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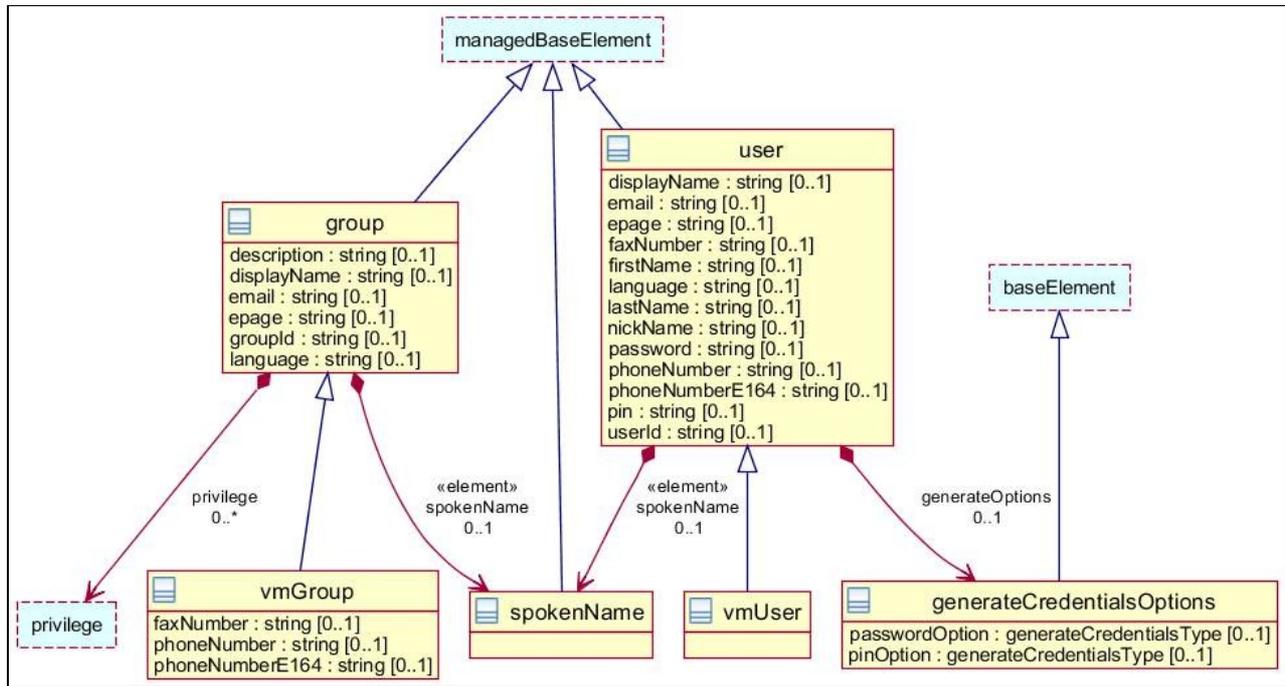**Search the Cisco Unity Express documentation on the DocWiki:**

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# Contents

## User and Group Management

**Classes**

**Figure 5: User and Group Management**



User

| Class Name | User | |
|---|---|---|
| **Extends From** | ManagedBaseElement | |
| **Description** | This class represents a subscriber in a CUE system. | |
| **XML Namespace** | http://user.model.rest.aesop.cisco.com | |
| **Field Name** | **Type** | **Constraints** | **Comments** |
| userId | String | Required for POST (create) operation Length 2-31 | Specifies the name or ID of the subscriber to be created. The username must be at least 3 and no more than 32 characters in length. CUE allows only letters, numbers, underscore (_), dot (.), and dash (-) in user IDs. User IDs must start with a letter. Do not use spaces in the username. |
| firstName | String | Length 0-59 | First name of a user. Callers use these names to access the extension using the dial-by-name feature. Cannot contain special characters, spaces, or |

