.712

## **mnggrpUserClassOfServices**

### **Origin**

Messaging Server 5.0

### **Syntax**

cis, multi-valued

### **Object Classes**

[inetOrgPerson](#)

### **Definition**

Reserved.

### **Example**

No example given.

## **OID**

2.16.840.1.113730.3.1.716

## **nsDefaultMaxDeptSize**

### **Origin**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

### **Syntax**

integer, single-valued

### **Object Classes**

[nsManagedDomain](#)

### **Definition**

This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Specifies the default size (in number of users) of a newly created department managed by Delegated Administrator.

### **Example**

```
nsDefaultMaxDeptSize:20
```

### **OID**

2.16.840.1.113730.3.1.562

## **nsMaxDepts**

### **Origin**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

### **Syntax**

integer, single-valued

### **Object Classes**

[organization](#), [nsManagedDomain](#)

### **Definition**

This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Used with Delegated Administrator. Specifies the maximum number of group entries that can be created under this object.

### **Example**

```
nsMaxDepts:200
```

**OID**

2.16.840.1.113730.3.1.557

**nsMaxDomains****Origin**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

**Syntax**

integer, single-valued

**Object Classes**

[nsManagedDomain](#)

**Definition**

This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

For use with Delegated Administrator. Specifies the maximum number of suborganizations allowed to be created under this object.

**Example**

```
nsMaxDomains:50
```

**OID**

2.16.840.1.113730.3.1.561

**nsMaxMailLists****Origin**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

**Syntax**

integer, single-valued

**Object Classes**

[nsManagedDomain](#)

**Definition**

This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

For use with Delegated Administrator. Specifies the maximum number of mailing lists that can be created under this entry.

## Example

```
nsMaxMailLists:200
```

## OID

2.16.840.1.113730.3.1.559

## nsMaxUsers

### Origin

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

### Syntax

integer, single-valued

### Object Classes

[organization](#)

### Definition

This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

For use with Delegated Administrator. Specifies the maximum number of users that can be created under this entry.

## Example

```
nsMaxUsers:750
```

## OID

2.16.840.1.113730.3.1.555

## nsNumDepts

### Origin

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

### Syntax

integer, single-valued

### Object Classes

[organization](#), [nsManagedDomain](#)

### Definition

This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

For use with Delegated Administrator. Tracks the number of nested departments that exist under this object.

### **Example**

```
nsNumDepts:35
```

### **OID**

2.16.840.1.113730.3.1.556

### **nsNumDomains**

#### **Origin**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

#### **Syntax**

integer, single-valued

#### **Object Classes**

[nsManagedDomain](#)

#### **Definition**

This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Used by Delegated Administrator. Tracks the number of suborganizations that exist under this object.

### **Example**

```
nsNumDomains:5
```

### **OID**

2.16.840.1.113730.3.1.560

### **nsNumMailLists**

#### **Origin**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

#### **Syntax**

integer, single-valued

#### **Object Classes**

[nsManagedDomain](#)

#### **Definition**

This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Used by Delegated Administrator. Tracks the number of mail lists that exist under this object.

### **Example**

```
nsNumMailLists:200
```

### **OID**

2.16.840.1.113730.3.1.558

### **nsNumUsers**

#### **Origin**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

#### **Syntax**

integer, single-valued

#### **Object Classes**

[organization](#), [nsManagedDomain](#)

#### **Definition**

This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Tracks the number of users that can be created under this object.

### **Example**

```
nsNumUsers:2000
```

### **OID**

2.16.840.1.113730.3.1.554

### **nsSearchFilter**

#### **Origin**

Not currently used; deprecated in Messaging Server 6.0 with LDAP Schema 2.

#### **Syntax**

string, single-valued

#### **Object Classes**

[nsManagedPerson](#)

#### **Definition**



This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Reserved for future development for Delegated Administrator.

### **Example**

No example given.

### **OID**

2.16.840.1.113730.3.1.564

### **nsdaCapability**

#### **Origin**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

#### **Syntax**

cis, single-valued

#### **Object Classes**

[nsManagedPerson](#)

#### **Definition**

This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Specifies whether a user can create a mail list. Supports Delegated Administrator.

### **Example**

No example given.

### **OID**

2.16.840.1.113730.3.1.563

### **nsdaDomain**

#### **Origin**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

#### **Syntax**

cis, single

#### **Object Classes**

[nsManagedPerson](#)

#### **Definition**

This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Specifies the user's organization, for Delegated Administrator.

### **Example**

No example given.

### **OID**

2.16.840.113730.3.1.600

### **nsdaModifiableBy**

#### **Origin**

Messaging Server 5.0; deprecated in Messaging Server 6.0 with LDAP Schema 2.

#### **Syntax**

dn, single-valued

#### **Object Classes**

[inetOrgPerson](#)

#### **Definition**

This attribute is deprecated for LDAP Schema 2, it is supported only for LDAP Schema 1.

Used by Delegated Administrator. Specifies who has modify access to the object in which this attribute appears. DN of the administrator's group used with ACI's 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

# Chapter 8. LDAP General Information and Time Zones

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## General Information

Topics:

- [LDAP Overview](#)
- [Attribute Syntax](#)
- [Object Identifiers](#)
- [Standard Time Zones](#)

## LDAP Overview

Messaging Server and Calendar Server products include object classes and attributes defined by the Lightweight Directory Access Protocol (LDAP) and extensions to the standard LDAP schema that extend the basic functionality of LDAP.

Initially developed at the University of Michigan, LDAP is a lightweight version of the X.500 Directory Access Protocol. LDAP has become an Internet standard for directory services running over TCP/IP.

One or more LDAP servers contain the data that make up the LDAP directory. An LDAP directory stores information in object-oriented hierarchies of entries. Each entry is uniquely identified by a distinguished name, or DN. The DN consists of the comma-separated sequence of attributes and values that specify the unique location of an entry within the directory information tree. This provides a path of names tracing the entry back to the top of the directory hierarchy.

## Attribute Syntax

Directory data is represented as attribute-value pairs. Any specific piece of information is associated with a descriptive attribute.

Each attribute has a corresponding syntax definition. The syntax definition describes the type of information provided by the attribute.

### *Syntax Types*

Syntax Method	Abbreviation	Definition
Binary	bin	Attribute values are binary
Boolean	boolean	Two values possible: Yes or No, True or False, On or Off
Case Exact String	ces	Values are case sensitive
Case Ignore String	cis	Values are not case sensitive
Telephone	tel	Telephone numbers (identical to cis, but blanks and dashes ( - ) are ignored)
Distinguished Name	dn	Indicates values are DNs
Integer	int	Values are numbers
Operational	operational	Not displayed in search results

Required and allowed attributes for each object class are included in the object class listing.

Unless otherwise noted, attributes are assumed to be multi-valued, that is, more than one instance of the attribute can be specified. Attributes that are single-valued, that is, only one instance of the attribute can be specified, are noted as such in the Syntax heading, found in each attribute definition.

## Object Identifiers

To meet LDAP and X.500 standards, all attributes and objects should have been assigned Object identifiers (OIDs). An OID is a sequence of integers, typically written as a dot-separated string. The OID identifies who first filed the name of the object or attribute with the standards committee.

In some cases, objects and attributes listed in this document do not have an OID assigned to them yet.

## Standard Time Zones

The following two tables lists the time zones recognized by Calendar and Messaging Servers first in alphabetical order, and then by offset from Universal Time Constant (UTC).

Note that in some countries, like Israel, daylight savings time is not always observed every year. The decision is made year-by-year. Also, some individual states in the United States do not observe daylight savings time.

This means that some time offsets will not be accurate unless the definitions are updated as needed in the respective systems (see individual product documentation for information about adjusting time zone offsets).

The following table lists the time zones in alphabetical order.

Time Zone Name	Offset
Africa/Amman	+0300
Africa/Cairo	+0300
Africa/Casablanca	-0000

Africa/Johannesburg	+0200
Africa/Lagos	+0100
Africa/Tripoli	+0100
Africa/Windhoek	+0300
America/Adak	-0900
America/Anchorage	-0800
America/Buenos_Aires	-0300
America/Caracas	-0300
America/Chicago	-0500
America/Costa_Rica	-0600
America/Cuiaba	-0300
America/Denver	-0600
America/Godthab	-0200
America/Grand_Turk	-0400
America/Halifax	-0300
America/Havana	-0400
America/Indianapolis	-0500
America/Los_Angeles	-0700
America/Miquelon	-0200
America/New_York	-0400
America/Phoenix	-0700
America/Port-au-Prince	-0400
America/Santiago	-0300
America/Sao_Paulo	-0200
America/St_Johns	-0230
Asia/Alma-Ata	+0700
Asia/Anandyr	+1400
Asia/Aqtau	+0500
Asia/Aqtobe	+0600
Asia/Baku	+0500
Asia/Bangkok	+0700
Asia/Beirut	+0300
Asia/Bishkek	+0600
Asia/Calcutta	+0530
Asia/Dacca	+0600

Asia/Irkutsk	+0900
Asia/Jerusalem	+0300
Asia/Kabul	+0430
Asia/Kamchatka	+1300
Asia/Karachi	+0500
Asia/Katmandu	+0545
Asia/Krasnoyarsk	+0800
Asia/Magadan	+1200
Asia/Novosibirsk	+0700
Asia/Rangoon	+0630
Asia/Riyadh	+0300
Asia/Shanghai	+0800
Asia/Taipei	+0800
Asia/Tehran	+0400
Asia/Tokyo	+0900
Asia/Ulan_Bator	+0800
Asia/Vladivostok	+1100
Asia/Yakutsk	+1000
Asia/Yekaterinburg	+0600
Asia/Yerevan	+0400
Atlantic/Azores	-0000
Atlantic/Cape_Verde	-0100
Atlantic/South_Georgia	-0200
Atlantic/Stanley	-0300
Australia/Adelaide	+1030
Australia/Brisbane	+1000
Australia/Darwin	+0930
Australia/Hobart	+1100
Australia/Lord_Howe	+1100
Australia/Perth	+0800
Australia/Sydney	+1100
Europe/Bucharest	+0300
Europe/Istanbul	+0300
Europe/London	+0100
Europe/Minsk	+0300

Europe/Moscow	+0400
Europe/Paris	+0200
Europe/Riga	+0300
Europe/Samara	+0500
Europe/Simferopol	+0400
Europe/Warsaw	+0200
Pacific/Apia	-1100
Pacific/Auckland	+1300
Pacific/Chatham	+1345
Pacific/Easter	-0500
Pacific/Fiji	+1200
Pacific/Gambier	-0900
Pacific/Guadalcanal	+1100
Pacific/Honolulu	-1000
Pacific/Kiritimati	+1400
Pacific/Marquesas	-0930
Pacific/Norfolk	+1130
Pacific/Noumea	+1200
Pacific/Pitcairn	-0830
Pacific/Rarotonga	-0930
Pacific/Tongatapu	+1300

The following table lists the time zones by standard-time offset.

Offset	Time Zone Name
-1100	Pacific/Apia
-1000	Pacific/Honolulu
-0900	America/Adak
-0930	Pacific/Rarotonga
-0930	Pacific/Marquesas
-0900	Pacific/Gambier
-0830	Pacific/Pitcairn
-0800	America/Anchorage
-0700	America/Los_Angeles
-0700	America/Phoenix

-0600	America/Denver
-0600	America/Costa_Rica
-0500	America/Chicago
-0500	Pacific/Easter
-0500	America/Indianapolis
-0400	America/New_York
-0400	America/Havana
-0400	America/Port-au-Prince
-0400	America/Grand_Turk
-0300	America/Caracas
-0300	America/Cuiaba
-0300	America/Halifax
-0300	America/Santiago
-0300	Atlantic/Stanley
-0300	America/Buenos_Aires
-0230	America/St_Johns
-0200	America/Sao_Paulo
-0200	America/Miquelon
-0200	America/Godthab
-0200	Atlantic/South_Georgia
-0100	Atlantic/Cape_Verde
-0000	Atlantic/Azores
-0000	Africa/Casablanca
+0100	Europe/London
+0100	Africa/Lagos
+0100	Africa/Tripoli
+0200	Europe/Paris
+0200	Europe/Warsaw
+0200	Africa/Johannesburg
+0300	Europe/Bucharest
+0300	Europe/Istanbul
+0300	Africa/Cairo
+0300	Africa/Amman
+0300	Europe/Riga
+0300	Asia/Beirut



+0300	Africa/Windhoek
+0300	Europe/Minsk
+0300	Asia/Jerusalem
+0300	Asia/Riyadh
+0400	Europe/Simferopol
+0400	Europe/Moscow
+0400	Asia/Yerevan
+0400	Asia/Tehran
+0430	Asia/Kabul
+0500	Asia/Aqtau
+0500	Asia/Baku
+0500	Europe/Samara
+0500	Asia/Karachi
+0530	Asia/Calcutta
+0545	Asia/Katmandu
+0600	Asia/Aqtobe
+0600	Asia/Bishkek
+0600	Asia/Yekaterinburg
+0600	Asia/Dacca
+0630	Asia/Rangoon
+0700	Asia/Alma-Ata
+0700	Asia/Novosibirsk
+0700	Asia/Bangkok
+0800	Asia/Krasnoyarsk
+0800	Asia/Shanghai
+0800	Australia/Perth
+0800	Asia/Taipei
+0800	Asia/Ulan_Bator
+0900	Asia/Irkutsk
+0900	Asia/Tokyo
+0930	Australia/Darwin
+1000	Asia/Yakutsk
+1000	Australia/Brisbane
+1030	Australia/Adelaide
+1100	Australia/Sydney

+1100	Australia/Hobart
+1100	Asia/Vladivostok
+1100	Australia/Lord_Howe
+1100	Pacific/Guadalcanal
+1130	Pacific/Norfolk
+1200	Pacific/Noumea
+1200	Asia/Magadan
+1200	Pacific/Fiji
+1300	Pacific/Auckland
+1300	Asia/Kamchatka
+1300	Pacific/Tongatapu
+1345	Pacific/Chatham
+1400	Asia/Anandyr
+1400	Pacific/Kiritimati

# Chapter 9. Messaging Server, Calendar Server, and Contacts Server LDAP Object Classes and Attributes

---

## Oracle Communications Messaging Server, Oracle Communications Calendar Server, and Oracle Communications Contacts Server Object Classes and Attributes

This information describes LDAP object classes and attributes required or allowed by LDAP object classes for Calendar Server 6 and Calendar Server 7, Messaging Server, starting with version 5, and Contacts Server 8. The object classes and attributes are listed alphabetically.

Objects and attributes used exclusively by other Communications Suite components (and by Access Manager) are described in the following documentation:

- [Instant Messaging Object Classes and Attributes](#)
- [Personal Address Book Object Classes and Attributes](#)
- [Convergence and Communications Express: Communications Suite Clients Object Classes and Attributes](#)
- [Access Manager Classes and Attributes](#)
- [Communications Suite Delegated Administrator Object Classes and Attributes \(Schema 2\)](#)
- [iPlanet Delegated Administrator for Messaging \(Schema 1\) Object Classes and Attributes](#)

This information contains the following sections:

- [LDAP Schema Changes for Oracle Communications Calendar Server 7](#)
- [Messaging Server, Calendar Server, and Contacts Server LDAP Object Classes](#)
- [Messaging Server, Calendar Server, and Contacts Server LDAP Attributes](#)

## LDAP Schema Changes for Oracle Communications Calendar Server 7

Calendar Server 7 works with the Calendar Server 6 LDAP schema with the following exceptions:

- Calendar 7 does not use the `icsAllowedServiceAccess` attribute. When Calendar Server 7 supports more than Calendar service, it proposes to use the `davAllowedServices` attribute.
- Calendar Server 6 requires `icsCalendarDomain` objectclass to be present for auto-provisioning purposes. Calendar Server 7 does not have this requirement.
- Calendar Server 7 uses the `davStore` attribute for setting up multiple back ends, instead of the `icsDWPHost` attribute used by Calendar Server 6
- In addition, Calendar Server 7 does not currently use the following attributes that were used by Calendar Server 6:

```
icsCalendar
icsCalendarOwned
icsDefaultSet
icsExtended
icsExtendedUserPrefs (but used by Convergence)
icsFirstDay (but used by Convergence)
icsFreeBusy
icsPreferredHost
icsSet
icsSubscribed
aclGroupaddr
icsExtendedResourcePrefs
icsSecondaryOwners
icsAllowRights
icsAnonymousAllowWrite
icsAnonymousCalendar
icsAnonymousDefaultSet
icsAnonymousLogin
icsAnonymousSet
icsDWPBackendHosts
icsDefaultAccess
icsDomainAllowed
icsDomainNotAllowed
icsMandatorySubscribed
icsMandatoryView
icsRecurrenceBound
icsSessionTimeout
icsSourceHtml
```

## List of Object Classes

The following sections describe these object classes:

- [davEntity](#)
- [domain](#)
- [groupOfUniqueNames](#)
- [icsAdministrator](#)
- [icsCalendarDomain](#)
- [icsCalendarDWPHost](#)
- [icsCalendarGroup](#)
- [icsCalendarResource](#)
- [icsCalendarUser](#)
- [inetAdmin](#)
- [inetDomain](#)
- [inetDomainAlias](#)
- [inetDomainAuthInfo](#)
- [inetLocalMailRecipient](#)
- [inetMailAdministrator](#)
- [inetMailGroup](#)
- [inetMailUser](#)
- [inetOrgPerson](#)
- [inetResource](#)
- [inetSubscriber](#)
- [inetUser](#)

- ipUser
- mailDomain
- mailPublicFolder
- msgVanityDomainUser
- nabUser
- nabDomain
- organization
- organizationalUnit
- pab
- pabGroup
- pabPerson
- userPresenceProfile

## davEntity

This object class was introduced in Calendar Server 7.

Supported by	Calendar Server 7
Superior Class	top
Object Class Type	auxiliary
OID	1.3.6.1.4.1.42.2.27.9.2.139

### Definition

Common DAV object.

### Required Attributes

None.

### Allowed Attributes

mail, davStore, davAllowedServices, davEventNotification, davEventNotificationDestination, davTimeZone, davUniqueId

## domain

Supported by	Messaging Server 5.0, Calendar Server 5.1
Superior Class	top
Object Class Type	structural
OID	0.9.2342.19200300.100.4.13

### Definition

Object class used to define entries that represent DNS domains.

This class can only be used with an entry that does 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.

### Required Attributes

dc, objectClass

### Allowed Attributes

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

### groupOfUniqueNames

Supported by	Messaging Server 5.0, Calendar Server 5.1
Superior Class	top
Object Class Type	structural
OID	2.5.6.17

### Definition

Defines entries for a group of unique names. A static group entry must be extended by this class. A group entry may also be extended by [inetUser](#). Use roles to define dynamic groups.

### Required Attributes

cn, objectClass, uniqueMember

### Allowed Attributes

[businessCategory](#), [description](#), o, ou, owner, [see Also](#)

### icsAdministrator

Supported by	Not currently used.
Superior Class	Not currently assigned
Object Class Type	structural
OID	2.16.840.1.113730.3.2.145

### Definition

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

### Required Attributes

none

### Allowed Attributes

[icsAdminRole](#), [icsExtended](#), [icsExtendedGroupPrefs](#)

## icsCalendarDomain

Supported by	Calendar Server 5.1.1, Calendar Server 7
Superior Class	top
Object Class Type	auxiliary
OID	1.3.6.1.4.1.42.2.27.9.2.142

### Definition

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

### Required Attributes

none

### Allowed Attributes

The following attributes are currently used:

[icsAllowedServiceAccess](#), [icsAllowRights](#), [icsDefaultAccess](#), [icsDomainNames](#), [icsExtendedDomainPrefs](#), [icsStatus](#), [icsTimezone](#)

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

[icsAnonymousAllowWrite](#), [icsAnonymousCalendar](#), [icsAnonymousDefaultSet](#), [icsAnonymousLogin](#), [icsAnonymousSet](#), [icsDomainAllowed](#), [icsDomainNotAllowed](#), [icsDWPBackEndHosts](#), [icsExtended](#), [icsMandatorySubscribed](#), [icsMandatoryView](#), [icsPreferredHost](#), [icsQuota](#), [icsRecurrenceBound](#), [icsRecurrenceDate](#), [icsSessionTimeout](#), [icsSourceHtml](#),

## icsCalendarDWPHost

Supported by	Calendar Server 5.1.1
Superior Class	Not currently assigned
Object Class Type	structural
OID	1.3.6.1.4.1.42.2.27.9.2.1

### 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.

### Required Attributes

none

### Allowed Attributes

[cn](#), [description](#), [icsDomainNames](#), [icsDWPHost](#), [icsExtended](#), [icsRegularExpressions](#), [icsStatus](#)

## icsCalendarGroup

Supported by	Calendar Server 5.1
Superior Class	top
Object Class Type	auxiliary
OID	1.3.6.1.4.1.42.2.27.9.2.113

### Definition

Specifies a calendar group; that is, a calendar created for, and used by, a group. Must be used in conjunction with [groupOfUniqueNames](#) or [groupOfURLs](#).

### Required Attribute

[groupid](#)

### Allowed Attributes

[icsAutoaccept](#), [icsCalendar](#), [icsDefaultacl](#), [icsDoublebooking](#), [icsDWPHost](#), [icsSecondaryowners](#), [icsStatus](#), [icsTimezone](#), [mail](#)

## icsCalendarResource

Supported by	Calendar Server 5.1, Calendar Server 7, Sun Java System Communication Services Delegated Administrator
Superior Class	top
Object Class Type	auxiliary
OID	1.3.6.1.4.1.42.2.27.9.2.141

### Definition

Specifies a calendar resource, such as a conference room or piece of equipment that must be scheduled.

Access Manager 6.1 reserves this as a marker class for calendar resources but does not support calendar resources yet.

### Required Attributes

none

### Allowed Attributes

The following attributes are currently used:

[icsAutoaccept](#), [cn](#), [description](#), [icsCalendar](#), [icsDefaultacl](#), [icsDoublebooking](#), [icsDWPHost](#), [icsPartition](#), [icsSecondaryowners](#), [icsStatus](#), [icsTimezone](#), [mail](#), [mailAlternateAddress](#), [owner](#), [uid](#)

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



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

## icsCalendarUser

Supported by	Calendar Server 5.1, Calendar Server 7
Superior Class	top
Object Class Type	auxiliary
OID	1.3.6.1.4.1.42.2.27.9.2.140

### Definition

Specifies a calendar user, including the DWP host name.

