

# UCServer Client Access Protocol

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# 1 UCServer Client Access Protocol

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Web Service Overview

List of Modules

Some examples in JavaScript

## 1.1 Disclaimer: Work in progress - not for public release!

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## 1.2 UCServer WebService Overview

The UCServer WebService is an integral component of the estos UCServer. It can be reached via the following methods:

- **http**  
The default listen port for http is 7224. You can open the UCWS Web page on <http://localhost:7224/>.
- **https**  
The default listen port for https is 7225. You can open the UCWS Web page on <https://localhost:7225/>. The SSL certificate is self signed by default. It is recommended to configure a real trusted ssl certificate.

### WebService API

The WebService offers an JSON API for talking with the estos UCServer.

### Calling conventions

All API endpoints may be called with GET or POST.

### Available routes

- **/ws/direct**  
Using this route, all functions are called with authentication. No user session is created. This route can be used only for simple methods that do not require events. Calling functions in this route has a significant overhead, because the user must be authenticated for every function call.  
(<http://servername:7224/ws/direct/>)

- **/ws/client**

This is the default route for clients. In this route it is always required to create a user session. To create a user session authentication is required. The user session authenticates the further function calls. The user session also contains an event channel to receive events from the server.  
(<http://servername:7224/ws/client/>)

- **/ws/public**

This is the default route for anonymous (public) clients. The functions in this route do not require authentication. This route is used to display public available presence.  
(<http://servername:7224/ws/public/>)

All API endpoints may be called with GET or POST. Jsonp is supported.

### 1.3 /ws/direct

The direct route is used to call single function with direct authentication. Every function call must be authenticated. This route can only be used for simple functions that do not require events.

#### First Steps

The most simple example is to get the properties of a user with http GET. Just paste the following line in a browser window. You will be prompted for authentication. Use a UCServer user name and password to authenticate. The result will be a json struct that contains the attributes of the user.

```
http://localhost:7224/ws/direct/asnGetLoggedInContact
```

#### Authentication options

There are different authentication options available.

- **HTTP Basic Authentication**

When using HTTP Basic Authentication in the Browser, a prompt will ask the user for credentials.

- **Token Authentication**

Token Authentication is used to authenticate users without transmitting the password every time. A Login Token can be obtained with `asnGetUserToken`. The Token is transmitted either with a query parameter (<http://localhost:7224/ws/direct/asnGetLoggedInContact?token=aabbccddeeff>) or as HTTP custom header (`x-uctoken: aabbccddeeff`). When using this option, no 401 response will be given. Failed Authentication will result in a 400 response with an json error struct.

- Replace `aabbccddeeff` with the login token:

```
http://localhost:7224/ws/direct/asnGetLoggedInContact?token=aabbccddeeff
```

- **Username and Password in query**

Username and Password may be transmitted as query parameters. When using this option, no 401 response will be given. Failed Authentication will result in a 400 response with an json error struct.

- Replace username and password with valid credentials:

```
http://localhost:7224/ws/direct/asnGetLoggedInContact?user=username&pass=password
```