| | | | numbers. |
|---|---|---|---|
| lastName | String | Length 0-59 | Last name of a user. Callers use these names to access the extension using the dial-by-name or numbers. |
| nickName | String | Length 0-59 | |
| displayName | String | Length 0-59 | User's name displayed within CUE applications. |
| phoneNumberE164 | String | Length 0-15 | Full telephone number, including area code, for the subscriber. |
| phoneNumber | String | Length 0-15 | Extension or number for this subscriber. |
| faxNumber | String | Length 0-15 | |
| password | String | Length 3-32 | Password for the subscriber. Valid values contain at least 3 but not more than 32 characters in length. Spaces are not allowed. Acceptable password characters are lowercase letters a to z, uppercase letters A to Z, digits 0 to 9, and the following symbols: - , . + = _ ! @ # $ ^ * ( ) ? / ~ < > & %. |
| pin | String | Length 3 -16 | Personal identification number for the subscriber. Valid values are at least 3 but not more than 19 characters in length, consisting of letters and numbers. No other characters are permitted. |
| language | String | Language locale string of the form xx_YY (where xx is the two letter language code and YY is the two letter country code). | Language of the prompts played to the user. |
| email | String | Length 0 - 320 | Email address of the subscriber. |
| epage | String | Length 0 - 320 | Epage address of the subscriber. |
| generateOptions | GenerateCredentialsOptions | For write only (To be used only during the POST and PUT | Used for specifying options for generating password and pin during create and update operation. |

| | | | |
|---|---|---|---|
| | | | operations). |
| spokenName | SpokenName | For Read only | This field indicates if a spoken name is configured for the user. |

**GenerateCredentialsOptions**

| Class Name | GenerateCredentialsOptions *(Enumeration Class)* |
|---|---|
| Extends From | |
| Description | Enumeration class used specifying options for auto credential generation during user create and delete operations. |
| XML Namespace | http://user.model.rest.aesop.cisco.com |
| Enum Values | GenerateBlank, GenerateRandom, UserSpecified |

**Spoken Name**

| Class Name | SpokenName |
|---|---|
| Extends From | ManagedBaseElement |
| Description | This class represents the configured spoken name for a user. It does not define and fields locally and contains only the "resourceURI" field inherited from the parent class. |
| XML Namespace | http://user.model.rest.aesop.cisco.com |

**VmUser**

| Class Name | VmUser |
|---|---|
| Extends From | User |
| Description | This class represents voicemail subscribers in CUE system. It does not define and fields locally and inherits all its field from the base class "User". |
| XML Namespace | http://user.model.rest.voicemail.aesop.cisco.com |

**Group**

| Class Name | Group | | |
|---|---|---|---|
| Extends From | ManagedBaseElement | | |
| Description | Represents "groups" in CUE system. Usually created to manage privileges for a group of users. | | |
| XML Namespace | http://user.model.rest.aesop.cisco.com | | |
| **Field Name** | **Type** | **Constraints** | **Comments** |
| groupId | String | | Name of the group. |

| | | Required for POST (create) operation Length 2-31 | |
|---|---|---|---|
| description | String | Length 0-40 | For providing a brief description about the group. |
| displayName | String | Length 0-59 If no value is specified during create, system will assign a value using groupId field value. | Full group name. Callers use the full name to access the extension using the dial-by-name feature. |
| email | String | Length 0 - 320 | Email address of the group. |
| epage | String | Length 0 - 320 | Epage address of the group. |
| privilege | Privilege | minOccurs="0" maxOccurs="unbounded" | Collection of privilege objects assigned to this group. |
| spokenName | SpokenName | For Read only | This field indicates if a spoken name is configured for the user. |