### Required Attributes

none

### Allowed Attributes

These attributes are currently in use:

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

These attributes are reserved but not currently used:

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

## inetAdmin

Supported by	Messaging Server 5.0
Superior Class	top
Object Class Type	auxiliary
OID	2.16.840.1.113730.3.2.112

### Definition

Identifies administrator user or group.

### Required Attributes

[objectClass](#)

### Allowed Attributes

[memberOf](#), [adminRole](#)

## inetDomain

Supported by	Messaging Server 5.0, Calendar Server 6, Calendar Server 7, Convergence
Superior Class	top
Object Class Type	auxiliary
OID	2.16.840.1.113730.3.2.129

### Definition

Used in two-tree LDAP data models to extend the base entry created by `domain` in the DC Tree. It represents a hosted domain account and is used in conjunction with `mailDomain` or `icsCalendarDomain`, (and optionally `inetDomainAuthInfo`), for creating a hosted domain node in the DC Tree suitable for mail services for the hosted organization. This object class must be used for all hosted domain entries in the DC Tree. `inetDomain` is a Schema 1 only object class. In Schema 2, the `sunManagedOrganization` object class is used to create a domain.

Access Manager uses this as a marker class for domains in the DC Tree.

### Required Attributes

[inetDomainBaseDN](#)

### Allowed Attributes

[inetDomainStatus](#)

### inetDomainAlias

Supported by	Messaging Server 5.0
Superior Class	alias
Object Class Type	structural
OID	2.16.840.1.113730.3.2.131

### Definition

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

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

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

### Required Attributes

[aliasedObjectName](#), `dc`

### Allowed Attributes

none

## inetDomainAuthInfo

Supported by	Messaging Server 5.0
Superior Class	top
Object Class Type	auxiliary
OID	2.16.840.1.113730.3.2.133

### Definition

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

### Required Attributes

none

### Allowed Attributes

[domainUidSeparator](#), [inetDomainSearchFilter](#), [inetDomainCertMap](#), [inetCanonicalDomainName](#)

## inetLocalMailRecipient

Supported by	Messaging Server 5.0
Superior Class	top
Object Class Type	auxiliary
OID	2.16.840.1.113.730.3.2.147

### Definition

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

### Required Attributes

none

### Allowed Attributes

[mail](#), [mailAlternateAddress](#), [mailHost](#), [mailRoutingAddress](#)

## inetMailAdministrator

Supported by	Messaging Server 5.0
Superior Class	top
Object Class Type	auxiliary
OID	2.16.840.1.113730.3.2.148

### 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.

### Required Attributes

none

### Allowed Attributes

`mailAdminRole`

## inetMailGroup

Supported by	Messaging Server 5.0
Superior Class	top
Object Class Type	auxiliary
OID	1.3.6.1.4.1.42.2.27.2.2.2

### 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).

### Required Attributes

none

### Allowed Attributes

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

## inetMailUser

Supported by	Messaging Server 5.0
Superior Class	top
Object Class Type	auxiliary
OID	2.16.840.1.113730.3.2.146

### 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.

### Required Attributes

none

### Allowed Attributes

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

### inetOrgPerson

Supported by	Specified here for reference only.
Superior Class	<code>organizationalPerson</code>
Object Class Type	structural
OID	2.16.840.1.113730.3.2.2

### Definition

All user entries are created with this object class. Refer to the internet RFC [The LDAP inetOrgPerson Object Class](#) for further details.

### Required Attributes

none

### Allowed Attributes

`businessCategory`, `givenName`, `mail`, `uid`, `preferredLanguage`

### inetResource

Supported by	Calendar Server 5.1
Superior Class	top
Object Class Type	structural
OID	2.16.840.1.113730.3.2.142

### Definition

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

### Required Attributes

cn

### Allowed Attributes

facsimileTelephoneNumber, inetResourceStatus, mail, postalAddress, telephoneNumber

### inetSubscriber

Supported by	Messaging Server 5.0
Superior Class	top
Object Class Type	auxiliary
OID	2.16.840.1.113730.3.2.134

### 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.

### Required Attributes

none

### Allowed Attributes

inetSubscriberAccountId, inetSubscriberChallenge, inetSubscriberResponse

### inetUser

Supported by	Messaging Server 5.0, Calendar Server 5.1.1
Superior Class	top
Object Class Type	auxiliary
OID	2.16.840.1.113730.3.2.130

### Definition

For Mail:

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

For Calendar:

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

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

### Required Attributes

none

### Allowed Attributes

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



#### Note

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

## ipUser

Supported by	Messaging Server 5.0
Superior Class	<code>top</code>
Object Class Type	auxiliary
OID	2.16.840.1.113730.3.2.135

### 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.

### Required Attributes

none

### Allowed Attributes

`inetCoS`, `memberOfPAB`, `maxPabEntries`, `pabURI`, `psIncludeInGAB`

## mailDomain

Supported by	Messaging Server 5.0
Superior Class	top
Object Class Type	auxiliary
OID	2.16.840.1.113730.3.2.151

### Definition

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

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

### Required Attributes

none

### Allowed Attributes

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

### mailPublicFolder

Supported by	Messaging Server 6.2
Superior Class	top
Object Class Type	structural
OID	Not currently assigned.

### Definition

Defines a public folder.

### Required Attributes

`mailFolderName`

### Allowed Attributes

`mailMessageStore`, `mailPublicFolderDefaultRights`, `mailDeliveryOption`

### msgVanityDomainUser



Supported by	Messaging Server 5.0
Superior Class	top
Object Class Type	auxiliary
OID	2.16.840.1.113730.3.2.150

### 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.

### Required Attributes

none

### Allowed Attributes

[msgVanityDomain](#)

### nabUser

Supported by	Contacts Server 8.0
Superior Class	top
Object Class Type	auxiliary
OID	2.16.840.1.113894.1009.1.2.1

### Definition

Defines a user entry with Contacts Server service enabled. This object class is recommended for Contacts Server users, but it is not mandatory. By default, a user entry containing the deployment's `uniqueid`, `uid`, `userPassword`, and `mail` attributes works as a valid Contacts Server user entry. This object class provides the capability to enable and disable the Contacts Server service for provisioned users by using the `nabStatus` attribute.

### Required Attributes

none

### Allowed Attributes

`cn`, `givenName`, `mail`, `mailalternateaddress`, `preferredLanguage`, `sn`, `uid`, `userPassword`, `nabStatus`, `nabStore`

### nabDomain

Supported by	Contacts Server 8.0
Superior Class	top
Object Class Type	equality
OID	2.16.840.1.113894.1009.1.2.2

### Definition

Defines a domain entry with Contacts Server enabled users. This object class enables you to set domain-level access control for Contacts Server users' cross-domain access using its attributes `nabDomainNames` and `nabDomainAcl`. You can use the `nabStatus` attribute in this object class to enable or disable NAB service for an entire domain.

### Required Attributes

none

### Allowed Attributes

`nabDomainNames`, `nabStatus`, `davAllowedServices`, `nabDomainAcl`, `nabStore`, `corpDirectoryUrl`

## organization

Supported by	Messaging Server 5.0
Superior Class	top
OID	2.5.6.4

### Definition

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

### Required Attributes

`objectClass`, `o` (`organizationName`)

### Allowed Attributes

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

## organizationalUnit

Supported by	Messaging Server 5.0
Superior Class	top
OID	2.5.6.5

## Definition

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

## Required Attributes

[objectClass](#), [ou](#)

## Allowed Attributes

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

## pab

Supported by	Messaging Server 5.0
Superior Class	top
Object Class Type	structural
OID	2.16.840.1.113730.3.2.140

## 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";

## Required Attributes

[cn](#)

## Allowed Attributes

[description](#), [un](#)

## pabGroup

Supported by	Messaging Server 5.0
Superior Class	top
Object Class Type	structural
OID	2.16.840.1.113730.3.2.139

### 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.

### Required Attributes

`cn`

### Allowed Attributes

`description`, `memberOfPAB`, `nickName`, `un`

### `pabPerson`

Supported by	Messaging Server 5.0
Superior Class	<code>inetOrgPerson</code>
Object Class Type	structural
OID	2.16.840.1.113730.3.2.138

### Definition

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

### Required Attributes

none

### Allowed Attributes

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

### `userPresenceProfile`

Supported by	Messaging Server 5.0
Superior Class	top
Object Class Type	auxiliary
OID	2.16.840.1.113730.3.2.136

### Definition

Used to store the presence information for a user.

## Required Attributes

none

## Allowed Attributes

vacationEndDate, vacationStartDate

# Oracle Communications Messaging Server, Oracle Communications Calendar Server, and Oracle Communications Contacts Server LDAP Attributes

The following information describes the Oracle Communications Messaging Server, Oracle Communications Calendar Server, and Oracle Communications Contacts Server attributes.

Topics:

- aclGroupAddr
- adminRole
- aliasedObjectName
- businessCategory
- calCalURI
- calFBURL
- cn
- co
- commonName
- corpDirectoryUrl
- countryName
- dataSource
- dateOfBirth
- davAllowedServices
- davEventNotification
- davStore
- davTimezone
- davUniqueld
- dc
- description
- domainUidSeparator
- domOrgMaxUsers
- domOrgNumUsers
- externalAuthPreUriTemplate
- externalAuthPostUriTemplate
- facsimileTelephoneNumber
- givenName
- groupid
- icsAdminRole
- icsAlias
- icsAllowedServiceAccess
- icsAllowRights
- icsAnonymousAllowWrite
- icsAnonymousCalendar
- icsAnonymousDefaultSet
- icsAnonymousLogin
- icsAnonymousSet
- icsAutoaccept
- icsCalendar

- icsCalendarOwned
- icsCapacity
- icsContact
- icsDefaultAccess
- icsDefaultacl
- icsDefaultSet
- icsDomainAcl
- icsDomainAllowed
- icsDomainNames
- icsDomainNotAllowed
- icsDoublebooking
- icsDWPBackEndHosts
- icsDWPHost
- icsExtended
- icsExtendedDomainPrefs
- icsExtendedGroupPrefs
- icsExtendedResourcePrefs
- icsExtendedUserPrefs
- icsFirstDay
- icsFreeBusy
- icsGeo
- icsMandatorySubscribed
- icsMandatoryView
- icsPartition
- icsPreferredHost
- icsQuota
- icsRecurrenceBound
- icsRecurrenceDate
- icsRegularExpressions
- icsSecondaryowners
- icsSessionTimeout
- icsSet
- icsSourceHtml
- icsStatus
- icsSubscribed
- icsTimezone
- inetCanonicalDomainName
- inetCoS
- inetDomainBaseDN
- inetDomainCertMap
- inetDomainSearchFilter
- inetDomainStatus
- inetMailGroupStatus
- inetResourceStatus
- inetSubscriberAccountld
- inetSubscriberChallenge
- inetSubscriberResponse
- inetUserHttpURL
- inetUserStatus
- mail
- mailAccessProxyPreAuth
- mailAccessProxyReplay
- mailAdminRole
- mailAllowedServiceAccess
- mailAlternateAddress
- mailAntiUBEService
- mailAutoReplyMode
- mailAutoReplySubject
- mailAutoReplyText

- mailAutoReplyTextInternal
- mailAutoReplyTimeOut
- mailClientAttachmentQuota
- mailConversionTag
- mailDeferProcessing
- mailDeliveryFileURL
- mailDeliveryOption
- mailDomainAllowedServiceAccess
- mailDomainCatchallAddress
- mailDomainConversionTag
- mailDomainDiskQuota
- mailDomainMsgMaxBlocks
- mailDomainMsgQuota
- mailDomainReportAddress
- mailDomainSieveRuleSource
- mailDomainStatus
- mailDomainWelcomeMessage
- mailEquivalentAddress
- mailFolderName
- mailForwardingAddress
- mailHost
- mailMessageStore
- mailMsgMaxBlocks
- mailMsgQuota
- mailParentalControl
- mailProgramDeliveryInfo
- mailPublicFolderDefaultRights
- mailQuota
- mailRoutingAddress
- mailRoutingHosts
- mailRoutingSmartHost
- mailSieveRuleRef
- mailSieveRuleSource
- mailSMTPSubmitChannel
- mailUserStatus
- maxPabEntries
- memberOf
- memberOfPAB
- memberOfPABGroup
- memberURL
- mgrpAddHeader
- mgrpAllowedBroadcaster
- mgrpAllowedDomain
- mgrpAuthPassword
- mgrpBroadcasterPolicy
- mgrpDeliverTo
- mgrpDisallowedBroadcaster
- mgrpDisallowedDomain
- mgrpErrorsTo
- mgrpModerator
- mgrpMsgMaxSize
- mgrpMsgPrefixText
- mgrpMsgRejectAction
- mgrpMsgRejectText
- mgrpMsgSuffixText
- mgrpNoDuplicateChecks
- mgrpRemoveHeader
- mgrpRequestTo
- mgrpRFC822MailMember

- msgVanityDomain
- multiLineDescription
- nabDomainAcl
- nabDomainNames
- nabStatus
- nabStore
- nickName
- nswcalDisallowAccess
- nswmExtendedUserPrefs
- o
- objectClass
- organizationName
- organizationUnitName
- ou
- owner
- pabURI
- parentOrganization
- postalAddress
- preferredLanguage
- preferredMailHost
- preferredMailMessageStore
- psIncludeInGAB
- seeAlso
- sn
- telephoneNumber
- uid
- un
- uniqueMember
- userId
- userPassword
- vacationEndDate
- vacationStartDate
- mgrpErrorsTo

## aclGroupAddr

Origin	Messaging Server 6.0, Calendar Server 6
Syntax	cis
Object Classes	inetMailUser, icsCalendarUser
OID	1.3.6.1.4.1.42.2.27.9.1.686

### Definition

Indicates that the user is a member of the specified *group*. This type of group is used for message store folder permissions (ACLs), which you should not confuse with mailing lists, group objects in LDAP, or LDAP ACLs. (You could construct a dynamic group/mailling list by using an LDAP URL that finds users who have this attribute with a specific value. If you do that, be sure this attribute is indexed properly for that usage.) Used by Calendar Server 6 but not Calendar Server 7.

For more information on folder permissions and folder group ACLs, see [To Grant Folder Access Rights Based on Group Membership](#) in the Messaging Server Administration Guide.

### Example

```
aclGroupAddr: lee-staff@siroe.com
```



## adminRole

Origin	Messaging Server 5.0
Syntax	cis
Object Classes	<a href="#">inetAdmin</a>
OID	2.16.840.1.113730.3.1.601

### Definition

Specifies the administrator role for this administrator entry.

### Example

None provided.

## aliasedObjectName

Origin	Messaging Server 5.0
Syntax	dn
Object Classes	<a href="#">inetDomainAlias</a>
OID	2.5.4.1

### Definition

Used only in Schema 1 or in Schema 2 compatibility mode (with a DC Tree), not in Schema 2 native mode (no DC Tree).

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

### Example

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

## businessCategory

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">groupOfUniqueNames</a> , <a href="#">organization</a> , <a href="#">organizationalUnit</a>
OID	2.5.4.15

### 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`

### calCalURI

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">pabPerson</a>
OID	1.2.840.113556.1.4.478

### 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.

### calFBURL

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">pabPerson</a>
OID	1.2.840.113556.1.4.479

### 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.

### cn

Origin	Calendar Server
Syntax	cis, single-valued
Object Classes	<a href="#">icsCalendarResource</a> , <a href="#">icsCalendarUser</a> , <a href="#">inetResource</a>
OID	2.5.4.3

### 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`

## co

Origin	LDAP
Syntax	cis
Object Classes	<a href="#">pabPerson</a>
OID	2.5.4.4

## 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`

## commonName (see cn)

Spells out the name of the attribute, but is the same as `cn`.

## corpDirectoryUrl

Enables a domain to point to a different corporate directory, or enables support for multiple corporate directories within that domain. The value of this attribute must be one or more valid corporate directory LDAP URLs.

Origin	Contacts Server 8.0
Syntax	cis, multi-valued
Object Classes	<a href="#">nabDomain</a>
OID	2.16.840.1.113894.1009.1.1.8

## countryName (see co)

Spells out the name of the attribute, but is the same as `co`.

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailUser</a> , <a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.779

## dataSource

### Definition

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

### Example

```
dataSource:1.0
```

The postmaster group of the default messaging domain:

```
datasource: Messaging Server Initial Configuration
```

## dateOfBirth

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">pabPerson</a>
OID	2.16.840.1.113730.3.1.779

### Definition

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

### Example

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

## davAllowedServices (Currently Unused)

Origin	Calendar Server 7
Syntax	cis, single-valued
Object Classes	<code>davEntity</code> , <code>icsCalendarDomain</code>
OID	1.3.6.1.4.1.42.2.27.9.1.937

### Definition

List of allowed services. If no value is specified, then all services are allowed. Currently unused.

## davEventNotification

Origin	Calendar Server 7
Syntax	cis, ASCII, single-valued
Object Classes	InetMailUser, davEntity
OID	1.3.6.1.4.1.42.2.27.9.1.939

### Definition

Enables DAV JMS notifications.

### Example

```
davEventNotification: True  
davEventNotification: False
```

## davStore

Origin	Calendar Server 7
Syntax	cis, single-valued
Object Classes	davEntity
OID	1.3.6.1.4.1.42.2.27.9.1.936

### Definition

Logical back-end ID. Used only if you have multiple Calendar Server back-end hosts.

### Example

```
davStore: backend1
```

## davTimezone

Origin	Calendar Server 7
Syntax	cis, single-valued
Object Classes	davEntity
OID	1.3.6.1.4.1.42.2.27.9.1.938

### Definition

The default time zone for this DAV object. Specifically, a valid time zone from the list found in [Standard Time Zones](#).

### Example

```
davTimezone: America/Chicago
```

## davUniqueId

Origin	Calendar Server 7 Update 3 Patch 10
Syntax	cis
Object Classes	davEntity
OID	2.16.840.1.113894.1009.1.1.1

### Definition

This attribute can be used to specify a globally unique ID for any LDAP entry. The attribute is recommended to be used as the value for the Calendar Server `davcore.uriinfo.permanentuniqueid` configuration parameter. The `populate-davuniqueid` tool sets this attribute. For more information on setting the `davUniqueId` value, see [populate-davuniqueid Usage](#).

In the Calendar Server data base, the unique identifier value is case sensitive. If you need to move or recreate the corresponding LDAP entry, make sure to retain the case of the value as is. However, because the value is considered as case insensitive for LDAP comparisons, do not create a unique identifier value for another user or resource entry by just changing the case of the value.

### Example

```
davUniqueId: 426dfa81-3ec811e0-808bb160-e71a5247
```

## dc

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetDomainAlias</a>
OID	0.9.2342.19200300.100.1.25

### Definition

The domain component of the domain alias entry.

### Example

```
dc: sesta
```

For example a domain alias entry DN might be: `dn: dc=sesta, dc=fr, o=internet`.

## description

Origin	LDAP
Syntax	cis, multi-valued
Object Classes	icsCalendarDWPHost, icsCalendarResource, groupOfUniqueNames, inetOrgPerson, organization, organizationalUnit, pab, pabGroup, sunServiceComponent
OID	2.5.4.13

## 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.
```

## domainUidSeparator

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	inetDomainOrg
OID	2.16.840.1.113730.3.1.702

## 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 (UID's) are used in this domain and this attribute specifies the separator between the local part and the domain part of the LDAP UID. For instance, if + is the separator, the mailbox names in this domain are obtained by replacing the rightmost occurrence of + in the UID with @, except in the default domain, where the mailbox name is only the local part (the portion of the UID to the left of the separator). To map an internal mailbox name to the LDAP UID, the rightmost occurrence of @ in the mailbox name is replaced with a +, except in the default domain, where the UID is the mailbox name, followed by the separator, followed by the domain 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.

When this attribute is absent, the LDAP UID consists of a local part only. In the default domain, the mailbox name is the same as the UID. In all other domains, the mailbox name is the UID, followed by @, followed by the domain name.



### Note

Format of internal mailbox names is `localpart@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 `localpart` is used to construct internal mailbox names. See `inetCanonicalDomainName` on how the default value of domain name used can be overridden in specific cases.

The MTA option used to override this attribute's value is `LDAP_DOMAIN_ATTR_UID_SEPARATOR`.

## Example

domainUIDSeparator: #

## domOrgMaxUsers

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetDomainOrg</a>
OID	2.16.840.1.113730.3.1.697

## Definition

This attribute is used only for LDAP Schema 1.

Maximum number of user entries in a domain organization.

## Example

domOrgMaxUser: 500

## domOrgNumUsers

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetDomainOrg</a>
OID	2.16.840.1.113730.3.1.698

## Definition

Number of current user entries in a domain organization.

## Example

domOrgNumUsers: 345

## externalAuthPreUrlTemplate

Origin	Calendar Server 7 Update 3
Syntax	cis
Object Classes	<a href="#">inetDomainAuthInfo</a>
OID	2.16.840.1.113894.1009.1.1.6

## Definition

This attribute is used to authenticate against external Directory Servers. It is used to set the LDAP URL



that defines how users must be searched for in the external Directory Server against which authentication is performed. You must add this attribute to each domain entry associated with that external directory. The attribute value is an LDAP URL of the form:

```
ldap://<server name>/<search base DN>?<attributes>?<scope>?<search filter>
```

where:

- *server name*: Specifies the LDAP pool identifier, defined in the Calendar Server configuration for that specific external directory server. See the `davadmin ldappool create` command for more information on how to configure the LDAP pool.
- *search base DN*: Specifies either a template or fixed DN.
- *attributes*: Specifies a list of attributes to be retrieved that are required to perform external authentication and mapping to the internal Communications Suite directory.
- *scope*: Should be `base`, `one`, or `sub`.
- *search filter*: Specifies either a template or a fixed filter.

Both the search base DN and search filter can be templates containing the following patterns:

- `%o` (original login ID, as provided by the user over protocol)
- `%U` (user part of login ID)
- `%V` (domain part of login ID)

Note: The `%` character in `%o`, `%U`, and `%V` needs to be encoded as per the general URI definition. That is, the `%` character becomes `%25`.

## Examples

Consider the following LDAP URL:

```
ldap://examplepool/ou=people,o=example.com?mail?sub?(uid=%25o)
```

In this example, for a user with login ID `john@example.com`, the following subtree search is issued:

- `basedn:ou=people,o=example.com`
- `filter:(uid=john@example.com)`

Consider the following LDAP URL where `example.com` is the default domain:

```
ldap://examplepool/cn=%U,ou=people,o=example.com?mail?base?(objectclass=*)
```

In this example, for a user with a login ID of `John Doe`, the following search is issued:

- `basedn:cn=John Doe,ou=people,o=example.com`
- `filter:(objectClass=*)`

If more than one entry matches the search, the authentication is rejected.

## externalAuthPostUriTemplate

Origin	Calendar Server 7 Update 3
Syntax	cis
Object Classes	inetDomainAuthInfo
OID	2.16.840.1.113894.1009.1.1.7

## Definition

This attribute is used for finding the internal Directory Server entry for a user who has authenticated against an external Directory Server. It sets the LDAP URL that must be used to map the user who has authenticated against the external Directory Server to a user in the internal Directory. It is used in conjunction with the `externalAuthPreUrlTemplate` attribute and must be added to each domain entry associated with that external directory.

The attribute value is an LDAP URL of the form:

```
ldap:///<search base DN>?<attributes>?<scope>?<search filter>
```

where:

- *search base DN*: Specifies the search base DN from which to perform searches. It can be a template or a fixed DN.
- *attributes*: Specifies the list of attributes to be retrieved. It must include the `mail` attribute.
- *scope*: Should be `base`, `one`, or `sub`.
- *search filter*: Specifies either a template or a fixed filter.

Note: No server name is used in this LDAP URL (it must be empty), because the lookup is performed against the internal Directory Server.

Both the search base DN and search filter can be templates containing the following patterns:

- `%o` (full login id)
- `%U` (user part of login id)
- `%V` (domain part of login id)
- `%A[attributename]` (value of attribute specified)

Note: The `%` character in `%o`, `%U`, `%V`, and `%A` needs to be encoded as per the general URI definition. That is, the `%` character becomes `%25`.

## Example

Consider the following LDAP URL:

```
ldap:///uid=%25A[ucsUid],ou=people,o=example.com?mail?base?(objectclass=*)
```

In this example, a search is constructed against the internal User/Group directory with the following values:

- *base DN*: `uid=jdoe,ou=people,o=example.com`
- *scope*: `base search`
- *filter*: `(objectClass=*)`
- *attributes to retrieve*: `mail`

## facsimileTelephoneNumber

Origin	Calendar Server
Syntax	tel, single-valued
Object Classes	<a href="#">icsCalendarResource</a> , <a href="#">inetResource</a> , <a href="#">organization</a> , <a href="#">organizationalUnit</a>
OID	2.5.4.23

### Definition

Fax telephone number for resources.

### Example

facsimileTelephoneNumber: 1-800-555-1212

## givenName

Origin	LDAP
Syntax	cis
Object Classes	<a href="#">icsCalendarUser</a>
OID	2.5.4.42

### Definition

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

### Example

givenName: John

## groupid

Origin	Calendar Server 6
Syntax	cis, single-valued
Object Classes	<a href="#">icsCalendarGroup</a>
OID	1.3.6.1.4.1.42.2.27.9.1.784

### Definition

Identifies the unique name used to create the group calendar. The `groupid` must be unique among all `uid` and `groupid` attributes in its relative namespace. All valid Calendar group entries must have a `groupid` attribute.

### Example

groupid:calendar1

## icsAdminRole

Origin	Calendar Server
Syntax	cis
Object Classes	<a href="#">icsAdministrator</a>
OID	2.16.840.1.113730.3.1.724

### Definition

Administrative calendar role that can be assigned to a group.

### Example

No example given.

## icsAlias

Origin	Calendar Server 6
Syntax	cis, UTF 8 encoded
Object Classes	<a href="#">icsCalendarResource</a>
OID	2.16.840.1.113730.3.1.725

### Definition

Alias associated with a resource. An alias can make a resource name easier for the end user to work with. Used by Calendar Server 6 but not Calendar Server 7.

### Example

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

```
icsAlias: Halley's Comet
```

## icsAllowedServiceAccess

Origin	Calendar Server 6.0
Syntax	cis, single-valued
Object Classes	<a href="#">icsCalendarDomain</a> , <a href="#">icsCalendarUser</a>
OID	2.16.840.1.113730.3.1.726

### Definition

This attribute is used only if the [icsStatus](#) attribute is not set, or in other words, if [icsStatus](#) is set, this attribute is ignored. Used by Calendar Server 6 but not Calendar Server 7.

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

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

## Example

```
icsAllowedServiceAccess:http
```

## icsAllowRights

Origin	Calendar Server 6
Syntax	integer, single-valued
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.727

## Definition

A numeric string used to hold bit fields, each corresponding to a set of rights. Each bit corresponds to a setting in the `ics.conf` file. After you have figured out the bit string settings you want, convert the bits to an integer. Used by Calendar Server 6 but not Calendar Server 7.

If the property is set (1), the right is explicitly allowed. If the bit is not set (0), the default server-wide setting is used.

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

`icsAllowRights` defines the meaning of each bit position for bits 0-15:

### **Bit Definitions and ics.conf Settings**

Property Name and ics.conf Setting Name	Bit	Allows (1) or Disallows (0)
<code>allowCalendarCreation</code> <code>service.wcap.allowcreatecalendars</code>	0	Creation of calendars
<code>allowCalendarDeletion</code> <code>service.wcap.allowdeletecalendars</code>	1	Deletion of calendars
<code>allowPublicWritableCalendars</code> <code>service.wcap.allowpublicwriteablecalendars</code>	2	Publicly writable calendars for users
<code>none</code>	3	Reserved. Defaults to 0
<code>allowModifyUserPreferences</code> <code>service.admin.calmaster.wcap.allowgetmodifyuserprefs</code>	4	Domain Administrator allowed to change user preferences

allowModifyPassword service.wcap.allowchangepassword	5	Users allowed to change their password
none	6	Reserved. Defaults to 0
none	7	Reserved. Defaults to 0
allowUserDoubleBook user.allow.doublebook	8	Double booking of user calendars
allowResourceDoubleBook resource.allow.doublebook	9	Double booking of resource calendars
allowSetCn service.wcap.allowsetprefs.cn	10	User preference <code>cn</code> modified by <code>set_userprefs</code> command
allowSetGivenName service.wcap.allowsetprefs.givenname	11	User preference <code>givenname</code> modified by <code>set_userprefs</code> command
allowSetGivenMail service.wcap.allowsetprefs.mail	12	User preference <code>mail</code> modified by <code>set_userprefs</code> command
allowSetPrefLang service.wcap. allowsetprefs.preferredlanguage	13	User preference <code>preferredlanguage</code> modified by <code>set_userprefs</code> command
allowSetSn service.wcap.allowsetprefs.sn	14	User preference <code>sn</code> modified by <code>set_userprefs</code> command
allowGroupDoubleBook group.allow.doublebook	15	Double booking of group calendars
none	16-31	Reserved. Defaults to all 0

## Example

If you decide that you want to *allow* the following rights on a domain:

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

then your bit pattern would look like this:

```
"000000000000000000000000101000000100"
```

which you would convert into the integer 2564 so that:

```
icsAllowRights: 2564
```

## icsAnonymousAllowWrite

Origin	Calendar Server 6
Syntax	boolean (yes, no)
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.728

## Definition

Specifies if anonymous users can write events in public calendars. The value comes from the `ics.conf` setting `service.wcap.anonymousallowpubliccalendarwrite`. Used by Calendar Server 6 but not Calendar Server 7.

## Example

```
icsAnonymousAllowWrite: yes
```

## icsAnonymousCalendar

Origin	Calendar Server 6
Syntax	ces
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.729

## Definition

Calendar ID for anonymous users. The value is taken from the `ics.conf` setting `calstore.anonymous.calid`. Used by Calendar Server 6 but not Calendar Server 7.

## Example

```
icsAnonymousCalendar: guest1
```

## icsAnonymousDefaultSet

Origin	Not implemented.
Syntax	ces, UTF 8 encoded
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.730

## Definition

Default calendar set for anonymous users.

## Example

No example given.

## icsAnonymousLogin

Origin	Calendar Server 6
Syntax	boolean (yes, no)
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.798

### Definition

Specifies if anonymous login is allowed. Value is taken from the `ics.conf` file setting `service.http.allowanonymousLogin`. Used by Calendar Server 6 but not Calendar Server 7.

### Example

```
icsAnonymousLogin: yes
```

## icsAnonymousSet

Origin	Not implemented.
Syntax	ces, UTF 8 encoded
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.732

### Definition

Reserved. Not implemented.

Default calendar set for anonymous users.

### Example

No example given.

## icsAutoaccept

Origin	Calendar Server 6
Syntax	cis, single-valued
Object Classes	<a href="#">icsCalendarGroup</a> , <a href="#">icsCalendarResource</a>
OID	1.3.6.1.4.1.42.2.27.9.1.788

### Definition

When a group receives an invitation, this attribute indicates whether the invitation is marked automatically as accepted. When enabled, the attribute causes the scheduled event to be marked as busy on the group calendar without any member taking any action.



For a Calendar resource, this attribute allows the resource to accept invitations automatically.

The `icsAutoaccept` attribute can have a value of 1, which allows automatic acceptance of invitations, or 0, which prohibits automatic acceptance.

For a group calendar, the default value is 0 (prohibit automatic acceptance of events). For a Calendar resource, the default value is 1 (allow automatic acceptance of events).

## Example

```
icsAutoaccept:0  
icsAutoaccept:1
```

## icsCalendar

Origin	Calendar Server 6
Syntax	ces, single-valued
Object Classes	<a href="#">icsCalendarResource</a> , <a href="#">icsCalendarGroup</a> , <a href="#">icsCalendarUser</a>
OID	2.16.840.1.113730.3.1.731

## Definition

The calendar ID (`calid`) of the default calendar for a user, group, or resource. Required attribute. It is a policy of Calendar Server to construct the `calid` based on the user's `uid` or the group's `groupid`, since it is guaranteed to be unique. Used by Calendar Server 6 but not Calendar Server 7.

## Example

```
icsCalendar: jdoe
```

## icsCalendarOwned

Origin	Calendar Server 6
Syntax	ces, multi-valued
Object Classes	<a href="#">icsCalendarUser</a>
OID	1.3.6.1.4.1.42.2.27.9.1.6

## Definition

Calendars owned by this user. At least one instance of this attribute must exist for each user and must be set with the user's default calendar value. Multiple instances of this attribute can be used to specify other calendars the user owns. Used by Calendar Server 6 but not Calendar Server 7.

## Example

```
icsCalendarOwned:jdoe@sesta.com:Project  
icsCalendarOwned:jdoe@sesta.com:icsCalendarOwned  
icsCalendarOwned:jdoe@sesta.com:BaseballSchedule  
icsCalendarOwned:jdoe@sesta.com:Holidays
```

## icsCapacity

Origin	Not implemented.
Syntax	integer, single-valued
Object Classes	Not currently defined.
OID	2.16.840.1.113730.3.1.800

### Definition

Reserved, not implemented.

### Example

No example given.

## icsContact

Origin	Not implemented.
Syntax	cis, UTF 8 encoded
Object Classes	<a href="#">icsCalendarResource</a>
OID	2.16.840.1.113730.3.1.733

### Definition

Reserved, not implemented.

Resource contact name.

### Example

```
icsContact: John Doe jdoe@sesta.com
```

## icsDefaultAccess

Origin	Calendar Server 6
Syntax	cis, single-valued
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.734

### Definition

Default access control string applied to the user's default calendar. For more information about access control, see "Access Control Entries" in the *Sun Java System Calendar Server Programmer's Manual*. If this attribute is not present, the value is taken from the `ics.conf` file setting `calstore.calendar.default.acl`. Used by Calendar Server 6 but not Calendar Server 7.

## Example

Granting the user both free-busy and scheduling permission for calendar components.

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

## icsDefaultacl

Origin	Calendar Server 6
Syntax	cis, single-valued
Object Classes	<a href="#">icsCalendarGroup</a> , <a href="#">icsCalendarResource</a>
OID	1.3.6.1.4.1.42.2.27.9.1.786

## Definition

Default access control string (ACL) applied to a group calendar or calendar resource. For more information about access control, see "Access Control Entries" in the *Sun Java System Calendar Server Developer's Guide*. If this attribute is not present, the value is taken from the `ics.conf` file settings `group.default.acl` for groups or `resource.default.acl` for resources. Used by Calendar Server 6 but not Calendar Server 7.

## Example

Granting the group calendar both free-busy and scheduling permission for calendar components.

```
icsDefaultacl:@sesta.com^c^sf^g
```

## icsDefaultSet

Origin	Calendar Server 6
Syntax	ces, single-valued
Object Classes	<a href="#">icsCalendarUser</a>
OID	2.16.840.1.113730.3.1.735

## 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. Used by Calendar Server 6 but not Calendar Server 7.

## Example

```
icsDefaultSet: MyCalendarGroup
```

## icsDomainAcl

Origin	Calendar Server 7 Update 2 (Patch 4)
Syntax	cis, ASCII, single-valued
Object Classes	icsCalendarDomain
OID	1.3.6.1.4.1.1466.115.121.1.26

### Definition

For use with cross-domain access.

### Example

```
icsDomainAcl: @a.com:w
```

For more examples, see [Managing Domain Access Controls](#).

## icsDomainAllowed

Origin	Not implemented.
Syntax	cis, single-valued (see <a href="#">mgrpAllowedDomain</a> )
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.736

### Definition

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

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

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

The following are the explicit wild cards 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 `service-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: `service@host_pattern:client-list`.

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

## Example

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

```
icsDomainAllowed: ALL:sesta.com
```

## icsDomainNames

Origin	Calendar Server
Syntax	cis, multi-valued, ASCII
Object Classes	<a href="#">icsCalendarDomain</a>
OID	1.3.6.1.4.1.42.2.27.9.1.3

## Definition

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

## Example

```
icsDomainNames: sesta.com
```

```
icsDomainNames: siroe.com
```

## icsDomainNotAllowed

Origin	Calendar Server 6
Syntax	cis, single-valued (see <a href="#">mgrpDisallowedDomain</a> )
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.737

## Definition

What domains are not allowed. Used by Calendar Server 6 but not Calendar Server 7. The value has the following format:

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

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

The following are the explicit wild cards 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 service-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.
--------	---

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

### Example 1

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

Deny access to anyone at the `company22.com` domain.

```
icsDomainNotAllowed: ALL:company22.com
```

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

### Example 2

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

```
icsDomainNotAllowed: ALL:ALL
```

### Example 3

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

```
icsDomainNotAllowed: ALL:UNKNOWN@ALL
```

## icsDoublebooking

Origin	Calendar Server 6
Syntax	cis, single-valued
Object Classes	<a href="#">icsCalendarGroup</a> , <a href="#">icsCalendarResource</a>
OID	1.3.6.1.4.1.42.2.27.9.1.787

### Definition

Indicates whether a group allows double-booking of events in the group's calendar. When enabled,

double-booking allows two events to be scheduled and displayed on the calendar at the same time.

For a Calendar resource, this attribute allows the resource to be booked for two events at the same time.

The `icsDoublebooking` attribute can have a value of 1, which allows double-booking, or 0, which prohibits double-booking.

For a group calendar, the default value is 1 (allow double-booking). For a Calendar resource, the default value is 0 (prohibit double-booking).

## Example

```
icsDoublebooking:1
```

```
icsDoublebooking:0
```

## icsDWPBackendHosts

Origin	Calendar Server 5.1.1
Syntax	cis, multi-valued
Object Classes	<a href="#">icsCalendarDomain</a>
OID	1.3.6.1.4.1.42.2.27.9.1.5

## Definition

The list of all possible back end hosts used for calendars found in this domain. This attribute is required if the calendar installation is using the Database Wire Protocol (DWP). Not used by Calendar Server 7.

## Example

```
icsDWPBackendHosts: machine1
```

```
icsDWPBackendHosts: machine2
```

## icsDWPHost

Origin	Calendar Server 6
Syntax	cis, single-valued, ASCII
Object Classes	<a href="#">icsCalendarDWPHost</a> , <a href="#">icsCalendarGroup</a> , <a href="#">icsCalendarResource</a> , <a href="#">icsCalendarUser</a>
OID	1.3.6.1.4.1.42.2.27.9.1.1
OID	2.16.840.1.113730.3.1.739

## Definition

Stores a DWP host name so that the calendar ID can be resolved to the Database Wire Protocol (DWP) server that stores the calendar and its data. When the calendar database is distributed across several back end servers, the attribute value is the DNS name of the back-end server hosting the user, group, or

resource. Each user's, group's, or resource's entire calendar will be on a single back-end server. Required if using the Calendar Lookup Database (CLD). Used by Calendar Server 6 but not Calendar Server 7.

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

## Example

```
icsDWPHost:calserv1
```

## icsExtended

Origin	Calendar Server 5.1.1
Syntax	cis, multi-valued
Object Classes	<a href="#">icsCalendarDWPHost</a>
OID	2.16.840.1.113730.3.1.738

## Definition

Extensions for calendar. Reserved. Used by Calendar Server 6 but not Calendar Server 7.

## Example

No example given.

## icsExtendedDomainPrefs

Origin	Calendar Server 6
Syntax	cis, multi-valued
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.739

## Definition

Preferences for calendar domains can be set using the properties found in [icsExtendedDomainPrefs](#). Each attribute value is a property-value pair. Used by Calendar Server 6 but not Calendar Server 7.

The format is:

```
icsExtendedDomainPrefs:property=value
```

The `icsExtendedDomainPrefs` attribute is multi-valued, but each attribute:property pair can be used only once. For example, use `icsExtendedDomainPrefs:domainAccess=value` only once.

The default settings for these properties are found in the domain server's `ics.conf` file. In the absence of this attribute, the `ics.conf` settings will be used.



## Domain Preferences

Property	Value	Description
allowProxyLogin	yes, no	Allow proxy login
calmasterAccessOverride	yes, no	Domain administrator can override access control
calmasterCred	string	Bind credentials (password) for user specified in <code>ics.conf</code> setting <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <code>service.admin. calmaster.userid</code> </div>
calmasterUid	string	User ID for the domain administrator
createLowerCase	yes, no	Make calendar name lowercase for creating new calendars and looking up calendars.
domainAccess	valid acl string	Access control string for domain. Used in cross-domain searches to permit external domains to search this domain.
fbIncludeDefCal	yes, no	User's default calendar included in free-busy calendar list.
filterPrivateEvents	yes, no	Filter the private and confidential events on queries to server.
groupDefaultAcl	valid access string	Group calendar's default ACL
resourceDefaultAcl	valid access string	Resource calendars' default ACL
setPublicRead	yes, no	Set default user calendars to public read and private write (yes), or private read and private write (no).
subIncludeDefCal	yes, no	User's default calendar included in subscribed calendar list
uiAllowAnyone	yes/no	Everybody ACL shows and can be used in the user interface.
uibaseURL	valid URL	Base server address. For example, <a href="https://proxyserver/">https://proxyserver/</a>
uiConfigFile	string	Specifies the configuration file for the user interface. (Allows items in the user interface to be turned off.)
uiProxyUrl	string	Proxy server address prepended in user interface JavaScript file. For example, <a href="https://web_portal.com/">https://web_portal.com/</a>

## Example

```
icsExtendedDomainPrefs: createlowercase=yes
```

```
icsExtendedDomainPrefs: domainaccess=@@^d^a^slfrwd^g;anonymous^a^r^g;@^a^s^g
```

In this example, any external domain matching the access rights shown above can search this domain.

## icsExtendedGroupPrefs

Origin	Calendar Server
Syntax	cis
Object Classes	<a href="#">icsAdministrator</a>
OID	2.16.840.1.113730.3.1.740

### Definition

Extensions for calendar group preferences. Reserved.

### Example

No example given.

## icsExtendedResourcePrefs

Origin	Not implemented.
Syntax	cis
Object Classes	Not yet assigned.
OID	2.16.840.1.113730.3.1.741

### Definition

Reserved, not implemented.

### Example

No example given.

## icsExtendedUserPrefs

Origin	Calendar Server 6
Syntax	cis, multi-valued
Object Classes	<a href="#">icsCalendarUser</a>
OID	2.16.840.1.113730.3.1.742

### Definition

Extensions for calendar user preferences. The attribute value is a property-value pair. The following are the properties and their values. Primarily used in Calendar Express. Used by Calendar Server 6 but not Calendar Server 7.

### Extended User Preferences

Properties	Values	Description
ceAllCalendarTZIDS	a standard time zone	Time zone TZID for this calendar.
ceClock	12, 24	Defines whether a 12 or 24 hour clock is used.
ceColorSet	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 the display order of the three date elements: month (M), day (D), and year (Y) .
ceDateSeparator	Any single printable character. For example: / or -	The single character used to delimit displayed date elements.  For example, a date can be delimited with a /, such as 12/22/2002, or with a -, such 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.
ceDefaultAgenda	unused	Not currently implemented.
ceDefaultAlarmEmail	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 <a href="#">Standard Time Zones</a> .	Time zone to use when a calendar does not have one assigned to it.

ceDefaultView	<p>dayview</p> <p>weekview</p> <p>monthview</p> <p>yearview</p> <p>groupview</p>	<p>View to be presented at log in.</p> <p>If this parameter is not present, overview is used as the default.</p>
ceExcludeSatSun	boolean (0, 1)	Calendars don't display if the value is set to 1. Default is the value set to 0.
ceFontFace	<p>One of these values:</p> <p>1) Times New Roman, Times, serif</p> <p>2) Courier New, Courier, noon</p> <p>3) PrimaSans BT, Verdana, sans-serif</p>	Three choices of font face to be used in the user interface.
ceFontSizeDelta	<p>pref_font_size_group_2 (normal)</p> <p>pref_font_size_group_1 (larger)</p> <p>pref_font_size_group_3 (smaller)</p>	Defines three font sizes for the user interface. In the interface they are defined as: normal, larger, smaller.
ceGroupInviteAll	boolean (0, 1)	When creating an invitation while viewing a group, invite all calendars in the group when the value is set to 1; default is 1.
ceInterval	<p>PT0H15M</p> <p>PT0H30M</p> <p>PT1H0M</p> <p>PT2H0M</p> <p>PT4H0M</p>	Defines the time interval to be used when displaying calendar information. Intervals are: 15 min., 30 min., 1 hour, 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 send notifications, 1 = send notifications

ceSingleCalendarTZID	any valid time zone  For a list of valid time zones, see <a href="#">Standard Time Zones</a> .	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: ceDateSeparator=/
icsextendeduserprefs: ceDayHead=10
icsextendeduserprefs: ceDayTail=17
icsextendeduserprefs: ceDefaultAlarmEmail=jdoe@sesta.com
icsextendeduserprefs: ceDefaultAlarmStart=P30H
icsextendeduserprefs: ceDefaultTZID=America/New_York
icsextendeduserprefs: ceDefaultView=groupview
icsextendeduserprefs: ceFontFace=PrimaSans BT, Verdana, sans--serif
icsextendeduserprefs: ceFontSizeDelta=pref_font_size_group_3
icsextendeduserprefs: ceInterval=PT2H0M
icsextendeduserprefs: ceNotifyEmail=jdoe@sesta.com
icsextendeduserprefs: ceNotifyEnable=0
icsextendeduserprefs: ceSingleCalendarTZID=America/Los_Angeles
icsextendeduserprefs: ceToolText=1
icsextendeduserprefs: ceToolImage=1
```

## icsFirstDay

Origin	Calendar Server 6
Syntax	cis, single-valued
Object Classes	<a href="#">icsCalendarUser</a>
OID	2.16.840.1.113730.3.1.743

## Definition

First day of the week to be displayed on user's calendar. Used by Calendar Server 6 but not Calendar Server 7.