#### Using Javascript

You may Javascript to send commands to the server. Copy the following text to a html file and open it in the browser. You may also open the page here: [Open Page](#):

```
<!DOCTYPE html>
```

```

<html>
<style>
span { vertical-align: top; display: inline-block; width: 200px; }
input { display: inline-block; width: 400px; }
</style>
<body>
<form>
<span>Server URL:</span><input id="serverurl" value="http://localhost:7224"/><br/>
<span>Username:</span><input id="user" value="" /><br/>
<span>Password:</span><input id="pass" value="" /><br/>
<span>Function:</span><input id="func" value="asnGetLoggedInContact"/><br/>
<span>Params:</span><textarea rows="7" id="params">[ ]</textarea><br/>
<button type='submit' onclick='sendcommand(); event.preventDefault();'>Send Command</button><br/>
</form>
<pre id="result"></pre>
</body>
<script>
function sendcommand()
{
var serverurl = document.getElementById("serverurl").value;
var user = document.getElementById("user").value;
var pass = document.getElementById("pass").value;
var func = document.getElementById("func").value;
var params = document.getElementById("params").value;
try {
JSON.parse(params);
} catch(e) {
document.getElementById("result").innerHTML = 'Failed: Params are not valid JSON: ' + e;
return;
}

var oXHR = new XMLHttpRequest(); // new HttpRequest instance
oXHR.addEventListener("loadend", function(evt) {
var outtext = oXHR.responseText;
try {
outtext = JSON.stringify(JSON.parse(oXHR.responseText), null, 4);
} catch(e) {
}
if (oXHR.status == 0) {
document.getElementById("result").innerHTML = 'Failed: General Network Error';
} else if (outtext == "") {
document.getElementById("result").innerHTML = 'Failed: No response received';
} else if (oXHR.status == 200) {
document.getElementById("result").innerHTML = outtext;
} else {
document.getElementById("result").innerHTML = outtext;
}
});
var queryString = '?user=' + encodeURIComponent(user) + '&pass=' + encodeURIComponent(pass);
oXHR.open("POST", serverurl + "/ws/direct/" + func + queryString);
oXHR.setRequestHeader("Content-Type", "application/json;charset=utf-8");
oXHR.send(params);
}
</script>
</html>

```

## Using cURL

You may use cURL (http command line) to send commands to the server. cURL can be found for multiple operating systems on the internet.

Using HTTP POST:

```
curl.exe "http://localhost:7224/ws/direct/asnGetLoggedInContact?user=username&pass=password" -X
POST -H "Content-Type: application/json" -d "{}"
```

Using HTTP GET:

```
curl.exe "http://localhost:7224/ws/direct/asnGetLoggedInContact?user=username&pass=password"
```

All API endpoints may be called with GET or POST. Jsonp is supported.

## 1.4 /ws/client

The client route is used to establish a user session with event notifications.

### First Steps

The first step is to create the user session. Use a UCServer user name and password to authenticate. The result will be a json Object that contains the sessionid.

Since UCServer Version 7 the protocol version must be given in the body of the request and should be set to **70**. The URL parameter **clientappid** helps the UCServer to categorize the client and should be set to 15 for SDK Clients.

#### POST:

```
POST http://localhost:7224/ws/client/createsession?clientappid=15
Content-Type application/json; charset=utf-8
X-no401 1
X-ucsid local
X-simple 1

{ "negotiate": { "iClientProtocolVersion": 70 } }
```

#### RESPONSE:

```
200 OK
{
  "sessionid": "470977D3647E174DB9AF9A0C3567A3E7"
}
```

### Authentication options

There are different authentication options available.

- **HTTP Authentication**

When using HTTP Authentication in the Browser, a prompt will ask the user for credentials. To prevent the 401 Authentication failed response, use the parameter 'no401' (<http://localhost:7224/ws/client/createsession?no401>).

- **Token Authentication**

Token Authentication is used to authenticate users without transmitting the password every time. A

Login Token can be obtained with asnGetUserToken. The Token is transmitted either with a query parameter (<http://localhost:7224/ws/client/createsession?token=aabbccddeeff&clientappid=15>) or as HTTP custom header (x-uctoken: aabbccddeeff). When using this option, no 401 response will be given. Failed Authentication will result in a 400 response with an json error struct.

- Replace aabbccddeeff with the login token:  
`http://localhost:7224/ws/client/createsession?token=aabbccddeeff&clientappid=15`

#### • **Username and Password in query**

Username and Password may be transmitted as query parameters. When using this option, no 401 response will be given. Failed Authentication will result in a 400 response with an json error struct.

- Replace username and password with valid credentials:  
`http://localhost:7224/ws/client/createsession?user=username&pass=password&clientappid=15`

## Error Conditions

There are different error conditions and corresponding error messages.