**VmGroup**

| Class Name | VmGroup |
|---|---|
| **Extends From** | Group |
| **Description** | Represents "groups" in CUE system. Usually created to manage privileges for a group of users and to assign members to a general-delivery mailbox. Inherits all the fields from base class "Group", as well as define local fields specific to voicemail-related features. |
| **XML Namespace** | http://user.model.rest.voicemail.aesop.cisco.com |

| Field Name | Type | Constraints | Comments |
|---|---|---|---|
| faxNumber | String | Length 0 -15 | Group fax number |
| phoneNumberE164 | String | Length 0-15 | Full telephone number, including area code for the group. |
| phoneNumber | String | Length 0-15 | Primary extension for the group's general-delivery mailbox. |

**Resources**

| Resource URI | Operation | Input | Return Value |
|---|---|---|---|
| /voicemail/users | GET (read | | BaseElementList |

| | | | |
|---|---|---|---|
| | all users) | | containing "VmUser" objects. |
| | POST create user) | | VmUser |
| /voicemail/users/{userid} | GET (read a user) | | VmUser |
| | PUT (update a user) | VmUser | |
| | DELETE (delete user) | | |
| /voicemail/users/{userid}/groupmemberships | GET (read groups where this user is a member) | | BaseElementList containing "VmGroup" objects |
| | POST (add this user to a group as member) | VmGroup (Only Resource URI) | |
| /voicemail/users/{userid}/groupmemberships/{groupid} | DELETE (remove this user from a group as member) | | |
| /voicemail/users/{userid}/groupownerships | GET (read groups where this user is an owner) | | BaseElementList containing "VmGroup" objects |
| | POST (add this user to a group as owner) | VmGroup (Only Resource URI) | |
| /voicemail/users/{userid}/groupownerships/{groupid} | DELETE (remove this user as owner from a group) | | |
| /voicemail/users/{userid}/spokenname | GET (download spoken name for this user) | Accept: audio/x-wav | Audio wav file of spoken name for user |
| | PUT (Upload audio wav file for spoken name for user) | Content-type: audio/x-wav | |
| /voicemail/groups | | | |

| | | | |
|---|---|---|---|
| | GET (read all groups) | | BaseElementList containing "VmGroup" objects |
| | POST (create a new group) | VmGroup (including group's Privileges) | |
| /voicemail/groups/{groupid} | PUT (update a group) | VmGroup (including group's Privileges) | |
| | GET (read a group) | | VmGroup (including group's Privileges |
| | DELETE (delete group) | | |
| /voicemail/groups/{groupid}/groupmemberships | GET (read groups where this group is a member) | | BaseElementList containing "VmGroup" objects |
| | POST (add the addressed group as member of another group) | VmGroup (Resource URI only) | |
| /voicemail/groups/{groupid}/groupmemberships/{groupid} | DELETE (remove the addressed group as member from another group) | | |
| /voicemail/groups/{groupid}/groupownerships | GET (read groups where this group is an owner) | | BaseElementList containing "VmGroup" objects |
| | PUT (add the addressed group as member of another group) | VmGroup (Resource URI only) | |
| /voicemail/groups/{groupid}/groupownerships/{groupid} | DELETE (remove the | | |

| | | | |
|---|---|---|---|
| | addressed group as owner of another group) | | |
| /voicemail/groups/{groupid}/members | GET (read all members of a group) | | BaseElementList containing "VmGroup" and "VmUser" objects |
| | POST (add a user or group as member to this group) | VmUser or VmGroup | |
| /voicemail/groups/{groupid}/members/{memberId} | DELETE (remove a member from this group) | | |
| /voicemail/groups/{groupid}/owners | GET (read all owners of this group) | | BaseElementList containing "VmGroup" and "VmUser" objects |
| | POST (add a user or group as owner to this group) | VmUser or VmGroup | |
| /voicemail/groups/{groupid}/owners/{ownerId} | DELETE (remove an owner from this group) | | |
| /voicemail/groups/{groupid}/privileges | GET (get list of privileges for this group) | | BaseElementList containing "Privilege" objects |
| | POST (Add a privilege to this group) | Privilege (with Resource URI or name) (to set multiple privileges for a group use update group operation) | |
| /voicemail/groups/{groupid}/privileges/{privilegeName} | DELETE (Remove a privilege from this group) | | |

| /rest/groups/{groupid}/spokenname | GET (download spoken name for group) | Accept: audio/x-wav | Audio wav file of spoken name for user |
|---|---|---|---|
| | PUT (Upload spoken name for group) | Content-type: audio/x-wav | |