Range of values: 1--7, with the values assigned as follows:

1	Sunday
2	Monday
3	Tuesday
4	Wednesday
5	Thursday
6	Friday
7	Saturday

### Example

```
icsFirstDay: 1
```

### icsFreeBusy

Origin	Not implemented.
Syntax	ces, single-valued
Object Classes	Not yet assigned.
OID	2.16.840.1.113730.3.1.744

### Definition

Reserved, not implemented.

### Example

No example given.

### icsGeo

Origin	Not implemented.
Syntax	cis single-valued, Latitude; longitude
Object Classes	Not yet identified.
OID	2.16.840.1.113730.3.1.745

### Definition

Reserved, not implemented.

Geographical location of user or resource.

## Example

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

## icsMandatorySubscribed

Origin	Calendar Server 6
Syntax	ces
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.746

## Definition

The valid calendar ID's for mandatory subscribed calendars for all users in a domain. Used by Calendar Server 6 but not Calendar Server 7.

## Example

```
icsMandatorySubscribed: ConfRm1@sesta.com:meetings
```

## icsMandatoryView

Origin	Calendar Server 6
Syntax	cis
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.747

## Definition

The mandatory default view for all calendars in a domain. Views are: overview, day, week, month, year, comparison. Used by Calendar Server 6 but not Calendar Server 7.

## Example

```
icsMandatoryView: overview
```

## icsPartition

Origin	Not implemented.
Syntax	cis, single-valued, ASCII
Object Classes	<a href="#">icsCalendarResource</a> , <a href="#">icsCalendarUser</a>
OID	1.3.6.1.4.1.42.2.27.9.1.4

## Definition

Reserved. not implemented.

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

### Example

```
icsPartition: partition1
```

### icsPreferredHost

Origin	Not implemented.
Syntax	cis, single-valued
Object Classes	Not yet defined.
OID	2.16.840.1.113730.3.1.749

### 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

No example given.

### icsQuota

Origin	Not implemented.
Syntax	integer, single-valued
Object Classes	Not yet specified.
OID	2.16.840.1.113730.3.1.748

### Definition

Reserved, not implemented.

### Example

No example given.

### icsRecurrenceBound



Origin	Calendar Server 6
Syntax	integer, single-valued
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.750

### Definition

Maximum number of instances created for events and todos with infinite recurrence. The value is taken from the `ics.conf` setting `calstore.recurrence.bound`. Used by Calendar Server 6 but not Calendar Server 7.

### Example

```
icsRecurrenceBound: 60
```

### icsRecurrenceDate

Origin	Calendar Server 6
Syntax	cis, single-valued
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.751

### Definition

An ISO 8601 date/time string specifying the maximum date for events and todos with infinite recurrence. Used by Calendar Server 6 but not Calendar Server 7.

### Example

```
icsRecurrenceDate: 20300365T115959Z
```

### icsRegularExpressions

Origin	Calendar Server.1
Syntax	ces, multi-valued, UTF 8
Object Classes	<a href="#">icsCalendarDWPHost</a>
OID	1.3.6.1.4.1.42.2.27.9.1.2

### 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.

## icsSecondaryowners

Origin	Calendar Server 6
Syntax	dn, multivalued
Object Classes	<a href="#">icsCalendarGroup</a> , <a href="#">icsCalendarResource</a>
OID	1.3.6.1.4.1.42.2.27.9.1.785

### Definition

Identifies the distinguished names (DNs) of co-owners of a group Calendar or Calendar resource. Like the primary owner, the users identified with `icsSecondaryowners` have administrative privileges over the Calendar group or Calendar resource entry. Used by Calendar Server 6 but not Calendar Server 7.

The co-owners must be Calendar users in the same domain as the group or resource. That is, Calendar service must be assigned to the co-owners as well as to the Calendar group or resource.

### Example

```
icsSecondaryowners:cn=John Smith,o=Sesta,c=US
```

## icsSessionTimeout

Origin	Calendar Server 6
Syntax	integer, single-valued
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.752

### Definition

Number of seconds of inactivity before a user session is timed out. Read from `ics.conf` setting `service.http.idletimeout`. Used by Calendar Server 6 but not Calendar Server 7.

### Example

```
icsSessionTimeout: 600
```

## icsSet

Origin	Calendar Server 6
Syntax	cis, multi-valued
Object Classes	
OID	2.16.840.1.113730.3.1.753

## 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. Used by Calendar Server 6 but not Calendar Server 7.

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

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

### Six Parts of the Attribute Value

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

## icsSourceHtml

Origin	Calendar Server 6
Syntax	ces, single-valued
Object Classes	<a href="#">icsCalendarDomain</a>
OID	2.16.840.1.113730.3.1.754

## Definition

The alternate location of all client HTML files. A directory path that is relative to the installed client HTML files. The default value comes from the `ics.conf` setting `service.http.uidir.path`. Used by Calendar Server 6 but not Calendar Server 7.

`icsSourceHtml` lists the values for this attribute.

**Alternate Locations for Client HTML files.**

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

**Example**

```
icsSourceHtml: calhostname=calhost1
```

**icsStatus**

Origin	Calendar Server 6 and 7
Syntax	cis, single-valued
Object Classes	<a href="#">icsCalendarDomain</a> , <a href="#">icsCalendarDWPHost</a> , <a href="#">icsCalendarGroup</a> , <a href="#">icsCalendarResource</a> , <a href="#">icsCalendarUser</a>
OID	2.16.840.1.113730.3.1.755

**Definition**

If this attribute is used with [icsCalendarDomain](#), the attribute must be set to active when assigning calendar services to a domain. The attribute describes the status of this domain's calendar service with one of the values specified in [icsStatus](#).

If the attribute is set for a user ([icsCalendarUser](#)), group ([icsCalendarGroup](#)), or resource ([icsCalendarResource](#)), the value of [icsStatus](#) affects the availability of the calendar for that individual entry.

See [Calendar Status Values](#) for definitions of the attribute's values.

**Note**

The following information applies only to **Calendar Server 6**.

If this attribute is not set, the `icsAllowedServiceAccess` attribute is checked. If present and the value of that attribute is `http`, then calendar services are disabled for the user or group (the user or group status is `inactive`). If `icsAllowedServiceAccess` has any other value, or if both attributes are missing, then the default user or group status is `active`. Calendar services evaluate the following status attributes in order: `inetDomainStatus`, `icsStatus` (for `icsCalendarDomain`), either `inetResourceStatus` or `inetUserStatus`, and `icsStatus` (for `icsCalendarResource`, `icsCalendarUser`, or `icsCalendarGroup`). The rule is: the first of these attributes that is set to something other than `active` takes precedence over all the others. When this attribute is set for a domain, the following status values apply to all users, groups, and resources in the domain. When this attribute is set for a user, group, or resource, the following status values apply only to that individual entry.

**Calendar Status Values**

Status	Definition
active	The user, group, or resource, or all users, groups, and resources in this domain, have access to calendar services.
inactive	Calendar services are blocked for this user, group, or resource, or for any users, groups, or resources in this domain, until the status is changed to <code>active</code> again. Calendars remain in the database and the LDAP entry remains.
deleted	<p>This user, group, or resource entry is marked for deletion. Calendar service is blocked for the user, group, or resource, or for any users, groups, or resources in this domain. Calendars are removed from the database and the LDAP attributes that control the calendar's service are removed. For Calendar Server 7, see <a href="#">To Remove Calendar Users</a>. For Calendar Server 6, the entry is a candidate for cleanup by the <code>csclean</code> utility. After <code>csclean</code> removes the calendar, it sets the value of <code>icsStatus</code> to <code>removed</code>.</p> <p>All the entries remain in the directory, but object classes having to do only with calendars for these users, resources and domains are removed. For example, <code>icsCalendarUser</code>, <code>icsCalendarResource</code>, <code>icsCalendarDomain</code> are removed. In addition, all attributes with the <code>ics</code> prefix are removed.</p> <p>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.</p>
removed	Indicates that the resource (calendar) associated with this entry has been removed. In addition, the entry itself is marked to be purged from the LDAP directory. If <code>icsStatus</code> is set at the domain level, all entries with calendar service in the domain are set to be removed. All calendar service is blocked for the entry (or entries). This setting allows the Delegated Administrator <code>commadmin domain purge</code> command to remove the entry (or entries) from the LDAP directory.

**Note**

A missing or unknown value for the `icsStatus` attribute implies the status is `active`.

## Example

```
icsStatus: active
```

## icsSubscribed

Origin	Calendar Server 6
Syntax	ces, multi-valued
Object Classes	<a href="#">icsCalendarUser</a>
OID	2.16.840.1.113730.3.1.756

## Definition

List of calendars to which this user is subscribed. This includes all the calendars that the user owns, as well as any calendars owned by others to which the owner subscribes. Used by Calendar Server 6 but not Calendar Server 7.

The value of this attribute is the calendar ID and optionally, the calendar name, with a dollar sign (\$) between them, when present. NOTE: The calendar "name" is not updated when the name is changed, and some clients (like Calendar Express) ignore the value in "icssubscribed:" when they display the list of subscribed folders).

## Example

```
icsSubscribed: jdoe$MyHomeCalendar  
icsSubscribed: jsmith
```

## icsTimezone

Origin	Calendar Server 6
Syntax	cis
Object Classes	<a href="#">icsCalendarDomain</a> , <a href="#">icsCalendarGroup</a> , <a href="#">icsCalendarResource</a> , <a href="#">icsCalendarUser</a>
OID	2.16.840.1.113730.3.1.757

## Definition

The default time zone for this user, group, or resource calendar. Specifically, a valid time zone from the list found in [Standard Time Zones](#). The value is taken from the `ics.conf` setting `calstore.default.timezoneID`. Used by Calendar Server 6 but not Calendar Server 7.

For a user, a time zone can be assigned explicitly through the user preferences attribute (see [icsExtendedUserPrefs](#)), which overrides the domain-level default.

## Example

```
icsTimezone: America/Chicago
```

## inetCanonicalDomainName

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetDomainAuthInfo</a>
OID	2.16.840.1.113730.3.1.701

## Definition

For Messaging Server, this attribute specifies the canonical domain name used to map a user entry to the correct organization entry when more than one organization entry exists.

The mail processes use information stored in the organization entry to locate a user's mailbox in the message store. If a user has multiple identities in different domains (associated with the different organization entries), the mail processes need to determine which organization entry to use to find the correct mailbox. The `inetCanonicalDomainName` attribute points to this canonical organization. If `inetCanonicalDomainName` were not used, a user with multiple user IDs (in multiple domains) would have a different mailbox for each domain.

Typically, the value of `inetCanonicalDomainName` is a fully qualified domain name, although this is not an absolute requirement.

The `inetCanonicalDomainName` attribute is used in LDAP Schema 2 and LDAP Schema 1. For an explanation of Schema 1 and Schema 2 LDAP structures, see the *Sun Java Communications Suite Deployment Planning Guide* and *Sun Java Communications Suite Schema Migration Guide*.

## Schema 2

In Schema 2, the directory can have two types of organization nodes: base and index. Base nodes appear at the root of the directory tree and contain the organization's data (users and groups).

Typically, index nodes for the organization are created if a deployment involves more than one logical grouping of the same physical data. An index node can appear anywhere in the directory.

Moreover, some LDAP administrators need to create a directory structure in which one organization node is placed above another, and the user data exists below both organization nodes. (You might have to do this to maintain the structure of a legacy user directory or to merge an existing user domain with a recently acquired domain.)

If the directory contains multiple index nodes for the organization or nested organization nodes, a user entry can "belong" logically to more than one organization node. An application such as Messaging Server must determine which organization is the canonical one in order to resolve a domain search and correctly identify the user's mailbox.

In this situation, you must decorate all the non-canonical organization entries with the `inetCanonicalDomainName` attribute, which specifies the domain name of the organization's base node. Its value must be the same as that of the `sunPreferredDomain` attribute in the organization's base node.

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

Note that it serves no purpose to decorate the canonical domain entry itself with the `inetCanonicalDomainName` attribute. If you do, it must have the same value as `sunPreferredDomain`.

If you want multiple domains to have the same attribute settings, you should not create multiple

organization nodes. Instead, add [associatedDomain](#) to the organization's base node to specify the DNS domain name aliases. (Add one instance of [associatedDomain](#) for each domain name alias.) If the organization's base node is not the canonical domain, then it must contain the [sunPreferredDomain](#) attribute.

## Schema 1

In Schema 1, the `inetCanonicalDomainName` attribute is used for the same purpose as in Schema 2, but it is used with DC nodes in the DC tree.

This attribute is used when more than one DC node in a DC tree refers to the same base node of a user/group tree for a particular domain in the Organization tree. (There can be only one canonical domain name for a domain's user/group base node in the Organization tree, but there can be many DC nodes referring to the same user/group base node.)

In Schema 1, this attribute is not necessary if there is only one DC node referring to a domain's user/group base 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 user/group base node, the mail processes could possibly use the wrong domain name when trying to open users' mailboxes.

Using multiple domain nodes to point to the same user/group base node allows you to have different attribute settings (for example, to achieve different routing) for each one. If you want to be sure the two domains have the same attribute settings (for example, to ensure that they are routed identically), use [aliasedObjectName](#) on the duplicate node instead.

## Examples

### Example 1 — Schema 2

Suppose the directory contains a base node, `o=sesta`, to store a corporation's user data. In addition, there is an index node, `o=sesta2`, which points to an overlapping subset of users. In this example, `sesta.com` is the canonical domain name.

To identify the actual organization node, you must decorate the non-canonical organization entry (the index node) with the value of the canonical organization node, `inetCanonicalDomainName:sesta.com`:

```
dn:o=sesta,o=rootsuffix
sunPreferredDomain:sesta.com
```

```
dn:o=sesta2,o=sesta,o=rootsuffix
inetDomainBaseDN:o=sesta,o=rootsuffix
inetCanonicalDomainName:sesta.com
```

### Example 2 — User Login with `inetCanonicalDomainName`

Assume the two organization nodes, `o=sesta` and `o=sesta2`, are decorated as shown in Example 1. The user `jdoue` logs in to Messaging Server with the following user ID:

```
jdoue@sesta2.com
```

In this example, there can be only one LDAP entry for the user `jdoue`.



In this case, Messaging Server performs one or more lookups to determine `jdoue`'s canonical user ID, which consists of the user's `uid` followed by `@` and the user's canonical domain name.

Messaging Server looks up the value of the `inetCanonicalDomainName` attribute in the `sesta2` organization entry. It then replaces the original domain name in the login ID, `sesta2`, with the canonical domain name, `sesta`.

Using the canonical user ID, Messaging Server opens `jdoue`'s correct mailbox, which displays all of `jdoue`'s messages, including messages sent to `jdoue@sesta2.com`, to `jdoue@sesta.com`, and to any other domain or alias domain associated with `jdoue`.

### Example 3 — User Login without `inetCanonicalDomainName`

Assume the same directory tree layout as is shown in Example 1, but now `inetCanonicalDomainName` is not used. The user `jdoue` logs in to Messaging Server with the following user ID:

```
jdoue@sesta2.com
```

As in Example 2 (shown above), there can be only one LDAP entry for the user `jdoue`.

In this case, Messaging Server performs the same lookups it performs in Example 2.

However, because the `sesta2` organization entry does not contain the `inetCanonicalDomainName` attribute, Messaging Server uses the user ID `<uid>@sesta2.com` to determine which mailbox to open. A second mailbox associated with the `sesta2` domain is created (or, if it already exists, opened).

In this mailbox, the user `jdoue` sees only messages sent to the `sesta2` domain; `jdoue` has no access to any other messages. All other messages are contained in the mailbox associated with the canonical domain.

### Example 4 — Schema 1

In a Schema 1 scenario, if two DC Tree nodes exist, `dc=sesta` and `dc=sesta2`, both referring to the user/group base node `o=sesta`, then you must specify the canonical domain name as follows:

```
dn:dc=sesta,dc=com,o=internet
inetDomainBaseDN:o=sesta.com
```

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

## inetCoS

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">ipUser</a>
OID	2.16.840.1.113730.3.1.706

## Definition

The `inetCoS` entries are the Delegated Administrator Service Packages assigned to a user or group.

In Delegated Admin 6.4, the Service Packages are stored under the default domain's `dn`: in the `o=cosTemplates` subtree. For example (below), the Class of Service referenced by the package is found in:

```
dn: cn=earth,o=mailcalendaruser,o=cosTemplates,<defaultdomain>
```

## Example

```
inetCoS: earth
```

## inetDomainBaseDN

Origin	Messaging Server 5.0
Syntax	dn, single-valued
Object Classes	<a href="#">inetDomain</a> , <a href="#">sunManagedOrganization</a>
OID	2.16.840.1.113730.3.1.690

## Definition

In Schema 2, this attribute decorates index nodes configured to support multiple logical groupings that point to the same physical data. In Schema 1, the attribute decorates domain nodes on the DC Tree when in compatibility mode.

### Schema 2

When your deployment comprises multiple logical groupings pointing to the same physical data, the directory may be configured to contain index nodes. Each index node must include the attribute `inetDomainBaseDN`; the attribute's value must point to the physical node under which the physical data is contained. The physical node must be decorated with the `sunManagedOrganization` object class.

### Schema 1

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

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

## Example

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

## inetDomainCertMap

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">inetDomainAuthInfo</a>
OID	2.16.840.1.113730.3.1.700

## Definition

Reserved.

## Example

No example given.

## inetDomainSearchFilter

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetDomainAuthInfo</a>
OID	2.16.840.1.113730.3.1.699

## Definition

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

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

The following variables can be used in constructing the filter:

- %U--Name part of the login name (that is, everything before the login separator stored in the servers configuration)
- %V--Domain part of the login string
- %o--Original login ID entered by the user

If this attribute is missing, it is equivalent to:

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

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

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

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

This attribute must return a unique match for valid users within the `inetDomainBaseDN` subtree.

## Example

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

## inetDomainStatus

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<code>inetDomain</code>
OID	2.16.840.1.113730.3.1.691

## Definition

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

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

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

### Status Attribute Values

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

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

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

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

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

For more information on native and compatibility mode LDAP schemes, see the *Sun Java Enterprise System Installation Guide*.

## Example

```
inetDomainStatus: active
```

## inetMailGroupStatus

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.786

## Definition

Current status of a mail group.

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

active	Messages are delivered to the members of the mailing list.
inactive	Messages sent to the mailing list result in a transient failure.
disabled	Mailing list is disabled. Messages sent to the mailing list result in a permanent failure returned to the sending MTA with text specified by the <code>ERROR_TEXT_DISABLED_GROUP</code> MTA option. If option is not set, the message "group disabled; cannot receive new mail" will be used.
deleted	Mailing list can be purged from the directory. Messages sent to the group return a permanent failure.

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

There are four status attributes that interact with each other: [inetDomainStatus](#), [mailDomainStatus](#), [inetGroupStatus](#), and [inetMailGroupStatus](#). These are considered in the order just given. The rule is: the first of these attributes that is set to something other than `active` takes precedence over all the others.

The MTA option `LDAP_GROUP_STATUS` can be used to specify a different attribute to be used for group status.

The MTA does not consider [inetGroupStatus](#) by default. If you want to have [inetGroupStatus](#) checked, you need to add to the MTA options something like:

```
LDAP_USER_STATUS=inetUserStatus
LDAP_GROUP_STATUS=inetGroupStatus
LDAP_USER_MAIL_STATUS=mailUserStatus
LDAP_GROUP_MAIL_STATUS=inetMailGroupStatus
```

You only need to specify `LDAP_GROUP_STATUS`, but if you are changing one of these settings from the default, it is worthwhile noting them all.

## Example

```
inetMailGroupStatus:active
```

## inetResourceStatus

Origin	Calendar Server
Syntax	cis, single-valued
Object Classes	<a href="#">inetResource</a>
OID	2.16.840.1.113730.3.1.758

## Definition

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

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

### Status Attribute Values

Value	Description
<code>active</code>	The resource is active and it may be used in services enabled by the overlay of service-specific object classes and the service state as indicated by the particular status attribute for that service.
<code>inactive</code>	Resource is inactive. The resource may not be used in any services granted by service-specific object classes. This state overrides individual service status set using the service's status attributes.
<code>deleted</code>	Resource is marked as deleted. The resource may remain in this state within the directory for some time (pending purging of deleted resources). Service requests for all resources marked as deleted will return permanent failures.

There are several status attributes that are evaluated to determine status. They are evaluated in this order: `inetDomainStatus`, `icsStatus` (for `icsCalendarDomain`), `inetResourceStatus`, `icsStatus` (for `icsCalendarResource`). The rule is: the first of these attributes that is set to something other than `active` takes precedence over all the others.

## Example

```
inetResourceStatus: active
```

## inetSubscriberAccountId

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">inetSubscriber</a>
OID	2.16.840.1.113730.3.1.694

### Definition

A unique account ID used for billing purposes.