HTTP Code	Description	Result Body
502	invalid UCSID or UCServer is not connected here	<pre>{   "error": {     "details": "server not connected here: [local1]",     "_type": "WsError",     "iErrorDetail": 119,     "u8sErrorString": "UCServer is not connected here"   } }</pre>
400	Logon to UCServer failed. For iErrorDetail Values see AsnLogonErrorEnum.	<pre>{   "error": {     "_type": "AsnLogonError",     "iErrorDetail": 101,     "sAuthCredentials": "",     "u8sErrorString": "User Authentication failed",     "u8sFailedUser": ""   },   "error_value": 0,   "invokedID": 44,   "sessionID": "F157012E9D63824C80141E367C77659A" }</pre>

## Using Javascript

You may use Javascript to send commands to the server. Copy the following text to a html file and open it in the browser. You may also open the page here.

```
<!DOCTYPE html>
<html>
<style>
span { vertical-align: top; display: inline-block; width: 200px; }
input { display: inline-block; width: 400px; }
</style>
<body>
<form>
<span>Server URL:</span><input id="serverurl" value="http://localhost:7224"/><br/>
<span>UCSID:</span><input id="ucsid" value="local"/><br/>
<span>Username:</span><input id="user" value="" /><br/>
<span>Password:</span><input id="pass" value="" /><br/>
<button type='submit' onclick='createsession(); event.preventDefault();'>Create Session</button><br/>
</form>
<form>
<span>SessionID:</span><input id="sessionid" value="" /><br/>
<span>Function:</span><input id="func" value="asnGetLoggedInContact"/><br/>
<span>Params:</span><textarea rows="7" id="params">[ ]</textarea><br/>
<button type='submit' onclick='sendcommand(); event.preventDefault();'>Send Command</button><br/>
</form>
<pre id="result"></pre>
</body>
<script>
function createsession()
{
let serverurl = document.getElementById("serverurl").value;
let ucsid = document.getElementById("ucsid").value;
let user = document.getElementById("user").value;
let pass = document.getElementById("pass").value;
let func = 'createsession?clientappid=15'; // since ProCall 7 you have to tell the server your application type
(Web = 15)

let oXHR = new XMLHttpRequest(); // new HttpRequest instance
oXHR.addEventListener("loadend", function(evt) {
let outtext = oXHR.responseText;
let response = {};
try {
response = JSON.parse(oXHR.responseText);
outtext = JSON.stringify(response, null, 4);
} catch(e) {
}
if (oXHR.status == 0) {
document.getElementById("result").innerHTML = 'Failed: General Network Error';
} else if (outtext == '') {
document.getElementById("result").innerHTML = 'Failed: No response received';
} else if (oXHR.status == 200) {
document.getElementById("result").innerHTML = outtext;
if (response.hasOwnProperty('sessionid')) {
document.getElementById("sessionid").value = response.sessionid;
}
} else {
document.getElementById("result").innerHTML = outtext;
}
}
}

```

```

}

};

//epid must be unique for every createsession request

// for ProCall 7 it is a MUST to tell the server the API Version ('70' for ProCall 7, '61' for ProCall 6)
// for ProCall 6 you can (and SHOULD) do it.
let apiVersion = 70;

oXHR.open("POST", serverurl + "/ws/client/" + func, true);
oXHR.setRequestHeader("Authorization", "Basic " + btoa(user + ":" + pass));
oXHR.setRequestHeader("Content-Type", "application/json; charset=utf-8");
oXHR.setRequestHeader("X-no401", "1");
oXHR.setRequestHeader("X-ucsid", ucsid);
oXHR.setRequestHeader("X-simple", "1");
oXHR.send({ "negotiate": { "iClientProtocolVersion": 'apiVersion' } });
}

function sendcommand()
{
let serverurl = document.getElementById("serverurl").value;
let func = document.getElementById("func").value;
let sessionid = document.getElementById("sessionid").value;
let params = document.getElementById("params").value;
try {
JSON.parse(params);
} catch(e) {
document.getElementById("result").innerHTML = 'Failed: Params are not valid JSON: ' + e;
return;
}

let oXHR = new XMLHttpRequest(); // new HttpRequest instance
oXHR.addEventListener("loadend", function(evt) {
let outtext = oXHR.responseText;
try {
outtext = JSON.stringify(JSON.parse(oXHR.responseText), null, 4);
} catch(e) {
}
if (oXHR.status == 0) {
document.getElementById("result").innerHTML = 'Failed: General Network Error';
} else if (outtext == '') {
document.getElementById("result").innerHTML = 'Failed: No response received';
} else if (oXHR.status == 200) {
document.getElementById("result").innerHTML = outtext;
} else {
document.getElementById("result").innerHTML = outtext;
}
});
oXHR.open("POST", serverurl + "/ws/client/" + func);
oXHR.setRequestHeader("Content-Type", "application/json; charset=utf-8");
oXHR.setRequestHeader("X-ucsessionid", sessionid);
oXHR.setRequestHeader("X-ucsid", ucsid);

oXHR.send(params);
}
</script>
</html>