## User and Group Examples

### Create User

Create a new user. Data for the new user is read from local file data/create_userx.xml.

```
$ cat data/create_userx.xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<vmUser>
     <displayName>Mr. X Yzee</displayName>
     <email>email_xyz@email.com</email>
     <epage>epage_xyz@address.com</epage>
     <firstName>Axe</firstName>
     <language>en_US</language>
     <lastName>Yzee</lastName>
     <nickName>xyz</nickName>
     <phoneNumber>1010</phoneNumber>
     <phoneNumberE164>213151273</phoneNumberE164>
     <pin>1234</pin>
     <generateOptions>
        <passwordOption>GenerateRandom</passwordOption>
     </generateOptions>
     <userId>userX</userId>
  </vmUser>

$ curl -i -X POST -H 'Authorization: Basic Y2lzY286Y2lzY28=' -H 'Content-type: application/xml'
-d @./data/create_userx.xml http://172.27.104.144/rest/voicemail/users

HTTP/1.1 201 Created
Server: Apache-Coyote/1.1
Set-Cookie: JSESSIONID=CDE84ED1DFCC25FA7F8029EE0C27E755; Path=/rest
PI-Version: 8.0.0.150
Location: http://172.27.104.144/rest/voicemail/users/voicemail/users/userX
Content-Type: text/plain
Transfer-Encoding: chunked
Date: Fri, 04 Dec 2009 02:11:43 GMT
Created - /voicemail/users/userX
```

### Read All Users

Read all users. Specify only first name and lastName fields to be included in the results.

```
$ curl -i -X GET -H 'Authorization: Basic Y2lzY286Y2lzY28=' http://172.27.104.144/rest/voicemail
/users?fields=firstName,lastName

HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Set-Cookie: JSESSIONID=441971AE997CDD32051F45F1544A8231; Path=/rest
PI-Version: 8.0.0.150
```

```
Content-Type: application/xml
Transfer-Encoding: chunked
Date: Fri, 04 Dec 2009 02:03:00 GMT


<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<baseElementList>
     <baseElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:ns3="http://user.model.rest.voicemail.aesop.cisco.com" xsi:type="ns3:vmUser">
        <resourceURI>/voicemail/users/userX</resourceURI>
        <firstName>Axe</firstName>
        <lastName>Yzee</lastName>
     </baseElement>
     <baseElement xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:ns3="http://user.model.rest.voicemail.aesop.cisco.com" xsi:type="ns3:vmUser">
        <resourceURI>/voicemail/users/cisco</resourceURI>
        <firstName>first</firstName>
        <lastName>cisco</lastName>
     </baseElement>
</baseElementList>
```

**Create Group**

Create a Group. Data for the new group is read from local file ./data/create_groupy.xml.

```
$ cat data/create_groupy.xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<vmGroup>
   <description>GroupY</description>
   <displayName>GroupWhy</displayName>
   <email>email@noreply.com</email>
   <groupId>groupY</groupId>
   <language>en_US</language>
   <privilege>
        <resourceURI>/privileges/tcv-payroll</resourceURI>
   </privilege>
   <privilege>
        <name>ViewHistoricalReports</name>
   </privilege>
   <privilege>
        <name>ManagePublicList</name>
   </privilege>
   <privilege>
        <resourceURI>/privileges/ManagePrompts</resourceURI>
   </privilege>
</vmGroup>


$ curl -i -X POST -H 'Authorization: Basic Y2lzY286Y2lzY28=' -H 'Content-type: application/xml'
-d @./data/create_groupy.xml http://172.27.104.144/rest/voicemail/groups
HTTP/1.1 201 Created
Server: Apache-Coyote/1.1
Set-Cookie: JSESSIONID=3B975C8500C143DB10E47B4970DDB2C0; Path=/rest
PI-Version: 8.0.0.150
Location: http://172.27.104.144/rest/voicemail/groups/voicemail/groups/groupY
Content-Type: text/plain
Transfer-Encoding: chunked
Date: Fri, 04 Dec 2009 06:15:16 GMT
Created - /voicemail/groups/groupY
```