### Example

```
inetSubscriberAccountId: A3560B0
```

## inetSubscriberChallenge

<b>Origin</b>	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetSubscriber</a>
OID	2.16.840.1.113730.3.1.695

### Definition

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

### Example

```
inetSubscriberChallenge:Mother's Maiden Name
```

## inetSubscriberResponse

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetSubscriber</a>
OID	2.16.840.1.113730.3.1.696

### Definition

Attribute for storing the response to the challenge phrase.

### Example

inetSubscriberResponse: Mamasita

## inetUserHttpURL

Origin	Messaging Server 5.0, deprecated in Messaging Server 6.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetUser</a>
OID	2.16.840.1.113730.3.1.693

### Definition

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

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

### Example

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

## inetUserStatus

Origin	Messaging Server 5.0, Calendar Server 5.1.1
Syntax	cis, single-valued
Object Classes	<a href="#">inetUser</a>
OID	2.16.840.1.113730.3.1.692

### Definition

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

The following table lists the values for this attribute:

#### ***Status Attribute Values***



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

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

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

The MTA option `LDAP_USER_STATUS` can be used to specify a different attribute to be used for user status.

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

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

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

## Example

```
inetUserStatus: inactive
```

## mail

Origin	Messaging Server 5.0, Calendar Server
Syntax	cis, single-valued (RFC 822 address)
Object Classes	<code>inetLocalMailRecipient</code> , <code>icsCalendarResource</code> , <code>icsCalendarUser</code> , <code>icsCalendarGroup</code>
OID	0.9.2342.19200300.100.1.3

## Definition

Identifies the primary email address for a user, Calendar group, or Calendar resource. This is the email address retrieved and displayed by white-pages lookup applications.

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

## Example

```
mail: jdoe@sesta.com
```

## mailAccessProxyPreAuth

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">mailDomain</a>
OID	2.16.840.1.113730.3.1.769

## Definition

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

## Example

```
mailAccessProxyPreAuth: yes
```

## mailAccessProxyReplay

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">mailDomain</a>
OID	2.16.840.1.113730.3.1.763

## Definition

This attribute tells the Messaging Multiplexor how to reconstruct the login string when replaying the login sequence with the back-end 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 back-end server than Communications Suite.

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.
- `%A[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=%A[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`.

## mailAdminRole

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailAdministrator</a>
OID	2.16.840.1.113730.3.1.780

### 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
```

## mailAllowedServiceAccess

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.777

### 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.

Note the effect of the preceding rule:

- If no rule is specified for `mailAllowedServiceAccess`, users are allowed access to all services from all clients.
- If an allow filter is explicitly specified for any service, users are denied access to all other services that are not specified.

For example, suppose you want to enable S/MIME for a domain. If you do not specify any allow filters or deny filters for `mailAllowedServiceAccess`, S/MIME is enabled.

Now suppose you specify an allow filter for the `pop` service. In this case, S/MIME is disabled until you also specify an allow filter for the `smime` service.

For a full explanation of access filters and an alternate way to control access through the administration console or the `configutil` utility, see [Configuring Client Access to POP, IMAP, and HTTP Services](#).

## Rule Syntax

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

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

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

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

Legal service names are: `imap`, `imaps`, `pop`, `pops`, `smtp`, `smtps`, `http`, and `smime`. Note that the MMP supports `imap`, `imaps`, `pop`, `pops`, and `smtp`, and `smime`. The back-end supports `imap`, `pop`, `smtp`, `http`, and `smime`.

`client_list` is a comma separated list of clients (domains) to which access is being granted or denied.

The following wild cards can be used for the service list: `*`, `ALL`.

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

### Wild cards

Wild cards	Description
ALL, *	The universal wild card. 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 wild card.
UNKNOWN	Matches any host whose name or address are unknown. Use this with care.

## Except Operator

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

The `EXCEPT` format is:

```
list1 EXCEPT list2
```

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

## Example

This example shows a single rule with multiple services and a single wild card 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 wild cards for the client list. (This is the most commonly used method of specifying access control in LDIF files.)

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

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

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

An example of a rule with an EXCEPT operator is:

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

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

The following example shows how to restrict user access to SSL-encrypted POP and IMAP access only:

```
mailAllowedServiceAccess: +imaps,pops:*$+imap,pop:MMP IP address
```

In the preceding example, note that the back-end servers do not recognize the `pops` and `imaps` service names, so it is necessary to grant the MMP IP address(es) `pop` and `imap` service access. Otherwise, connections for that user between the MMP and the back-end servers will be rejected.

## mailAlternateAddress

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">inetLocalMailRecipient</a> , <a href="#">pabPerson</a>
OID	2.16.840.1.113730.3.1.13

### Definition

Alternate RFC 822 email address of this recipient. If the MTA receives mail with a "to" header with this email address, it rewrites the header with the value of the [mail](#) attribute and routes the email to that inbox. The reverse-pointing addresses are rewritten from the value of any of a user's `mailAlternateAddress` attributes to the value of the user's [mail](#) attribute. (That is, the MTA will rewrite the following headers, if they match this attribute, to the value of the user's [mail](#) attribute.)

The [mailEquivalentAddress](#) attribute works similarly to route the email, but does not rewrite the header.

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

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

### Example

mailAlternateAddress: jdoe@sesta.com

To specify a mail catchall address:

mailAlternateAddress: @sesta.com

## mailAntiUBEService

Origin	Messaging Server 5.2
Syntax	cis, multi-valued
Object Classes	inetMailUser, mailDomain
OID	Unknown

### Definition

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

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

There are two Brightmail values:

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

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

While another attribute can be named in the `option.dat` setting for `LDAP_OPTIN`, it is not recommended. (For more information on Brightmail, see the *Messaging Server Administration Guide*.)

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

```
LDAP_OPTIN=mailAntiUBEService
```

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

```
LDAP_DOMAIN_ATTR_OPTIN=mailAntiUBEService
```

### Example

```
mailAntiUBEService: virus  
mailAntiUBEService: spam
```

## mailAutoReplyMode

Origin	Messaging Server 5.0 (for reply mode) Messaging Server 5.2 patch 1 (for echo mode)
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.14

### 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 (`mailDeliveryOption: autoreply`). The two modes for autoreply are:

- `echo--` Echo the original message with the added `mailAutoReplyText` or `mailAutoReplyTextInternal` to the original sender. `echo` mode replies are sent unconditionally.
- `reply--` Send a fixed reply, contained in attributes `mailAutoReplyText` or `mailAutoReplyTextInternal`, to the original sender.

NOTE: The two modes support different attributes for composing mail.

### Example

```
mailAutoReplyMode: reply
```

```
mailAutoReplyMode: echo
```

## mailAutoReplySubject

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.772

### Definition

Subject text of autoreply response. `$(SUBJECT)` can be used to insert the subject of the original message into the response.

### Example

```
mailAutoreplySubject: I am on vacation
```

## mailAutoReplyText

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.15

### Definition

Autoreply 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.
```

### mailAutoReplyTextInternal

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.773

### Definition

Autoreply text sent to senders from the recipients domain. If not specified, then internal users get the mail autoreply text message.

### Example

```
mailAutoreplyTextInternal: Please contact me later.
```

### mailAutoReplyTimeOut

Origin	Messaging Server 5.0
Syntax	integer, single-valued
Object Classes	<a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.771

### Definition

This value is only used with "mailAutoReplyMode: reply"

Interval, in hours, for successive autoreply responses to any given mail sender. If the value is set to 0 *and* the mailAutoReplyMode: reply, then a response is sent back every time a message is received. Autoreply responses are sent out only if the recipient is listed in the To: or Cc: of the original message.



## Example

```
mailAutoreplyTimeout: 48
```

## mailClientAttachmentQuota

Origin	Messaging Server 5.0
Syntax	integer, single-valued
Object Classes	<a href="#">mailDomain</a>
OID	2.16.840.1.113730.3.1.768

## 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
```

## mailConversionTag

Origin	Messaging Server 5.2
Syntax	cis, multi-valued (ASCII string)
Object Classes	<a href="#">inetMailGroup</a> , <a href="#">inetMailUser</a>
OID	Unknown

## Definition

Method of specifying unique conversion behavior for a user or group entry. A message sent to this user or group will match any conversion file entries that require the specified value of the tag. (Any string value can be associated with this attribute.)

Tag-specific conversion actions are specified in the MTA configuration.

The MTA option used to override this attribute is `LDAP_CONVERSION_TAG`.

## Example

No example given.

## mailDeferProcessing

Origin	Messaging Server 5.2
Syntax	cis, single-valued (ASCII string)
Object Classes	inetMailGroup, inetMailUser
OID	Unknown

## Definition

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



### Note

A different attribute (other than `mailDeferProcessing`) can be designated for this purpose in the MTA option `LDAP_REPROCESS`.

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

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

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

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

## Best Practices Suggestions for Duplicate Message Problem

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

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

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

- For installations with only a few small groups, setting the default `DEFER_GROUP_PROCESSING=1`, and this attribute to `No`, gives you duplicates but also gives you two major benefits:
  - You don't have to bother running the reprocess channel, which makes a bit less overhead and a bit faster delivery.
  - The potential for eliminating duplicate addresses is increased.

If your installation has many small groups and only a few large groups, then set `DEFER_GROUP_PROCESSING=0`, and this attribute to `Yes` for the few large groups.

## Example

The default for mail users:

```
mailDeferProcessing: No
```

The default for mailing lists:

```
mailDeferProcessing: Yes
```

## mailDeliveryFileURL

Origin	Messaging Server 5.0
Syntax	ces, single-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.787

### Definition

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

The MTA option used to override this attribute's value is `LDAP_PROGRAM_FILE`.

### Example

```
mailDeliveryFileURL: /home/dreamteam/mail_archive
```

## mailDeliveryOption

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">inetMailGroup</a> , <a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.16

### Definition

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

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

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

Valid values are:

#### For users only (`inetMailUser`)

- `autoreply`-- Specifies `autoreply` is turned on for the user. Messages on which the recipient is listed in the "To:" or "Cc:" header fields of the message are sent to the `autoreply` channel where an

- autoreply message is generated and sent to the original sender.
- `hold`-- A recipient is temporarily halted from receiving messages. See `mailUserStatus`, `hold`. Note that unlike `mailUserStatus`, `hold` for this attribute does not disallow POP, IMAP and WebMail access. For this attribute, `hold` only halts delivery to the recipient's mailbox, but access is still allowed.
- `mailbox`-- Deliver messages to the user's IMAP/POP store.
- `native` or `unix`-- Deliver messages to the user's `/var/mail` store INBOX. The store is in Berkeley mailbox format. Messaging Server does not support `/var/mail` access. Users must use UNIX tools to access mail from the `/var/mail` store.

#### For groups only (`inetMailGroup`)

- `file`-- Messages are appended to the file specified in the attribute `mailDeliveryFileURL`.
- `members`-- Messages are sent to members of the mailing list.
- `members_offline`-- To defer processing for this group, set the attribute to this value, and set the `option.dat` file option `DEFER_GROUP_PROCESSING` to zero (0).

#### Both users and groups

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

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

#### Defaults

The default for users is the first item in the `DELIVERY_OPTIONS` MTA option (normally `mailbox`); the default for groups is the second item (normally `members`).

The MTA option `DELIVERY_OPTIONS`, found in the `msg-svr-base/config/option.dat` file, defines how each of the previously listed values will be processed.

The MTA option to override the name of the attribute used for this is `LDAP_DELIVERY_OPTION`.



#### Note

Because the default behavior if the attribute is not present is usually `mailbox` for user objects and `members` for group objects, it is possible that the object might not have a `mailDeliveryOption` attribute. Ensure that when setting this attribute that you do not replace all values with only your new value, or that if there was no attribute, you also add the appropriate value to maintain the default behavior along with the behavior you intend to add.

In other words, if a user object does not have a `mailDeliveryOption` attribute, then the default is to deliver mail to the user. If you then set `maildeliveryoption: forward` (or `autoreply`), then mail is **only** forwarded (or replied to) but not delivered. If you intend to keep delivering as well as forward, you must set the following:

```
mailDeliveryOption: mailbox
mailDeliveryOption: forward
```

#### Example

mailDeliveryOption: mailbox

## mailDomainAllowedServiceAccess

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">mailDomain</a>
OID	2.16.840.1.113730.3.1.764

### 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.

Note the effect of the preceding rule:

- If no rule is specified for `mailAllowedServiceAccess`, users are allowed access to all services from all clients.
- If an allow filter is explicitly specified for any service, users are denied access to all other services that are not specified.

For example, suppose you want to enable S/MIME for a domain. If you do not specify any allow filters or deny filters for `mailAllowedServiceAccess`, S/MIME is enabled.

Now suppose you specify an allow filter for the `pop` service. In this case, S/MIME is disabled until you also specify an allow filter for the `smime` service.

For a full explanation of access filters and an alternate way to control access through the administration console or the `configutil` utility, see [Configuring Client Access to POP, IMAP, and HTTP Services](#).

### Rule Syntax

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

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

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

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

Legal service names are: `imap`, `imaps`, `pop`, `pops`, `smtp`, `smtps`, `http`, and `smime`. Note that the MMP supports `imap`, `imaps`, `pop`, `pops`, and `smtp`, and `smime`. The back-end supports `imap`, `pop`, `smtp`, `http`, and `smime`.

`client_list` is a comma separated list of clients (domains) to which access is being granted or denied.

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

## Wild Cards

Wild cards	Meanings
ALL, *	The universal wild card. 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 wild card.
UNKNOWN	Matches any host whose name or address are unknown. Use this with care.

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

## Except Operator

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

The `EXCEPT` format is:

```
list 1 EXCEPT list 2
```

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

## Example

This example shows a single rule with multiple services and a single wild card 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 wild cards 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`.

## mailDomainCatchallAddress

Origin	Messaging Server 5.2
Syntax	cis, single-valued (RFC 822 mailbox)
Object Classes	<a href="#">mailDomain</a>
OID	Unknown

### Definition

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

The MTA option used to override this attribute's value is `LDAP_DOMAIN_ATTR_CATCHALL_ADDRESS`.

### Example

No example given.

## mailDomainConversionTag

Origin	Messaging Server 5.2
Syntax	cis, multi-valued (ASCII string)
Object Classes	<a href="#">mailDomain</a>
OID	Unknown

### Definition

Method of specifying unique conversion behavior for any user in the domain. A message sent to a user in this domain will match any conversion file entries that require the specified value of the tag. (Any string value can be associated with this attribute.)

Tag-specific conversion actions are specified in the MTA configuration.

The MTA option used to override this attribute's value is `LDAP_DOMAIN_ATTR_CONVERSION_TAG`.

### Example

No example given.

## mailDomainDiskQuota

Origin	Messaging Server 5.0
Syntax	integer, single-valued
Object Classes	<a href="#">mailDomain</a>
OID	2.16.840.1.113730.3.1.766

### Definition

Disk quota, in bytes, for all users in the domain. If domain quota enforcement is activated, then domains exceeding this quota stop receiving more messages until the domain messages no longer exceed the quota. Domain quota enforcement is activated using the command `imquotacheck -f -d <domain>`.

Valid numeric values for *mailDomainDiskQuota* are

`pos_num[G|M|K]` or `-1` or `-2`.

where `pos_num` is a positive number up to a maximum of 4294966272

and `G` (gigabytes), `M` (megabytes), and `K` (kilobytes) are the valid units of measurement.

You can specify the full quota value as a positive number by itself (for example, 20000000) or use a unit of measurement (for example, 20M).

The maximum *mailDomainDiskQuota* value is 4096G.

Specifying a *mailDomainDiskQuota* value of 0 will mean that no mail will be delivered.

You can also use the values shown in the following table.

#### ***mailDomainDiskQuota* Values**

Value	Meaning
-1	No limit on space usage allowed.
-2	Use system default quota.

### **Example**

To specify a quota of 4 gigabytes:

```
mailDomainDiskQuota: 4G
```

To specify the system default quota, do not add *mailDomainDiskQuota* to the LDAP entry. Or you can use the following value:

```
mailDomainDiskQuota: -2
```

### **mailDomainMsgMaxBlocks**

Origin	Messaging Server 5.2
Syntax	integer, single-valued
Object Classes	mailDomain
OID	Unknown

### **Definition**

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

The value of this attribute is overridden by the value of [mailMsgMaxBlocks](#), if set.



The MTA option used to override this attribute's value is `LDAP_DOMAIN_ATTR_BLOCKLIMIT`.

## Example

No example given.

## mailDomainMsgQuota

Origin	Messaging Server 5.0
Syntax	integer, single-valued
Object Classes	<a href="#">mailDomain</a>
OID	2.16.840.1.113730.3.1.767

## Definition

Quota of number of messages permitted for all users in this domain. If domain quota enforcement is activated, then the domain exceeding this quota will stop receiving more messages until the messages no longer exceed the quota. Domain quota enforcement is activated using the command `imquotacheck -f -d <domain>`.

## Example

```
mailDomainMsgQuota: 2000000
```

## mailDomainReportAddress

Origin	Messaging Server 5.2
Syntax	cis, single-valued (RFC 822 mailbox)
Object Classes	<a href="#">mailDomain</a>
OID	Unknown

## Definition

This value is used as the header `From:` address in DSN's 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 non-local addresses.

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

The MTA option used to override this attribute's value is `LDAP_DOMAIN_ATTR_REPORT_ADDRESS`.

## Example

No example given.

## mailDomainSieveRuleSource

Origin	Messaging Server 5.2
Syntax	cis, single-valued (RFC 3028 sieve filter)
Object Classes	<a href="#">mailDomain</a>
OID	Unknown

## Definition

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

A script has the following form:

```
require ["fileinto"];
# $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!" { discard; }
```

## Multi-valued Form

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

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

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

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

## MTA Override Option

The MTA option that overrides this attribute's value is `LDAP_DOMAIN_ATTR_FILTER`.

## Example

```

require ["fileinto","reject"];
if header :contains "Subject" "New Rules Suggestion" {
    redirect "rules@sesta.com"; # Forward message
}
if header :contains "Sender" "porn.com" {
    discard; # Discard the email, don't inform the sender
}
if size :over 1M {
    reject text: # Reject message, send multi-line reply back to sender.
    Please do not send large attachments.
    Put your file on a server and send the URL. Thank you.
.
;}
if header :contains "Sender" "domainadministrator@sesta.com" {
    fileinto "complaints.refs"; # File message into folder
}

```

## mailDomainStatus

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">mailDomain</a>
OID	2.16.840.1.113730.3.1.770

### Definition

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

The following table lists the status values:

#### **Status Values**

Value	Description
active	Mail service is marked as active for all users in this domain and all users in the domain that are marked active (see <code>inetUserStatus</code> and <code>mailUserStatus</code> for more information). However, any restrictions specified in <code>mailAllowedServiceAccess</code> and <code>mailDomainAllowedServiceAccess</code> 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.
disabled	Mail service for all users in the domain is disabled. All user login attempts are rejected and messages sent to users in this domain result in a permanent failure returned to the sending MTA with text specified by the <code>ERROR_TEST_DISABLED_USER</code> MTA option. If the option is not set, one of the following messages will be used: "user disabled; cannot receive new mail" or "group disabled; cannot receive new mail" (depending on whether it is a user or a group).
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 MTA's where the user mailboxes now reside.
overquota	The MTA will not accept new messages for any users in the domain until this value is changed back to active.
unused	Specifies that the MTA will ignore this domain. For this domain no email administrative authority is to be assumed. This attribute is used when a domain entry is not using messaging, but is using other applications.

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

The MTA option that overrides this attribute's values is `LDAP_DOMAIN_ATTR_STATUS`. The `LDAP_DOMAIN_ATTR_STATUS` option does not affect the message store or Delegated Administrator `commadmin` utility, which only recognize and use the current value of `mailDomainStatus`.

## Example

```
mailDomainStatus: active
```

## mailDomainWelcomeMessage

Origin	Messaging Server 6.0
Syntax	cis, single-valued
Object Classes	<a href="#">mailDomain</a>
OID	2.16.840.1.113730.3.1.765

## Definition

Welcome message sent to new users added to this domain. The message must contain a header and a message body. The message header must contain at least a subject line. The header and body are separated by a blank line. Enter the mail-domain welcome message on a single line. You must use a \$ (dollar sign) to represent a new line. To indicate a blank line, use \$\$ (two dollar signs).

You can use the following variables in the mail-domain welcome message:

[ID] The userid (message store user ID).

[URL] The url location specified with the `configutil` parameter, `gen.accounturl`. You can configure this parameter to point the user to, for example, the url of the administrative interface where the user can customize the client configuration.

## Example

The following example would be entered on a single line, even though it appears on this page on multiple lines:

```
mailDomainWelcomeMessage: From: postmaster@siroe.com$Subject: Welcome!$
Dear \
[ID],$Welcome to the mail system.$To customize your email preferences,
go to the following url:$$[URL]$$--postmaster@siroe.com
```

When the user anne logs in for the first time, the following sample mail-domain welcome message would be displayed (depending on the url configuration):

```
From: postmaster@siroe.com
Subject: Welcome!
To: anne@siroe.com
Date: Tue, 7 Nov 2006 10:10:04 --0800
MIME--Version 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Dear anne,
Welcome to the mail system.
To customize your email preferences, please go to the following url:
http://anne&#64;west.siroe.com:8080/bin/user/admin/bin/enduser
--postmaster@siroe.com
```

## mailEquivalentAddress

Origin	Messaging Server 5.2
Syntax	cis, multi-valued (RFC 822 addr-spec)
Object Classes	inetMailGroup, inetMailUser
OID	Unknown

## Definition

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

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

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

## Example

```
mailEquivalentAddress: jdoe@sesta.com
```

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

## mailFolderName

Origin	Messaging Server 6.2
Syntax	cis, single-valued
Object Classes	<a href="#">mailDomain</a> , <a href="#">mailPublicFolder</a>
OID	Unknown

## Definition

This attribute specifies the name of a public folder.

## Example