```

All API endpoints may be called with GET or POST. Jsonp is supported.

## 1.5 /ws/public

The public route is used display presence information for anonymous clients without authentication.

### First Steps

The most simple example is to get the list of public available users (<http://localhost:7224/ws/public/contacts?ucsid=local>).

```
GET /ws/public/contacts?ucsid=local

200 OK
{
  "contacts" : {
    "sip:hansi@testestos.de" : {
      "asnRemoteContact" : {
        "optionalParams" : {
          "jpegPhoto" : {
            "binarydata" : "base64encodedjpeg"
          }
        }
      },
      "u8sDisplayName" : "Hansi Meier",
      "u8sEMail" : "ste@estos.de",
      "u8sFirstName" : "Hansi",
      "u8sLastName" : "Meier",
      "u8sSIPAddress" : "sip:hansi@testestos.de"
    },
    "iMonitorAccessRights" : 1,
    "iPresenceState" : 1610612739,
  }
}
```

## 1.6 Token Authentication

A token is a piece of data created by the server that contains information about a particular user and validity. To get a token, the user must authenticate using username and password.

### Token types

There are two different kinds of tokens:

- **Login Tokens** A login token can be used to login a user or authenticate services. The token can be used instead of submitting username and password.
- **Identification Tokens** An identification token can be used to verify the identity of a user. It can not be used to login to the server. The purpose of these tokens is to allow third party services to verify a logged in user.

### Obtain a login token

A token can be obtained with `asnGetUserToken`. Here is an example using the `/ws/direct` route:

```
GET
/ws/direct/asnGetUserToken?user=username&pass=password&ucsid=local&iType=1
```

or

```
POST /ws/direct/asnGetUserToken?user=username&pass=password
x-ucsid="local"
{
  "iType": 1
}
200 OK
{
  "sToken": "aabbcceeddeeff"
}
```

## 2 General

General interface

### Module description

General interface functions not included in any other module.

#### 2.1 General Operations

##### 2.1.1 asnGetLocationInformation2

Get a specific location information (AsnLocationInformation2).

This function replaces asnGetLocationInformation and delivers the new AsnLocationInformation2 for the given location id.

#### ArgumentType: AsnGetLocationInformationArgument

AsnGetLocationInformationArgument is an Object

Name	Type	Optional	Comment
u8sLocationID	string		The identifier of a location information. See asnGetLocationIDs as an example how to get a location id.

#### ResultType: AsnGetLocationInformation2Result

AsnGetLocationInformation2Result is an Object

Name	Type	Optional	Comment
asnLocationData	AsnLocationInformation2		Location information (v2) about the phone number rules on the line.