Read All Users                                                                                          10

**Add User to a Group**

Add userX as member to groupY. Input data is read from local file ./data/userx.xml.

```
$ cat ./data/userx.xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<vmUser>
     <userId>userX</userId>
</vmUser>

$ curl -i -X POST -H 'Authorization: Basic Y2lzY286Y2lzY28=' -H 'Content-type: application/xml'
-d  @./data/userx.xml
http://172.27.104.144/rest/voicemail/groups/groupY/members

HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Set-Cookie: JSESSIONID=58D138AD5DE9ECCBD801D86F0518755C; Path=/rest
PI-Version: 8.0.0.150
Content-Type: text/plain
Transfer-Encoding: chunked
Date: Fri, 04 Dec 2009 06:22:57 GMT

Added userX as member to Group - groupY
```

**Remove User from a Group**

Remove userX as member of groupY.

```
$ curl -i -X DELETE -H 'Authorization: Basic Y2lzY286Y2lzY28='
http://172.27.104.144/rest/voicemail/groups/groupY/members/userX

HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Set-Cookie: JSESSIONID=C182CA0E8CF34573508C6D31E99DA6A4; Path=/rest
PI-Version: 8.0.0.150
Content-Type: text/plain
Transfer-Encoding: chunked
Date: Fri, 04 Dec 2009 06:34:46 GMT

Removed userX as member of Group - groupY
```

**Upload Spoken Name for Group**

Upload spoken name for groupX. The spoken name is uploaded from local wav file data/groupX.upload.wav

```
$ curl -i -T ./data/groupX.upload.wav -H 'Authorization: Basic Y2lzY286Y2lzY28=' -H
'Content-type: audio/x-wav'
http://172.27.104.144/rest/voicemail/groups/groupX/spokenname
HTTP/1.1 100 Continue

HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Set-Cookie: JSESSIONID=6EDB5242A677B1CD6495DD96A2D5D256; Path=/rest
PI-Version: 8.0.0.150
Content-Type: text/plain
Transfer-Encoding: chunked
Date: Fri, 04 Dec 2009 06:38:50 GMT

Uploaded - /voicemail/groups/groupX/spokenname

$ curl -i -X GET -H 'Authorization: Basic Y2lzY286Y2lzY28='
```

```
http://172.27.104.144/rest/voicemail/groups/groupX
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Set-Cookie: JSESSIONID=A98FDBA862CD2DFAC7DE079ACE304678; Path=/rest
PI-Version: 8.0.0.150
Content-Type: application/xml
Content-Length: 488
Date: Fri, 04 Dec 2009 06:42:44 GMT

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<vmGroup>
     <resourceURI>/voicemail/groups/groupX</resourceURI>
     <description>Group X's Description</description>
     <displayName>Group Hacks</displayName>
     <email>email@noreply.com</email>
     <groupId>groupX</groupId>
     <language>en_US</language>
     <spokenName>
          <resourceURI>/voicemail/groups/groupX/spokenname</resourceURI>
     </spokenName>
      <faxNumber>56908762</faxNumber>
      <phoneNumber>7654</phoneNumber>
      <phoneNumberE164>4083925174</phoneNumberE164>
</vmGroup>
```

Upload Spoken Name for Group                                                                 12