```
mailFolderName: Announcements
```

## mailForwardingAddress

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.17

## Definition

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

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

## Example

mailForwardingAddress: kokomo@sesta.com

## mailHost

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetLocalMailRecipient</a>
OID	2.16.840.1.113730.3.1.18

### Definition

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

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

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

The MTA option that overrides this attribute's value is `LDAP_MAILHOST`.

### Example

mailHost: mail.siroe.com

## mailMessageStore

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.19

### 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

## mailMsgMaxBlocks

Origin	Messaging Server 5.2
Syntax	integer, single-valued
Object Classes	<code>inetMailGroup</code> , <code>inetMailUser</code>
OID	Unknown

## Definition

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

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

The MTA option that overrides the attribute's value is `LDAP_BLOCKLIMIT`.

## Example

No example given.

## mailMsgQuota

Origin	Messaging Server 5.0
Syntax	ces, single-valued
Object Classes	<code>inetMailUser</code>
OID	2.16.840.1.113730.3.1.774

## Definition

Maximum number of messages permitted for a user is set with `mailMsgQuota`. This is a cumulative count for all folders in the store.

This attribute also can specify the number of messages allowed for a particular folder or message type.

Although `mailMsgQuota` is a single-valued attribute, you can use it to specify multiple quota values. You can set individual quota values for specific folders and message types. For details, see [Specifying Quotas for Folders and Message Types](#).

If the `mailMsgQuota` attribute is missing, the system default quota is used. This is defined by the `configutil` parameter `store.defaultmessagequota`.

During server configuration, quota enforcement must be turned on for `mailMsgQuota` to take effect. Both soft and hard quotas can be set. (See the *Sun Java System Messaging Server Administration Guide*.)

The MTA option override is `LDAP_MESSAGE_QUOTA`.

To specify a `mailMsgQuota` value for the user's entire mailbox tree, use the following format:

```
mailMsgQuota: msgquota
```



where

*msgquota* is the number of messages.

### ***msgquota* Values**

Valid values for *msgquota* are up to a maximum of 4294967292. Specifying a *msgquota* value of 0 will mean that no mail will be delivered. You can also use the values shown in the following table:

#### ***MsgQuota Values***

Value	Meaning
-1	No limit on number of messages allowed
-2	Use system default quota

### **Specifying Quotas for Folders and Message Types**

To enable the quotas for individual folders or specific message types, enable (set to "1") either the `store.folderquota.enable` or `store.typequota.enable` parameter.

To enable and configure message types, you also must enable the `configutil` parameter `store.message.type.enable` and configure other `configutil` parameters.

### **Guidelines for Specifying Multiple Quota Values**

You can specify the following `mailMsgQuota` values for a user's mailbox tree:

- Quota values for specific folders in the user's mailbox
- Quota values for specific message types such as voice mail or text messages. A message type quota applies to messages of that type in all folders in the user's mailbox.
- A default quota value that applies to all folders and message types in the user's mailbox that are not explicitly assigned quotas.

The following guidelines apply when you assign multiple quota values for a user:

- Quotas do not overlap. For example, when there is a quota for a particular message type or folder, messages of that type or messages in that folder are not counted toward the default quota. Each message counts toward one and only one quota.
- The total quota for the whole user mailbox equals the sum of the values of all the quotas specified by default, type, and folder.
- Message type quotas take precedence over folder quotas. For example, suppose one quota is specified for a user's `memos` folder and another quota is specified for voice messages. Now suppose the user stores eight voice messages in the `memos` folder. The eight messages are counted toward the voice-mail quota and excluded from the `memos` folder quota.

### **Formatting Quota Values for Folders and Message Types**

To specify `mailMsgQuota` values for folders or message types, use the following format:

```
mailMsgQuota: {msgquota} [ ; {name} % {msgquota} ] ...
```

where

*{msgquota}* is the number of messages. For a description of the valid numeric values, see [msgquota Values](#).

{*name*} is the name of the folder or message type.

The semicolon (";" ) is a separator that separates multiple quota values.

The percent sign ("%") associates a folder or message-type name with the quota value that follows it.

### Additional Formatting Guidelines for Quota Values

- The first {*msgquota*} in the syntax shown previously--that is, the first quota value entered after the `mailMsgQuota` attribute--does not have a name. This value represents the default quota for all folders in the user's mailbox that are not explicitly assigned quotas. The default value applies to all the unnamed folders combined, not individual folders.
- A message-type name starts with a pound sign ("#").
- A folder name does not start with a pound sign ("#").
- The "%" and "#" signs are not allowed in folder names or message-type names.

### Example

To specify a quota of 2,000 messages:

```
mailMsgQuota: 2000
```

To specify the system default quota, do not add `mailMsgQuota` to the LDAP entry. Or you can use the following value:

```
mailMsgQuota: -2
```

To specify a default quota of 2,000 messages for all user folders not explicitly assigned a quota; a voice-message quota of 100 messages; and a quota for the Archive folder of 4,000 messages:

```
mailMsgQuota: 2000;#voice%100;Archive%4000
```

In the preceding example, the 2,000 message default quota includes messages in all user folders except the Archive folder; it also excludes voice messages. The 100 message voice-mail quota includes voice messages in all user folders, including the Archive folder. The 4,000 message Archive-folder quota includes messages in the Archive folder and its subfolders; it includes messages of all types except voice messages.

## mailParentalControl

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax

cis, single-valued

### Object Class

[inetMailUser](#)

### Definition

Set to true when parental control is enabled for a user.

Messaging Server uses sieve rules to implement parental control (the ability of a family administrative account to specify mail delivery rules for one or more sub-accounts).

Parental control rules are stored in the family group entry (implemented by using `mailSieveRuleSource` as an attribute of the `inetManagedGroup` object class). When a head of family specifies parental control rules, the rules are transformed to sieve rules and stored in the family group entry.

When a sub-account is tagged for parental control, the DN of the family group entry is stored in the sub-account's user entry (implemented with the `mailSieveRuleRef` attribute). In addition, the `mailParentalControl` attribute is set to `true`.

Allowed values: true, false

Default value: false

## Example

```
mailParentalControl: true
```

## OID

oid-mailParentalControl

## mailProgramDeliveryInfo

Origin	Messaging Server 5.0
Syntax	ces, multi-valued
Object Classes	<a href="#">inetMailGroup</a> , <a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.20

## Definition

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

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

The program approval process is documented further in the *Sun Java System Messaging Server Administration Guide*.

The MTA option used to name a different attribute for this function is `LDAP_PROGRAM_INFO`.

## Example

```
mailProgramDeliveryInfo: procmail
```

## mailPublicFolderDefaultRights

Origin	Messaging Server 6.2
Syntax	cis, multi-valued
Object Classes	mailPublicFolder
OID	Unknown

### Definition

Specifies the access control rights granted for this public folder. Each value of this attribute consists of two parts separated by a space. The two parts are: an identifier, as specified in RFC 2086, and a list of access rights, `mod_rights`, as shown in the following table:

#### Access Rights for a Public Folder

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

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

```
anyone@domain
```

where *domain* is a valid domain.

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

```
anyone@domain lrs
```

where *domain* is a valid domain.

Group identifiers start with the prefix "group=". Do not put the group identifier prefix on a userid. The

message store's user creation code checks for this.

## Examples

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

## mailQuota

Origin	Messaging Server 5.0
Syntax	ces, single-valued
Object Classes	<a href="#">inetMailUser</a> , <a href="#">mailDomain</a>
OID	16.840.1.113730.3.1.21

### Definition

Specifies, in bytes, the amount of disk space allowed for the user's mailbox.

This attribute also can specify the amount of disk space allowed for a particular folder or message type.

Although `mailQuota` is a single-valued attribute, you can use it to specify multiple quota values. You can set individual quota values for specific folders and message types. For details, see [Specifying Quotas for Folders and Message Types](#).

For a description of the numeric values for specifying quotas, see [quota Values](#).

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



#### Note

`LDAP_DISK_QUOTA` is the MTA option used to specify a different attribute name for this function.

To specify a `mailQuota` value for the user's entire mailbox tree, use the following format:

```
mailQuota: quota
```

where

*quota* is the number of bytes or a number with a special meaning.

### quota Values

Valid numeric values for *quota* are

```
pos_num[G|M|K] or 0 or -1 or -2
```

where `pos_num` is a positive number up to a maximum of 4294967292

and G (gigabytes), M (megabytes), and K (kilobytes) are the valid units of measurement.

You can specify the full quota value as a positive number by itself (for example, 20000000) or use a unit of measurement (for example, 20M).

The maximum *quota* value of the user mailbox is 4294967292K.

You can also use the values shown in the following table.

#### **quota Values**

Value	Meaning
0	<b>No mail will be delivered</b>
-1	No limit on space usage allowed
-2	Use system default quota

### **Specifying Quotas for Folders and Message Types**

To enable the quotas for individual folders or specific message types, you must run the `configutil` command with the parameters `store.folderquota.enable` and `store.typequota.enable`.

To enable and configure message types, you also must enable the `configutil` parameter `store.message.type.enable` and configure other `configutil` parameters.

### **Guidelines for Specifying Multiple Quota Values**

You can specify the following `mailQuota` values for a user's mailbox tree:

- Quota values for specific folders in the user's mailbox
- Quota values for specific message types such as voice mail or text messages. A message type quota applies to messages of that type in all folders in the user's mailbox.
- A default quota value that applies to all folders and message types in the user's mailbox that are not explicitly assigned quotas.

The following guidelines apply when you assign multiple quota values for a user:

- Quotas do not overlap. For example, when there is a quota for a particular message type or folder, messages of that type or messages in that folder are not counted toward the default quota. Each message counts toward one and only one quota.
- The total quota for the whole user mailbox equals the sum of the values of all the quotas specified by default, type, and folder.
- Message type quotas take precedence over folder quotas. For example, suppose one quota is specified for a user's `memos` folder and another quota is specified for voice messages. Now suppose the user stores eight voice messages in the `memos` folder. The eight messages are counted toward the voice-mail quota and excluded from the `memos` folder quota.

### **Formatting Quota Values for Folders and Message Types**

To specify `mailQuota` values for folders or message types, use the following format:

```
mailQuota: {quota} [ ; {name} % {quota} ] ...
```

where

{*quota*} is the number of bytes. For a description of the allowed numeric values, see [quota Values](#).

{*name*} is the name of the folder or message type.

The semicolon (";" ) is a separator that separates multiple quota values.

The percent sign ("%") associates a folder or message-type name with the quota value that follows it.

### Additional Formatting Guidelines for Quota Values

- The first {*quota*} in the syntax shown above--that is, the first quota value entered after the `mailQuota` attribute--does not have a name. This value represents the default quota for all folders in the user's mailbox that are not explicitly assigned quotas. The default value applies to all the unnamed folders combined, not individual folders.
- A message-type name starts with a pound sign ("#").
- A folder name does not start with a pound sign ("#").
- The "%" and "#" signs are not allowed in folder names or message-type names.

### Example

To specify a quota of 4 gigabytes for the user mailbox:

```
mailQuota: 4G
```

To specify the system default quota, do not add `mailQuota` to the LDAP entry. Or you can use the following value:

```
mailQuota: -2
```

To specify a 20 MB default quota for all user folders not explicitly assigned a quota; a 10 MB voice-message quota; and a 100 MB quota for the Archive folder:

```
mailQuota: 20M;#voice%10M;Archive%100M
```

In the preceding example, the 20 MB default quota includes messages in all user folders except the Archive folder; it also excludes voice messages. The 10 MB voice-message quota includes voice messages in all user folders, including the Archive folder. The 100 MB Archive folder quota includes messages in the Archive folder and its subfolders; it includes messages of all types except voice messages.

### mailRoutingAddress

Origin	Messaging Server 5.0
Syntax	single-valued
Object Classes	<a href="#">inetLocalMailRecipient</a>
OID	2.16.840.1.113730.3.1.24

### Definition

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



#### Note

`LDAP_ROUTING_ADDRESS` is the MTA option used to specify a different attribute name for this function.

### Example

No example given.

### mailRoutingHosts

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<code>mailDomain</code>
OID	2.16.840.1.113730.3.1.759

### Definition

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

When a domain is found to be non-local, the use of this attribute depends on the value of the MTA option `ROUTE_TO_ROUTING_HOST`:

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

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

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

`LDAP_DOMAIN_AATR_ROUTING_HOSTS` is the MTA option used to specify a different attribute name for this function.

### Example

```
mailRoutingHosts: mail.siroe.com
```



## mailRoutingSmartHost

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">mailDomain</a>
OID	2.16.840.1.113730.3.1.760

### Definition

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



#### Note

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

### Example

```
mailRoutingSmartHost: mail.siroe.com
```

```
mailRoutingSmartHost: 129.148.12.141
```

## mailSieveRuleRef

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax

dn, single-valued

### Object Class

[inetMailUser](#)

### Definition

Specifies the DN of an LDAP entry. The referenced LDAP entry can contain additional mail filters in the entry's `mailSieveRuleSource` attribute. Sieve rules specified in the referenced LDAP entry are applied before sieve rules specified in this user entry. This reference is used only when the `mailParentalControl` attribute is set to `true`.

### Example

mailSieveRuleRef: cn=Sample Family  
Group,o=groups,o=Residential,o=userGroupRoot

## OID

oid-mailSieveRuleRef

## mailSieveRuleSource

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">inetMailUser</a> , <a href="#">inetManagedGroup</a> , <a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.775

## Definition

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



### Note

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

The script is applied when a message is ready to be enqueued to the delivery channel.

A script has the following form:

```
require ["fileinto"];
# 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!"
{ discard; }
```

## MTA Option

The MTA option used to name a different attribute for this function is `LDAP_FILTER`.

## Example

```

require ["fileinto", "reject"];
if header :contains "Subject" "New Rules Suggestion" {
    redirect "rules@sesta.com"; # Forward message
}
if header :contains "Sender" "porn.com" {
    discard; # Discard the email, don't inform the sender
}
if size :over 1M {
    reject text: # Reject message, send multi-line reply back to sender.
    Please do not send large attachments.
    Put your file on a server and send the URL. Thank you.
.
;}
if header :contains "Sender" "barkley@sesta.com" {
    fileinto "complaints.refs"; # File message into folder
}

```

## mailSMTPSubmitChannel

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.776

### Definition

Specifies source channel to use (switch) when the user submits messages.

Most commonly, this attribute is used to set up guaranteed message delivery, or other special classes of service. When defined, this attribute tells the MTA to consider the specified channel to be the effective submission channel (ie, the source channel will be switched to the specified channel), if SMTP AUTH is successful. SMTP authentication is required to determine it is this user and thereby find this attribute.

For mailSMTPSubmitChannel to work, the current source channel must have the `saslswitchchannel` keyword. Connections originating on the `tcp_local` or `tcp_intranet` channels will work by default because those have `saslswitchchannel tcp_auth`. For connections originating on the `tcp_submit` channel, you will need to add `saslswitchchannel tcp_submit` on the `tcp_submit` channel, if it does not already have it.

For switching based on the MAIL FROM address, see the `userswitchchannel` channel option.

### Example

```
mailSMTPSubmitChannel: tcp_tas
```

## mailUserStatus

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.778

## Definition

Current status of the mail user. Can be one of the values in the following table:

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

### ***Mail User Status***

Status Value	Description
active	Normal state. If <code>inetUserStatus</code> is also active, then mail is processed as per the values stored in other user attributes (such as <code>mailDeliveryOption</code> , <code>mailSieveRuleSource</code> , and so on). If not set to active, the status from <code>inetUserStatus</code> takes precedence. Other status attributes taken into consideration are <code>inetDomainStatus</code> and <code>mailDomainStatus</code> . If the combination of <code>inetDomainStatus</code> and <code>mailDomainStatus</code> permits mail delivery and access for the domain, the user state is determined from <code>inetUserStatus</code> and <code>mailUserStatus</code> .
inactive	The user's mail account is inactive. A transient failure is returned to the sending MTA.
disabled	User's mail account is disabled. Messages sent to the user result in a permanent failure returned to the sending MTA with text specified by the <code>ERROR_TEST_DISABLED_USER</code> MTA option. If option is not set, the message "user disabled; cannot receive new mail" will be used.
deleted	The user's mail account is marked to be deleted from the message store. A permanent failure is returned to the sending MTA and the user's mail account is a candidate for cleanup by the <code>msuser purge</code> utility. User access to the mailbox is blocked. After <code>msuser purge</code> deletes the mail account from the message store, it sets the value of <code>mailUserStatus</code> to <code>removed</code> .
deliver	A <code>mailUserStatus</code> of <code>deliver</code> is now treated by the MTA as equivalent to <code>active</code> . This new status settings allows mail delivery to continue uninterrupted while effectively locking the user out their account (because other components will treat <code>deliver</code> the same way as <code>inactive</code> ). (Feature introduced in Messaging Server 7 Update 3.)
removed	Indicates that the resource (mailbox) associated with this entry has been removed. In addition, the user entry itself is marked to be deleted from the LDAP directory. A permanent failure is returned to the sending MTA. User access to the mailbox is blocked. This setting allows the Delegated Administrator <code>commadmin domain purge</code> command to delete the user entry from the LDAP directory.
hold	User's mail is sent to the hold queue and access to the mailbox over IMAP, POP, and HTTP is disallowed. MTA and Message Access Servers on the store server must comply with this requirement. This setting overrides any other <code>mailDeliveryOption</code> settings. Messages places in the <code>hold</code> channel queue will be <i>held</i> , meaning they are renamed to the <code>.HELD</code> extension and will not be retried without administrative intervention - see the <code>qm release</code> command.
overquota	The MTA will not deliver mail to a mailbox with this status.
defer	Used by <code>rehostuser</code> to prevent user from logging in, like <code>hold</code> , but causes mail to be placed in the <code>reprocess</code> queue and retried automatically as per the <code>backoff</code> option.
defer-submit	Same as <code>defer</code> , but only for message submission (ie, messages arriving via channels with the <code>submit</code> keyword, like <code>tcp_submit</code> ). This allows mail from local senders to be accepted into the <code>reprocess</code> channel queue while mail from external users is rejected with a transient failure so the remote MTA will retain the message and retry later.

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

**Note**

LDAP\_USER\_STATUS is the MTA option that overrides the `mailUserStatus` attribute. The LDAP\_USER\_STATUS option does not affect the message store or Delegated Administrator `commadmin` utility, which only recognize and use the current value of `mailUserStatus`.

**Example**

```
mailUserStatus: active
```

**maxPabEntries**

Origin	Messaging Server 5.0
Syntax	integer, single-valued
Object Classes	<code>ipUser</code>
OID	2.16.840.1.113730.3.1.705

**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
```

**memberOf**

Origin	Messaging Server 5.0, deprecated in Messaging Server 6.0 for <code>inetUser</code> ; Access Manager
Syntax	<code>dn</code> , multi-valued
Object Classes	<code>inetAdmin</code> , <code>inetUser</code>
OID	1.2.840.113556.1.2.102

**Definition**

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

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

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

## Example

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

## memberOfPAB

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">pabPerson</a> , <a href="#">pabGroup</a>
OID	2.16.840.1.113730.3.1.718

## Definition

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

## Example

`memberOfPAB: addressbook122FA7`

## memberOfPABGroup

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">pabPerson</a>
OID	2.16.840.1.113730.3.1.719

## Definition

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

## Example

`memberOfPabGroup: testgroup15577F2D`

## memberURL

Origin	LDAP/Messaging Server 5.2
Syntax	ces, multi-valued
Object Classes	<a href="#">groupOfURLs</a>
OID	2.16.840.1.113730.3.1.198

## Definition

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

This is the preferred way to specify a dynamic mailing list. Alternately, you can use [mgrpDeliverTo](#).

The MTA option used to override this attribute's value is `LDAP_GROUP_URL2`.

This attribute is used by Delegated Administrator 6.4 for to store the ldap: URLs of "Dynamic Members".

## Example

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

## mgrpAddHeader

Origin	Messaging Server
Syntax	ces, multi-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.781

## Definition

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

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



### Note

`LDAP_ADD_HEADER` is the MTA option used to specify a different attribute name for this function.

## Example

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

## mgrpAllowedBroadcaster

Origin	Messaging Server 5.0
Syntax	ces, multi-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.22

## Definition

Identifies mail users allowed to send messages to the mail group. The purpose of this attribute is to restrict who can send messages to the mail group. If no instances of this attribute exist on the `inetMailGroup` entry, there are no restrictions on who can send messages to the mail group unless the `mgrpAllowedDomain`, `mgrpDisallowedDomain`, and `mgrpDisAllowedBroadcaster` attributes are used.



The Messaging Server expects this attribute to contain either a distinguished name or an RFC822address using an LDAP URI or a `mailto` address (see example). If a distinguished name is used, it must represent a mailable entry or entries of type `group` or `groupOfUniqueNames`. (That is, the group entry must contain an email address in one of the following attributes: `mail`, `mailAlternateAddress`, `mailEquivalentAddress`.)

If multi-valued, each URL or DN 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.

Any email addresses specified are expanded as if they are a mailing list. Unlike a mailing list, this expansion includes all the attributes used to store email addresses (normally `mail`, `mailAlternateAddress`, and `mailEquivalentAddress`). Thus, if an address for the list itself is specified as a `mgrpAllowedBroadcaster`, a user can subscribe to a restricted list using one address and use an alternate address to send messages to the list.

If none of the attribute values is a valid URL, or none of the members of the group specified in the attribute value have a valid URL, the message will bounce or be directed to a moderator (as determined by the `mgrpMsgRejectAction` attribute).

You can specify metacharacter substitutions in this attribute. In particular, the address-related metacharacter sequences (`$A` for the entire address, `$U` for the mailbox part, `$D` for the domain part) refer to the current envelope "from" address and can in some cases be used to limit the results returned by the URL to entries that are likely (or guaranteed) to match. This may make authorization checks more efficient.

Suppose you define a dynamic list through an LDAP lookup where anyone on the list is allowed to post to the mailing group. For example:

```
mgrpAllowedBroadcaster:  
ldap:///o=Sesta,c=US??sub?(&(objectClass=inetMailUser)  
(objectClass=inetOrgPerson))
```

The effect of this definition is to expand the whole list for the authorization check. However, if you add a restriction so only entries containing the current envelope "from" address are returned to the authorization check, the operation may be much more efficient:

```
mgrpAllowedBroadcaster:  
ldap:///o=Sesta,c=US??sub?(&(objectClass=inetMailUser)  
(objectClass=inetOrgPerson)(mail=$A))
```

In this case, only the sender's entry is checked for broadcast authorization. In the preceding example, all the mail user entries in the Sesta US domain are checked.

To enable metacharacter substitutions, you must enable the MTA option `PROCESS_SUBSTITUTIONS`. For details about this option, see the *Sun Java System Messaging Server Administration Guide*.



**Note**

`LDAP_AUTH_URL` is the MTA option used to specify a different attribute name for this function.