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

##### 2.1.2 asnSetLocationInformation2

#### ArgumentType: AsnSetLocationInformation2Argument

AsnSetLocationInformation2Argument is an Object

Name	Type	Optional	Comment
asnLocationData	AsnLocationInformation2		

### **ResultType: AsnSetLocationInformation2Result**

AsnSetLocationInformation2Result is an Object

Name	Type	Optional	Comment
------	------	----------	---------

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### **2.1.3 asnGetLocationIDs**

#### **ArgumentType: AsnGetLocationIDsArgument**

AsnGetLocationIDsArgument is an Object

Name	Type	Optional	Comment
locationIDs	UTF8StringList	yes	

#### **ResultType: AsnGetLocationIDsResult**

AsnGetLocationIDsResult is an Object

Name	Type	Optional	Comment
locationIDMD5ChecksumList	AsnStringPairList		first LocationID, last MD5 Checksum

#### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
------	------	----------	---------

iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 2.1.4 asnSetUserAbsentState

Operation to set the manual presence state of a user.

This operation is used to set the manual presence state of a user. This is mostly used for the logged in contact, but can be used to set it for others user too.

In order to do that, access rights have to be granted by the other contact to the current user of the calling client.

If the operation was successful, AsnAbsentStateSetUserResult is returned.

If an error occurred, AsnRequestError is returned.

### ArgumentType: AsnSetUserAbsentStateArgument

AsnSetUserAbsentStateArgument is an Object

Name	Type	Optional	Comment
absentstate	AsnAbsentStateV2		The AsnAbsentState data to change the manual presence of the user.

### ResultType: AsnSetUserAbsentStateResult

AsnSetUserAbsentStateResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		Should always be true.

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 2.1.5 asn GetUserAbsentState

### ArgumentType: Asn GetUserAbsentStateArgument

Asn GetUserAbsentStateArgument is an Object

Name	Type	Optional	Comment
contactId	string		

**ResultType: Asn GetUserAbsentStateResult**

Asn GetUserAbsentStateResult is an Object

Name	Type	Optional	Comment
absentstate	AsnAbsentStateV2		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**2.1.6 asnResetUserAbsentState**

This operation set the manual presence state of a user back, so the system calculated presence will not be affected by it.

The manual presence of a user is a special input to the presence system.

To set it back to the pure system calculated presence this operation has to be called.

If the operation was successful, AsnAbsentStateResetResult is returned.

If the operation fails, AsnRequestError is returned.

**ArgumentType: AsnResetUserAbsentStateArgument**

AsnResetUserAbsentStateArgument is an Object

Name	Type	Optional	Comment
u8sContactId	string		

**ResultType: AsnResetUserAbsentStateResult**

AsnResetUserAbsentStateResult is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**2.1.7 asnCustomNoteSet****ArgumentType: AsnCustomNoteSetArgument**

AsnCustomNoteSetArgument is an Object

Name	Type	Optional	Comment
customnote	AsnCustomNote		

**ResultType: AsnCustomNoteSetResult**

AsnCustomNoteSetResult is an Object

Name	Type	Optional	Comment
optionalParams	AsnOptionalParameters	yes	optionalParams Name "RemoteInvokeID" Value String

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**2.1.8 asnGetMetaSettings****ArgumentType: AsnGetMetaSettingsArgument**

AsnGetMetaSettingsArgument is an Object

Name	Type	Optional	Comment

eSendPlainPassword	AsnMetaDirectoryPasswordEncryption		Soll das Passwort fÃ¼r das MetaDirectory verschlÃ¼sstelt Ã¼bermittelt werden 1: ja, 0(default): nein
--------------------	------------------------------------	--	--

**ResultType: AsnGetMetaSettingsResult**

AsnGetMetaSettingsResult is an Object

Name	Type	Optional	Comment
metasettings	AsnMetaDirectorySettings		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**2.1.9 asnGetMetaPhoneBooksSettings****ArgumentType: AsnGetMetaSettingsArgument**

AsnGetMetaSettingsArgument is an Object

Name	Type	Optional	Comment
eSendPlainPassword	AsnMetaDirectoryPasswordEncryption		Soll das Passwort fÃ¼r das MetaDirectory verschlÃ¼sstelt Ã¼bermittelt werden 1: ja, 0(default): nein

**ResultType: AsnGetMetaSettingsResult**

AsnGetMetaSettingsResult is an Object

Name	Type	Optional	Comment
metasettings	AsnMetaDirectorySettings		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 2.1.10 asnSetMetaSettings