## Example

```
mgrpAllowedBroadcaster: uid=bjensen,o=siroe.com
mgrpAllowedBroadcaster: ldap:///uid=bjensen,o=siroe.com
mgrpAllowedBroadcaster:mailto:group1@siroe.com
mgrpAllowedBroadcaster:
ldap:///o=Sesta,c=US??sub?(&!(objectClass=inetMailUser)
(objectClass=inetOrgPerson)(mail=$A)
```

## mgrpAllowedDomain

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.23

### Definition

Identifies domains or subdomains from which users are allowed to send messages to the mail group. Note that glob-style wild carding can be used in the domains. In other words, any part of the domain specification can be wild carded.

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.



#### Note

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

### Examples

`mgrpAllowedDomain:siroe.com` will only match the `siroe.com` domain.

`mgrpAllowedDomain:*.siroe.com` will match any subdomain of the `siroe.com` domain.

`mgrpAllowedDomain:*.com` will match any `*.com` domain.

`mgrpAllowedDomain:siroe.*` will match any top-level domain beginning with `siroe`.

## mgrpAuthPassword

Origin	Messaging Server 5.0
Syntax	ces, single-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.783

### Definition

Specifies a password needed to post to the list.

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

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



#### Note

`LDAP_AUTH_PASSWORD` is the MTA option used to specify a different attribute name for this function.

## mgrpBroadcasterPolicy

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	inetMailGroup
OID	2.16.840.1.113730.3.1.3

### Definition

Policy for determining allowed broadcaster. It specifies the level of authentication required to verify that the sender matches value of the `mgrpAllowedBroadcaster` attribute and is therefore allowed to send to the list. The allowed values are:

- `AUTH_REQ`, `SMTP_AUTH_REQUIRED`  
In order to post to the list, the sender must be authenticated using the `SMTP AUTH` command.
- `PASSWORD_REQUIRED`, `PASSWD_REQUIRED`, `PASSWD_REQ`  
All values mean the password to the broadcaster list, specified by the `mgrpAuthPassword` attribute, must appear in an `Approved:` header field in the message.
- `NO_REQUIREMENTS`  
This value means no special requirements apply.



#### Note

`LDAP_AUTH_POLICY` is the MTA option used to specify a different attribute name for this function.

### Example

```
mgrpBroadcasterPolicy: AUTH_REQ
```

## mgrpDeliverTo

Origin	Messaging Server 5.0
Syntax	ces, multi-valued
Object Classes	inetMailGroup
OID	2.16.840.1.113730.3.1.25

## Definition

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

The preferred attribute to use for specifying dynamic mail group is [memberURL](#).

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

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



### Note

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

## Example

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

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

## mgrpDisallowedBroadcaster

Origin	Messaging Server 5.0
Syntax	ces, multi-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.785

## Definition

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

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

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

You can specify metacharacter substitutions in this attribute. In particular, the address-related metacharacter sequences (\$A for the entire address, \$U for the mailbox part, \$D for the domain part) refer to the current envelope "from" address and can in some cases be used to limit the results returned by the URL to entries that are likely (or guaranteed) to match. This may make authorization checks more efficient.

Suppose you define a dynamic list through an LDAP lookup where everyone on the list is prohibited from posting to the mailing group. For example:

```
mgrpDisallowedBroadcaster:  
ldap:///o=Sesta,c=US??sub?(&(objectClass=inetMailUser)  
(objectClass=inetOrgPerson))
```

The effect of this definition is to expand the whole list for the authorization check. However, if you add a restriction so only entries containing the current envelope "from" address are returned to the authorization check, the operation may be much more efficient:

```
mgrpDisallowedBroadcaster:  
ldap:///o=Sesta,c=US??sub?(&(objectClass=inetMailUser)  
(objectClass=inetOrgPerson)(mail=$A))
```

In this case, only the sender's entry is checked for broadcast authorization and prevented from posting the message. In the preceding example, all the mail user entries in the Sesta US domain are checked.

To enable metacharacter substitutions, you must enable the MTA option `PROCESS_SUBSTITUTIONS`. For details about this option, see the *Sun Java System Messaging Server Administration Guide*.



#### Note

`LDAP_CANT_URL` is the MTA option used to specify a different attribute name for this function.

## Example

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

```
mgrpDisallowedBroadcaster: sys50@sesta.com
```

```
mgrpDisallowedBroadcaster:  
ldap:///o=Sesta,c=US??sub?(&(objectClass=inetMailUser)  
(objectClass=inetOrgPerson)(mail=$A))
```

## mgrpDisallowedDomain

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.784

## Definition

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



#### Note

`LDAP_CANT_DOMAIN` is the MTA option used to specify a different attribute name for this function.

## Example

```
mgrpDisallowedDomain:sesta.com
```

## mgrpErrorsTo

Origin	Messaging Server 5.0
Syntax	ces, single-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.26

## Definition

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

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



#### Note

`LDAP_ERRORS_TO` is the MTA option used to specify a different attribute name for this function.

## Examples:

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

## mgrpModerator

Origin	Messaging Server 5.0
Syntax	ces, multi-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.33

## Definition

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

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

You can specify metacharacter substitutions in this attribute. In particular, the address-related metacharacter sequences (\$A for the entire address, \$U for the mailbox part, \$D for the domain part) refer to the current envelope "from" address and can in some cases be used to limit the results returned by the URL to entries that are likely (or guaranteed) to match. This may make authorization checks more efficient.

To enable metacharacter substitutions, you must enable the MTA option `PROCESS_SUBSTITUTIONS`. For details about this option, see the *Sun Java System Messaging Server Administration Guide*.



### Note

`LDAP_MODERATOR_URL` is the MTA option used to specify a different attribute name for this function.

## Example

```
mgrpModerator: [jordan@sesta.com|mailto:jordan@sesta.com]
```

## mgrpMsgMaxSize

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.3

## Definition

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

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



### Note

`LDAP_ATTR_MAXIMUM_MESSAGE_SIZE` is the MTA option used to specify a different attribute name for this function.

## Example

`mgrpMsgMaxSize:8000`

## mgrpMsgPrefixText

Origin	Messaging Server 6.0.
Syntax	UTF-8 text, single-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	Unknown

## Definition

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



### Note

`LDAP_PREFIX_TEXT` is the MTA option used to specify a different attribute name for this function.

The prefix text is inserted in the body of a message that is text-only. If a message is not text-only, the prefix text is not added.

## Example

No example given.

## mgrpMsgRejectAction

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.28

## Definition

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

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

This attribute takes two values: `reply` and `toModerator`:

`reply`-- The system produces an SMTP error, which is also the default if the attribute is not set. The text of the failure notice is stored in the [mgrpMsgRejectText](#) attribute.



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

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

## Example

```
mgrpMsgRejectAction: reply
```

## mgrpMsgRejectText

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.29

## Definition

Specifies the error text to use in the 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

No example given.

## mgrpMsgSuffixText

Origin	Messaging Server 6.0
Syntax	UTF-8 text, single-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	Unknown

## Definition

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

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

The suffix text is inserted in the body of a message that is text-only. If a message is not text-only, the suffix text is not added.

## Example

No example given.

## mgrpNoDuplicateChecks

Origin	Messaging Server 5.0, not implemented going forward for Messaging Server 5.2
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.789

## 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
```

## mgrpRemoveHeader

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.801

## Definition

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

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



### Note

`LDAP_REMOVE_HEADER` is the MTA option used to specify a different attribute name for this function.

## Example

No example given.

## mgrpRequestTo

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

## mgrpRFC822MailMember

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">inetMailGroup</a>
OID	2.16.840.1.113730.3.1.30

### 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 is used to represent mail recipients by their canonical RFC 822 mail addresses. Also see the `uniqueMember` attribute.



#### Note

For backwards compatibility, `rfc822MailMember` is also supported. You can use either one or the other of these attributes in any given group, but not both. `LDAP_GROUP_RFC822` is the MTA option used to specify a different attribute name for this function.

NOTE: When calendar server sends notifications to a group, the notification is not sent to any recipients using `mgrpRFC822MailMember`, only `uniqueMember` and `memberURL`.

### Example

```
mgrpRFC822MailMember:bjensen@siroe.com
```

## msgVanityDomain

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">msgVanityDomainUser</a>
OID	2.16.840.1.113730.3.1.799

### Definition

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

### Example

No example given.

## multiLineDescription

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">inetMailUser</a>
OID	1.3.6.1.4.1.250.1.2

### 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.
```

## nabDomainAcl

For use with cross-domain access.

Origin	Contacts Server 8.0
Syntax	cis, single-valued, ASCII
Object Classes	<a href="#">nabDomain</a>
OID	2.16.840.1.113894.1009.1.108.0.1002.1.1

## nabDomainNames

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

Origin	Contacts Server 8.0
Syntax	cis, multi-valued, ASCII
Object Classes	<a href="#">nabDomain</a>
OID	2.16.840.1.113894.1009.1.108.0.1003.1.1

## nabStatus

Absence of this attribute or a value of `active` indicates active status. A value of `removed`, `deleted`, or `inactive` disables the Contacts Server service. Any other value enables the service, but this is not recommended.

Origin	Contacts Server 8.0
Syntax	cis, single-valued
Object Classes	<a href="#">nabUser</a>
OID	2.16.840.1.113894.1009.1.108.0.1001.1.1

## nabStore

Indicates the Contacts Server back-end host on which a user's data resides, if the deployment uses multiple back-end hosts.

Origin	Contacts Server 8.0
Syntax	cis, single-valued
Object Classes	<a href="#">nabUser</a>
OID	2.16.840.1.113894.1009.1.108.0.1004.1.1

## nickName

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">pabPerson</a> , <a href="#">pabGroup</a>
OID	2.16.840.1.113730.3.1.720

### Definition

Identifies the short name used to locate a [pabPerson](#) or a [pabGroup](#) entry.

### Example

```
nickname:Nick
```

## nswcalDisallowAccess

Origin	Netscape™ Calendar Hosting Server
Syntax	cis, single
Object Classes	<a href="#">icsCalendarUser</a>
OID	2.16.840.1.113730.3.1.539

### Definition

Lists the calendar protocols not allowed to be used by this user. Used by Calendar Server 6 but not Calendar Server 7.

### Example

No example given.

## nswmExtendedUserPrefs

Origin	Messaging Server 5.0
Syntax	cis, multi-valued
Object Classes	<a href="#">inetMailUser</a>
OID	2.16.840.1.113730.3.1.520

## Definition

This attribute holds the pairs that define client user 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=OtisFanning$ofanning@sesta.com`

Example 5: `nswmExtendedUserPrefs: meDraftFolder=Drafts`

## O

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">pabPerson</a>
OID	2.5.4.10

## Definition

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

## Example

`organizationName:Company22 Incorporated`

or

`o:Company22 Incorporated`

## objectClass

Origin	Messaging Server 5.0
Syntax	cis
Object Classes	<a href="#">inetAdmin</a> , <a href="#">organization</a>
OID	2.5.4.0

## Definition

Specifies the objects for this object class.

## Example

```
objectClass:person
```

## organizationName (see o)

All information about this attribute found under `o`.

## organizationUnitName (see ou)

All information about this attribute found under `ou`.

## ou

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">organizationalUnit</a> , <a href="#">pabPerson</a>
OID	2.16.840.1.113730.3.1.722

## Definition

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

## Example

```
organizationUnitName:docs
```

or

```
ou:docs
```

## owner

Origin	Messaging Server 5.0, Calendar Server
Syntax	dn, single-valued
Object Classes	<a href="#">groupOfUniqueNames</a> , <a href="#">icsCalendarResource</a>
OID	2.5.4.32

## Definition

Identifies the distinguished name (DN) of the person or group with administrative privileges over the entry. For any resource entry, it defines the owner of the resource.

If the group has Calendar service (is a Calendar group), the owner must be a Calendar user or group in the same domain as the entry. That is, Calendar service must be assigned to the owner as well as the Calendar group.

## Example

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

## pabURI

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">ipUser</a>
OID	2.16.840.1.113730.3.1.703

## 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
```

## parentOrganization

Origin	Server 6.0, Calendar Server 6.0
Syntax	cis, single-valued
Object Classes	<a href="#">sunManagedSubOrganization</a>
OID	Unknown

## Definition



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

### Example

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

### postalAddress

Origin	LDAP
Syntax	cis
Object Classes	<a href="#">icsCalendarResource</a> , <a href="#">organization</a> , <a href="#">organizationalUnit</a>
OID	2.5.4.16

### 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
```

### preferredLanguage

Origin	Messaging Server 5.0, Calendar Server, Directory Server
Syntax	RFC 2798, cis, single-valued
Object Classes	<a href="#">icsCalendarUser</a> , <a href="#">inetMailGroup</a> , <a href="#">inetOrgPerson</a> , <a href="#">iPlanetPreferences</a> , <a href="#">mailDomain</a>
OID	2.16.840.1.113730.3.1.39

### Definition

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

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

Also used by Access Manager in user LDAP entries to store a user's preferred language. Note that only Access Manager uses the `iPlanetPreferences` object class to host this attribute.

#### **Language Strings for preferredLanguage Attribute**

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

#### **Example**

```
preferredLanguage:en
```

#### **preferredMailHost**

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">mailDomain</a>
OID	2.16.840.1.113730.3.1.761

#### **Definition**

If you are provisioning an LDAP Schema 2 directory with Communications Suite Delegated Administrator:

See [preferredMailHost](#) for a definition of how to use this attribute with Schema 2.

If you are provisioning an LDAP Schema 1 directory with iPlanet Delegated Administrator, use the following definition:

Used to set the `mailHost` attribute of newly created users in this mail domain. When a user is created, the `mailHost` attribute of the user entry is filled by the value of `preferredMailHost`.

#### **Example**

```
preferredMailHost:mail.siroe.com
```

#### **preferredMailMessageStore**

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">mailDomain</a>
OID	2.16.840.1.113730.3.1.762

## Definition

If you are provisioning an LDAP Schema 2 directory with Communications Suite Delegated Administrator:

See [preferredMailMessageStore](#) for a definition of how to use this attribute with Schema 2.

If you are provisioning an LDAP Schema 1 directory with iPlanet Delegated Administrator, use the following definition:

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

## Example

```
preferredMailMessageStore: primary
```

## psIncludeInGAB

### Origin

Messaging Server 6 2006Q2; Communications Suite Delegated Administrator

### Syntax

cis, single-valued

### Object Class

[ipUser](#)

## Definition

Includes this user in the Global Address Book (GAB) and gives this user access to the Global Address Book.

Allowed values: `true`, `false`

Default value: `true`

## Example

```
psIncludeInGAB: false
```

## OID

oid-psIncludeInGAB

## seeAlso

Origin	LDAP
Syntax	dn
Object Classes	<a href="#">groupOfUniqueNames</a> , <a href="#">organization</a> , <a href="#">organizationalUnit</a>
OID	2.5.4.34

## 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`

## sn

Origin	LDAP
Syntax	cis
Object Classes	<a href="#">icsCalendarUser</a>
OID	2.5.4.4

## Definition

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

## Example

surname: jones

## telephoneNumber

Origin	LDAP
Syntax	tel
Object Classes	<a href="#">domain</a> , <a href="#">organization</a> , <a href="#">organizationalUnit</a>
OID	2.5.4.20

## Definition

Identifies the entry's phone number.

## Example

telephoneNumber:800-555-1212

## uid

Origin	Calendar Server 5.0, Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">icsCalendarResource</a> , <a href="#">icsCalendarUser</a>
OID	0.9.2342.19200300.100.1.1

### Definition

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

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

### Example

`uid: jdoe`

## un

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">pabPerson</a> , <a href="#">pabGroup</a> , <a href="#">pab</a>
OID	2.16.840.1.113730.3.1.717

### 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`

## uniqueMember

Origin	Messaging Server 5.0
Syntax	dn, multi-valued
Object Classes	<a href="#">groupOfUniqueNames</a>
OID	2.5.4.50

## Definition

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

### Note

Contrary to what its name seems to imply, the `uniqueMember` is not restricted to specifying the DN of an individual user object, although that is a valid and perhaps normal usage. The `uniqueMember` attribute can specify the DN of a container and thereby include an entire subtree. For this reason, each object specified by a `uniqueMember` attribute is looked up again. See the `GROUP_DN_TEMPLATE` MTA option and the discussion of `uniqueMember` in [Group Expansion Attributes](#).

## Example

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

## Delegated Administrator

When a user is added to a group (via `-m`), the relationship is also documented in the user entry. `iplanet-am-static-group-dn` in user points to group (dn).

## userId (see uid)

All information for this attribute found at `uid`.

## userPassword

Origin	Messaging Server 5.0
Syntax	bin, single-valued Even though RFC 2256 defines this attribute as multi-valued, for Sun Java™ System products, only one value is allowed.
Object Classes	<a href="#">inetUser</a> , <a href="#">domain</a> , <a href="#">organization</a> , <a href="#">organizationalUnit</a>
OID	2.5.4.35

## 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

## vacationEndDate

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">userPresenceProfile</a>
OID	2.16.840.1.113730.3.1.708

### 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.

The webmail interfaces set the value to "the last minute of this day, in the local time zone". For Messaging Express and Convergence, the local timezone is the timezone of the browser (OS). For Communications Express, the time zone is the sunuctimezone (set in the Options > Global > Time Zone UI).

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.

This value is only used with "mailAutoReplyMode: reply"

### Example

```
vacationEndDate:20000220000000Z
```

## vacationStartDate

Origin	Messaging Server 5.0
Syntax	cis, single-valued
Object Classes	<a href="#">userPresenceProfile</a>
OID	2.16.840.1.113730.3.1.707

### 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.

The webmail interfaces set the value to "midnight of this day, in the local time zone". For Messaging Express and Convergence, the local timezone is the timezone of the browser (OS). For Communications Express, the time zone is the sunuctimezone (set in the Options > Global > Time Zone UI).

This value is only used with "mailAutoReplyMode: reply"

## Example

```
vacationStartDate:20000215000000Z
```

## mgrpErrorsTo

Origin	Messaging Server
Syntax	cis, single-valued
Object Classes	inetMailGroup
OID	2.16.840.1.113730.3.1.26

## Definition

The `mgrpErrorsTo` attribute specifies either an email address or a URL, which is resolved to produce an address. The address is placed in the MAIL FROM (envelope from) field of all messages the list produces. Additionally, the presence of the `mgrpErrorsTo` attribute causes the MTA to treat the group as a full-fledged mailing list and not as a simple autoforwarder. The basic purpose of the MAIL FROM address is to create a place to send reports of message delivery problems. As such, the main effect of `mgrpErrorsTo` is to cause errors delivering list mail to be directed to the `mgrpErrorsTo` address.

## Example

```
mgrpErrorsTo: mgrperrors.log@siroe.com
```



# Chapter 10. Personal Address Book LDAP Object Classes and Attributes

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## Personal Address Book LDAP Object Classes and Attributes

This information describes LDAP object classes and attributes for the Personal Address Book used by Convergence and Communications Express.

Topics:

- [Object Classes for Personal Address Book](#)
- [Attributes for Personal Address Book](#)

### Object Classes for Personal Address Book

These object classes describe the attributes used in the entry which serves as the base of every user's Personal Store (Address Book collection). Root entries for a user's address book store are created using the structural object class. The following object classes are used to create address book entries. These object classes include nodes for creating the address book store, contact entries, group entries, and resource entries.

- piStoreRoot
- piTypeBook
- piRemoteBook
- piEntry
- piTypePerson
- piTypeGroup
- piTypeABConferenceRoom
- sunUCPreferences

#### piStoreRoot

##### Supported by

Communications Express 6.2

##### Definition

Used to create the root node of an address book store root node for a user.

##### Superior Class

top

##### Object Class Type

structural

##### OID

Unknown

### **Required Attributes**

piPStoreOwner

### **Allowed Attributes**

piMaxStoreEntries, piDefaultAB, lastPurgeDate

## **piTypeBook**

### **Supported by**

Messaging Server 6.0 with LDAP Schema 2

### **Definition**

Used to create a basic address book entry. This entry is extended by piAddressBook and piLocalBook object classes.

### **Superior Class**

top

### **Object Class Type**

structural

### **OID**

Unknown

### **Required Attributes**

piEntryID, piBookType

### **Allowed Attributes**

displayName, multilineDescription, piLastModifiedBy

## **piLocalBook**

### **Definition**

Used to store the access control values for an address book entry and book type. This class is typically used to extend an address book node created using piAddressBook object class and the attributes are used to specify access control granted by a user to other users.

### **Superior Class**

piTypeBook

### **Object Class Type**

auxiliary

## **OID**

Unknown

## **Required Attributes**

None

## **Allowed Attributes**

[piReader](#), [piWriter](#), [piDeleter](#), [piCreator](#), [abBookType](#)

## **piRemoteBook**

### **Definition**

Used to store the attributes necessary for a remote address book server. These are typically corporate address books shared by users and have shared and read-only access.

### **Superior Class**

[piTypeBook](#)

### **Object Class Type**

auxiliary

## **OID**

Unknown

## **Required Attributes**

[piRemotePiURL](#)

## **Allowed Attributes**

None

## **piEntry**

### **Definition**

All address book entries are created using this structural object class. The basic entry can be further extended by specific object classes for users (to represent an individual contact entry) and groups (to represent an address book group).

### **Superior Class**

top

### **Object Class Type**

structural

## OID

Unknown

## Required Attributes

piEntryID

## Allowed Attributes

displayName, memberOfPIGroup, multilineDescription, piLastModifiedBy, memberOfPIBook, deleted, piPEntryXMLData, piPEntryTextData, attachment

## piTypePerson

### Definition

Used to extend the base entry created by piEntry. Entries extended using this object class are used to represent an individual contact entry.

### Superior Class

piEntry

### Object Class Type

structural

## OID

Unknown

## Required Attributes

None

## Allowed Attributes

piBackPointer, givenName, sn, middleName, nickname, jobTitle, company, ou, campus, building, floor, officeNumber, piPhone1, piPhone2, piPhone3, piPhone4, piPhone5, piPhone6, piPhone7, piPhone8, piPhone9, piPhone10, piPhone11, piPhone12, piPhone13, piPhone14, piPhone15, piPhone16, piPhone17, piPhone18, piPhone19, piPhone20, piPhone1Type, piPhone2Type, piPhone3Type, piPhone4Type, piPhone5Type, piPhone6Type, piPhone7Type, piPhone8Type, piPhone9Type, piPhone10Type, piPhone11Type, piPhone12Type, piPhone13Type, piPhone14Type, piPhone15Type, piPhone16Type, piPhone17Type, piPhone18Type, piPhone19Type, piPhone20Type, piAdditionalPhone, piEmail1, piEmail2, piEmail3, piEmail1Type, piEmail2Type, piEmail3Type, piEmail1CN, piEmail2CN, piEmail3CN, piEmail1TransType, piEmail2TransType, piEmail3TransType, piWebsite1, piWebsite2, piWebsite1Descr, piWebsite2Descr, inetCalendar, inetFreeBusy, piM1ID, piM2ID, piM3ID, piM1Service, piM2Service, piM3Service, homePostalAddress, homeCity, homeState, homePostalCode, homeCountry, homePOBox, homePostalDelivery, homeParcelDelivery, homeDomDelivery, homeIntlDelivery, workPostalAddress, workCity, workState, workPostalCode, workCountry, workPOBox, workPostalDelivery, workParcelDelivery, workDomDelivery, workIntlDelivery, otherPostalAddress, otherCity, otherState, otherPostalCode, otherCountry, otherPOBox, otherPostalDelivery, otherParcelDelivery,

otherDomDelivery,otherIntlDelivery,anniversary, dateOfBirth, otherDate, otherDateDescr, mailingAddress, photoURL,logoURL,photoBinaryData,photoType,label,tz,sortString,latitude,longitude,notes, assistantName, department, fullName, gender, location, manager, profession, spouse, suffix, title, alarmflag, alarmstatus, alarmtime, alarmtopic

## **piTypeGroup**

### **Definition**

Used to extend the base entry created by piEntry. Entries extended using this object class are used to represent an address book group entry.

### **Superior Class**

piEntry

### **Object Class Type**

structural

### **Required Attributes**

None

### **Allowed Attributes**

piEmail1, piWebsite1, piWebsite1Descr,inetCalendar,inetFreeBusy

## **piTypeABConferenceRoom**

### **Definition**

Used to create an entry to represent a conference room entry. This object class is intended to be used for entries in the users' personal address book store. The corresponding object class used in the corporate LDAP to represent a generic resource entry (including a conference room) is icsCalendarResource.

Since users may find resources in the corporate LDAP directory and decide to add them to their personal address book, you need to map the values from icsCalendarResource to the attributes in piTypeABConferenceRoom. As of now, calendar server has no typing information in the icsCalendarResource entry to indicate what type of resource is represented by LDAP entry. Hence we should assume that the corporate entry is for a conference room. The following table shows the mapping of attributes.

### ***Mapping of attributes***

<b>icsCalendarResouce</b>	<b>piTypeABConferenceRoom/piEntry</b>
cn	displayName
description	multilineDescription
icsCapacity	sunConfRoomCapacity
none	campus
none	building
none	floor
none	officeNumber
icsCalendar	inetCalendar
none	inetFreeBusy
icsContact	contactPerson

### Superior Class

piEntry

### Object Class Type

structural

### OID

Unknown

### Required Attributes

None

### Allowed Attributes

telephoneNumber, sunConfRoomCapacity, building, floor, officeNumber, inetCalendar, contactPerson

## Attributes for Personal Address Book

The following attributes are used to provision the personal address book for Communications Suite users in an LDAP directory:

### piPStoreOwner

#### Origin

Communications Services 6 2006Q2 Communications Express

#### Syntax

Single-value

#### Object Class

piStoreRoot

**Definition**

Specifies the address book owner's ID. It is assigned this UID from the user entry available in the Corporate Directory

**OID**

Unknown

**piMaxStoreEntries**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piStoreRoot

**Definition**

Specifies the maximum number of entries that can be created in the store.

**OID**

Unknown

**piDefaultAB**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piStoreRoot

**Definition**

Specifies the location of default address book or category in which all new entries in the address book are stored.

**OID**

Unknown

## **lastPurgeDate**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piStoreRoot](#)

### **Definition**

Species the last purge cycle date.

### **OID**

Unknown

## **piEntryID**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypeBook](#)

### **Definition**

Unique “d” used for entry. The 128 bit `UID` is generated by address book server and never displayed.

### **OID**

Unknown

## **piBookType**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**



Single-value

### **Object Class**

[piTypeBook](#)

### **Definition**

Address Book supports three piBookTypes. These are: abook, imbook, or pbook.

### **OID**

Unknown

### **displayName**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypeBook](#)

### **Definition**

Specifies the name of the address book used.

### **OID**

Unknown

### **multilineDescription**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypeBook](#)

### **Definition**

Specifies the detailed description associated with address book.

### **OID**

Unknown

## **piLastModifiedBy**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypeBook](#)

### **Definition**

Stores the identifier of the user modifying this entry.

### **OID**

Unknown

## **piReader**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Multi-valued

### **Object Class**

[piLocalBook](#)

### **Definition**

Allows users to read entries in the address book. The owner of the address book store is implicitly granted read, write, modify and delete permissions.

### **OID**

Unknown

## **piWriter**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Multiple-value

### **Object Class**

[piLocalBook](#)

### **Definition**

Allows users to add or modify entries in an address book. The owner of the address book store is implicitly granted read, write, modify and delete permissions.

### **OID**

Unknown

### **piDeleter**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Multiple-value

### **Object Class**

[piLocalBook](#)

### **Definition**

Allows users to delete entries in an address book.

### **OID**

Unknown

### **piCreator**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Multi-valued

### **Object Class**

[piLocalBook](#)

### **Definition**

Allows users to create entries in an address book.

**OID**

Unknown

**abBookType****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piLocalBook](#)

**Definition**

An address book can either be user-defined or set up from a system-defined type. Currently three system-defined categories are supported, namely, *favorites*, *subscribed*, and *user-defined*. The category display name is stored in `displayName` attribute of the `piTypeBook` object class. Only user defined `abBookType` can be deleted by users.

**OID**

Unknown

**piRemotePIURL****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piRemoteBook](#)

**Definition**

Specifies the LDAP URL for a remote address book. For each user, a `piRemoteBook` node is created for each remote book defined for the domain.

**OID**

Unknown

**displayName**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piEntry](#)

**Definition**

Specifies the display name for the entry.

**OID**

Unknown

**memberOfPIGroup****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Multi-valued

**Object Class**

[piEntry](#)

**Definition**

Specifies the piEntryID of each group that is entry is present.

**OID**

Unknown

**multilineDescription****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piEntry](#)

**Definition**

Specifies the URL that identifies recipient(s) of request-to-be-added to messages

**OID**

Unknown

**piLastModifiedBy****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piEntry](#)

**Definition**

Specifies the ID of a person that modifies the entry.

**OID**

Unknown

**memberOfPIBook****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Multi-valued

**Object Class**

[piEntry](#)

**Definition**

Specifies the piEntryID of each address book that this entry belongs to.

**OID**

Unknown

**deleted**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piEntry](#)

**Definition**

Specifies the deletion flag.

**OID**

Unknown

**piPEntryXMLData****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Multi-valued

**Object Class**

[piEntry](#)

**Definition**

Specifies the XML data

**OID**

Unknown

**piPEntryTextData****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Multi-valued

**Object Class**

[piEntry](#)

## Definition

Specifies the generic Text type data to keep extended attributes, which are typically free-floating  
<index1\>|<index2\>|<index3\>

## OID

Unknown

## attachment

### Origin

Communications Services 6 2006Q2 Communications Express

### Syntax

Single-value

### Object Class

[piEntry](#)

## Definition

Specifies the URL information.

## OID

Unknown

## category

### Origin

Communications Services 6 2006Q2 Communications Express

### Syntax

Multi-value

### Object Class

[piTypePerson](#)

## Definition

Specifies that the contact belongs to categories like friends, colleagues etc.

## OID

Unknown

## privacy



**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

None available

**OID**

Unknown

**piBackPointer****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Multi-valued

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the LDAP URL that points to the directory entry containing information on this person.

**OID**

Unknown

**givenName****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's first name

**OID**

Unknown

**sn**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's last name.

**OID**

Unknown

**middleName**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's middle name.

**OID**

Unknown

**nickname**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies a short name associated with the contact. This must be unique amongst all contacts in any address book store.

**OID**

Unknown

**jobTitle****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's job title.

**OID**

Unknown

**company****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the contact's company.

**OID**

Unknown

**ou**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the organization or department that the contact belongs to

**OID**

Unknown

**campus**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the physical location of the person.

**OID**

Unknown

## **building**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Specifies the physical location of the person.

### **OID**

Unknown

## **floor**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Specifies the floor of the building that the person occupies. .

### **OID**

Unknown

## **officeNumber**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

piTypePerson

**Definition**

Specifies the office number

**OID**

Unknown

**piPhone1**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the primary phone number for this user

**OID**

Unknown

**piPhone2**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Stores the store other phone numbers of the contact. The corresponding piPhone*n*{{Type}}attribute is used to determine that what the number represents

**OID**

Unknown

## piPhone3

### Origin

Communications Services 6 2006Q2 Communications Express

### Syntax

Single-value

### Object Class

[piTypePerson](#)

### Definition

Stores the store other phone numbers of the contact. The corresponding `piPhonenType` attribute is used to determine that what the number represents

### OID

Unknown

## piPhone4

### Origin

Communications Services 6 2006Q2 Communications Express

### Syntax

Single-value

### Object Class

[piTypePerson](#)

### Definition

Stores the store other phone numbers of the contact. The corresponding `piPhonenType` attribute is used to determine that what the number represents

### OID

Unknown

## piPhone5

### Origin

Communications Services 6 2006Q2 Communications Express

### Syntax

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhoneType` attribute is used to determine that what the number represents

### **OID**

Unknown

### **piPhone6**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhoneType` attribute is used to determine that what the number represents

### **OID**

Unknown

### **piPhone7**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhoneType` attribute is



used to determine that what the number represents

#### **OID**

Unknown

### **piPhone8**

#### **Origin**

Communications Services 6 2006Q2 Communications Express

#### **Syntax**

Single-value

#### **Object Class**

[piTypePerson](#)

#### **Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhonenType` attribute is used to determine that what the number represents

#### **OID**

Unknown

### **piPhone9**

#### **Origin**

Communications Services 6 2006Q2 Communications Express

#### **Syntax**

Single-value

#### **Object Class**

[piTypePerson](#)

#### **Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhonenType` attribute is used to determine that what the number represents

#### **OID**

Unknown

### **piPhone10**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhoneType` attribute is used to determine that what the number represents

**OID**

Unknown

**piPhone11****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhoneType` attribute is used to determine that what the number represents

**OID**

Unknown

**piPhone12****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

### **Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhoneType` attribute is used to determine that what the number represents

### **OID**

Unknown

## **piPhone13**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhoneType` attribute is used to determine that what the number represents

### **OID**

Unknown

## **piPhone14**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhoneType` attribute is used to determine that what the number represents

### **OID**

Unknown

## **piPhone15**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhonenType` attribute is used to determine that what the number represents

### **OID**

Unknown

## **piPhone16**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhonenType` attribute is used to determine that what the number represents

### **OID**

Unknown

## **piPhone17**

### **Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhoneType` attribute is used to determine that what the number represents

**OID**

Unknown

**piPhone18****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhoneType` attribute is used to determine that what the number represents

**OID**

Unknown

**piPhone19****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhonenType` attribute is used to determine that what the number represents

#### **OID**

Unknown

#### **piPhone20**

#### **Origin**

Communications Services 6 2006Q2 Communications Express

#### **Syntax**

Single-value

#### **Object Class**

[piTypePerson](#)

#### **Definition**

Stores the store other phone numbers of the contact. The corresponding `piPhonenType` attribute is used to determine that what the number represents

#### **OID**

Unknown

#### **piPhone1Type**

#### **Origin**

Communications Services 6 2006Q2 Communications Express

#### **Syntax**

Single-value

#### **Object Class**

[piTypePerson](#)

#### **Definition**

Specifies the phone

#### **OID**

Unknown

#### **piPhone2Type**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone3Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone4Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone5Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone6Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone7Type**



**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone8Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone9Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone10Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone11Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone12Type**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone13Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone14Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone15Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone16Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone17Type**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone18Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone19Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piPhone20Type****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the phone

**OID**

Unknown

**piAdditionalPhone****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the additional phone

**OID**

Unknown

**piEmail1**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's primary Email address.

**OID**

Unknown

**piEmail2****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

piEmail2 through piEmail3 are used to store other email addresses of the contact. The corresponding `piEmailType` attribute is used to determine the type of the email address.

**OID**

Unknown

**piEmail3****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies how the addresses are stored.

**OID**

Unknown

**piEmail1Type**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

None available

**OID**

Unknown

**piEmail2Type**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

None available

**OID**

Unknown

**piEmail3Type**



**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

None available

**OID**

Unknown

**piEmail1CN****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the email display name

**OID**

Unknown

**piEmail2CN****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the other email display name

**OID**

Unknown

**piEmail3CN**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the other email display name

**OID**

Unknown

**piEmail1TransType**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Email1 Transport Type

**OID**

Unknown

## **piEmail2TransType**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

None available

### **OID**

Unknown

## **piEmail3TransType**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

None available

### **OID**

Unknown

## **piWebsite1**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

piTypePerson

**Definition**

Specifies the URL of the primary web-site associated with the person.

**OID**

Unknown

**piWebsite2**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the URL of secondary web-site associated with the person.

**OID**

Unknown

**piWebsite1Descr**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the description associated with piWebsite1

**OID**

Unknown

## piWebsite2Descr

### Origin

Communications Services 6 2006Q2 Communications Express

### Syntax

Single-value

### Object Class

[piTypePerson](#)

### Definition

Specifies the description associated with piWebsite2

### OID

Unknown

## inetCalendar

### Origin

Communications Services 6 2006Q2 Communications Express

### Syntax

Multi-valued

### Object Class

[piTypePerson](#)

### Definition

Specifies the URL of the person. The format of this URL is:

```
ics:///?calid=<calid\>
```

### OID

Unknown

## inetFreeBusy

### Origin

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the URL usually used to see the calendar free-busy time for a user

**OID**

Unknown

**piIM1ID****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's primary IM identifier

**OID**

Unknown

**piIM2ID****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's other IM identifier

**OID**

Unknown

**piIM3ID****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's other IM identifier

**OID**

Unknown

**piIM1Service****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the type of IM service associated with the contacts IM identifier specified in the piIM1ID attribute.

**OID**

Unknown

**piIM2Service****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the type of IM service associated with the contacts specified by the IM identifier in the piM2ID attribute.

**OID**

Unknown

**piM3Service****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the type of IM service associated with the contacts specified by the IM identifier in the piM3ID attribute.

**OID**

Unknown

**homePostalAddress****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)



**Definition**

Specifies the contacts home address

**OID**

Unknown

**homeCity****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contacts city

**OID**

Unknown

**homeState****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

[\\Definition](#)

Specifies the contact's state

**OID**

Unknown

**homePostalCode****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the home postal code of the contact

**OID**

Unknown

**homeCountry**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's home country

**OID**

Unknown

**homePOBox**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's home PO BOX

**OID**

Unknown

**homePostalDelivery**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies whether the contact's home address will be used as postal delivery address

**OID**

1.3.6.1.4.1.42.2.27.9.1.872

**homeParcelDelivery**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies whether the contact's home address will be used as parcel delivery address

**OID**

1.3.6.1.4.1.42.2.27.9.1.873

**homeDomDelivery**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies whether the contact's home address will be used as domestic delivery address

**OID**

1.3.6.1.4.1.42.2.27.9.1.874

**homeIntlDelivery**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies whether the contact's home address will be used as international delivery address

**OID**

1.3.6.1.4.1.42.2.27.9.1.875

**workPostalAddress**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's work postal address

**OID**

Unknown

**workCity**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's work city.

**OID**

Unknown

**workState**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's work state.

**OID**

Unknown

**workPostalCode**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the postal code of the contact's workplace

**OID**

Unknown

**workCountry**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the country of work

**OID**

Unknown

**workPOBox**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the PO BOX.

**OID**

Unknown

**workPostalDelivery**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies whether the contact's work address will be used as postal delivery address

**OID**

1.3.6.1.4.1.42.2.27.9.1.876

**workParcelDelivery**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies whether the contact's work address will be used as parcel delivery address

**OID**

1.3.6.1.4.1.42.2.27.9.1.877

**workDomDelivery**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies whether the contact's work address will be used as domestic delivery address

**OID**

1.3.6.1.4.1.42.2.27.9.1.878

**workIntlDelivery**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies whether the contact's work address will be used as international delivery address

**OID**

1.3.6.1.4.1.42.2.27.9.1.879

**otherPostalAddress**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**



Specifies the other postal address.

**OID**

Unknown

**otherCity**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the other city

**OID**

Unknown

**otherState**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the other state

**OID**

Unknown

**otherPostalCode**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the other postal code

**OID**

Unknown

**otherCountry**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the other country

**OID**

Unknown

**otherPOBox**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the other PO Box

**OID**

Unknown

**otherPostalDelivery**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies whether the contact's other address will be used as postal delivery address

**OID**

1.3.6.1.4.1.42.2.27.9.1.880

**otherParcelDelivery**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies whether the contact's other address will be used as parcel delivery address

**OID**

1.3.6.1.4.1.42.2.27.9.1.881

**otherDomDelivery**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies whether the contact's other address will be used as domestic delivery address

**OID**

1.3.6.1.4.1.42.2.27.9.1.882

**otherIntlDelivery**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies whether the contact's other address will be used as international delivery address

**OID**

1.3.6.1.4.1.42.2.27.9.1.883

**anniversary**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the anniversary date.

**OID**

Unknown

**dateOfBirth**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the date of birth.

**OID**

Unknown

**otherDate**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the other date

**OID**

Unknown

**otherDateDescr**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the other date description

**OID**

Unknown

**mailingAddress**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the mailing address, that could be work/home/other

**OID**

Unknown

**photoURL**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the `HTTP` URL that points to a picture of this person.

**OID**

Unknown

**logoURL**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the `HTTP` URL that points to a logo of contact's company

**OID**

1.3.6.1.4.1.42.2.27.9.1.887

**photoBinaryData**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the image or photograph information that annotates some aspect of the contact in binary encoded format.

**OID**

1.3.6.1.4.1.42.2.27.9.1.887

**photoType**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the image or photograph type of the contact associated with the attribute photoBinaryData.

**label**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the formatted text corresponding to delivery address of the contact

**OID**

1.3.6.1.4.1.42.2.27.9.1.884

**tz**

**Origin**

Convergence 1.0

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the contact's time zone



## **sortString**

### **Origin**

Convergence 1.0

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Specifies that the contact's family name or given name text to be used for national-language-specific sorting of the FN and N types.

### **OID**

1.3.6.1.4.1.42.2.27.9.1.886

## **latitude**

### **Origin**

Convergence 1.0

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Specifies the contact's latitude coordinate

### **OID**

1.3.6.1.4.1.9586.100.4.2.7

## **longitude**

### **Origin**

Convergence 1.0

### **Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the contact's longitude coordinate

**OID**

1.3.6.1.4.1.9586.100.4.2.8

**notes****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the notes associated with this contact

**OID**

Unknown

**assistantName****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the name of the assistant

**OID**

Unknown

## **contact**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Specifies the Contact

### **OID**

Unknown

## **department**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Specifies the contact's work department

### **OID**

Unknown

## **fullName**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the person's full name.

**OID**

Unknown

**gender****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the gender.

**OID**

Unknown

**location****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the contact location.

**OID**

Unknown

## **manager**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Specifies the manager's name

### **OID**

Unknown

## **profession**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Specifies the contact's profession

### **OID**

Unknown

## **spouse**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies the contact's spouse

**OID**

Unknown

**suffix****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies suffixes such as Jr., Sr.

**OID**

Unknown

**title****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

piTypePerson

**Definition**

Specifies titles such as Mr., Mrs. etc.

**OID**

Unknown

## **alarmflag**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Specifies whether the alarm is set.

### **OID**

Unknown

## **alarmstatus**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypePerson](#)

### **Definition**

Specifies whether the status is completed, where 1 represents completed and 0- represents that the activity is not yet started

### **OID**

Unknown

## **alarmtime**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the UTC formatted date/time

**OID**

Unknown

**alarmtopic****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypePerson](#)

**Definition**

Specifies the follow up status

**OID**

Unknown

**piEmail1****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax****Object Class**

[piTypeGroup](#)

**Definition**

Specifies the Email address of the group. If this is not specified, the message sent to a group are sent to all group members.

**OID**

Unknown



## **piWebsite1**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypeGroup](#)

### **Definition**

Specifies the URL of the web-site associated with group

### **OID**

Unknown

## **piWebsite1Descr**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypeGroup](#)

### **Definition**

Specifies the descriptions associated with `website1`.

### **OID**

Unknown

## **inetCalendar**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

## **Object Class**

[piTypeGroup](#)

### **Definition**

Specifies the URL used when inviting this group. If this is not specified, all members of the group are sent invitations to meetings by default

### **OID**

Unknown

## **inetFreeBusy**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

## **Object Class**

[piTypeGroup](#)

### **Definition**

Specifies the URL used to see the calendar free-busy time for a person

### **OID**

Unknown

## **telephoneNumber**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

## **Object Class**

[piTypeABConferenceRoom](#)

### **Definition**

Specifies the telephone number of the conference room.

### **OID**

Unknown

## **sunConfRoomCapacity**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypeABConferenceRoom](#)

### **Definition**

Specifies the number that represents the maximum occupants of who could be in the room.

### **OID**

Unknown

## **building**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

### **Object Class**

[piTypeABConferenceRoom](#)

### **Definition**

Specifies the Building

### **OID**

Unknown

## **floor**

### **Origin**

Communications Services 6 2006Q2 Communications Express

### **Syntax**

Single-value

**Object Class**

[piTypeABConferenceRoom](#)

**Definition**

Specifies the Floor in the Building

**OID**

Unknown

**officeNumber**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypeABConferenceRoom](#)

**Definition**

Specifies the Office Number

**OID**

Unknown

**inetCalendar**

**Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Single-value

**Object Class**

[piTypeABConferenceRoom](#)

**Definition**

Specifies the calendar URL of the resource. The syntax for this attribute is: ics:/// <uid>[#64;<domain>]: [ <opt\_cal\_name>]

**OID**

Unknown

**contactPerson****Origin**

Communications Services 6 2006Q2 Communications Express

**Syntax**

Multi-valued

**Object Class**

[piTypeABConferenceRoom](#)

**Definition**

Specifies the person who needs to be contacted to use the conference room

**OID**

Unknown