### ArgumentType: AsnSetMetaSettingsArgument

AsnSetMetaSettingsArgument is an Object

Name	Type	Optional	Comment
eSendPlainPassword	AsnMetaDirectoryPasswordEncryption		Soll das Passwort fÃ¼r das MetaDirectory verschlÃ¼sst Ã¼bermittelt werden 1: ja, 0(default): nein
metasettings	AsnMetaDirectorySettings		

### ResultType: AsnSetMetaSettingsResult

AsnSetMetaSettingsResult is an Object

Name	Type	Optional	Comment

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 2.1.11 asnSetMetaPhoneBooksSettings

### ArgumentType: AsnSetMetaSettingsArgument

AsnSetMetaSettingsArgument is an Object

Name	Type	Optional	Comment

eSendPlainPassword	AsnMetaDirectoryPasswordEncryption		Soll das Passwort fÃ¼r das MetaDirectory verschlÃ¼sstelt Ã¼bermittelt werden 1: ja, 0(default): nein
metasettings	AsnMetaDirectorySettings		

**ResultType: AsnSetMetaSettingsResult**

AsnSetMetaSettingsResult is an Object

Name	Type	Optional	Comment
------	------	----------	---------

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**2.1.12 asnSubscribeServices**

This is an temporary function we use to separate Login from the implicit logic the server is doing with the login

This function exists while we rework the interface from asnLogon to asnLoginV2

In the future every service will have its own login function telling the server that a client is interested in that service

Please be aware that we will remove this function any time as it is just a temporary solution to decouple login from subscribing to services

**ArgumentType: AsnSubscribeServicesArgument**

AsnSubscribeServicesArgument is an Object

Name	Type	Optional	Comment
------	------	----------	---------

**ResultType: AsnSubscribeServicesResult**

AsnSubscribeServicesResult is an Object

Name	Type	Optional	Comment
------	------	----------	---------

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 2.2 General Events

### 2.2.1 asnKeepAlive

Event which can be send to the UCServer regularly to detect connection loss faster.

#### ArgumentType: AsnKeepAliveArgument

AsnKeepAliveArgument is an Object

Name	Type	Optional	Comment
dummy	Object		no parameter

### 2.2.2 asnLocationInformationChanged

#### ArgumentType: AsnLocationInformationChangedArgument

AsnLocationInformationChangedArgument is an Object

Name	Type	Optional	Comment
u8sLocationID	string		
optionalParams	AsnOptionalParameters	yes	optionalParams Name "MD5CheckSum" Value UTF8String MD5 Prüfsumme über den Standort

### 2.2.3 asnUpdateMyContactConfigurationV2

Event that my contact configuration has changed

#### ArgumentType: AsnUpdateMyContactConfigurationV2Argument

AsnUpdateMyContactConfigurationV2Argument is an Object

Name	Type	Optional	Comment
contactChanged	AsnContactV2		

## 2.2.4 asnUpdateMyAbsentStateV2

### ArgumentType: AsnUpdateMyAbsentStateV2Argument

AsnUpdateMyAbsentStateV2Argument is an Object

Name	Type	Optional	Comment
absentstate	AsnAbsentStateV2		

## 2.2.5 asnUpdateMyCustomNote

### ArgumentType: AsnUpdateMyCustomNoteArgument

AsnUpdateMyCustomNoteArgument is an Object

Name	Type	Optional	Comment
customnote	AsnCustomNote		

## 2.3 General Types

### 2.3.1 AsnContactID

### 2.3.2 AsnETAPIDialNumberFormat

Enum to indicated how phone numbers should be formatted.

AsnETAPIDialNumberFormat is an Enumeration

Name	Type	Value	Comment
eTAPIDIALNUMBERFORMATNORMAL	number	0	Normal formatting, all rules apply
eTAPIDIALNUMBERFORMATSUPERCANONIC	number	1	Make all numbers upercanoncal (e.g. +49815136856177)
eTAPIDIALNUMBERFORMATPLAIN	number	2	No rules apply, numbers will be dialed like they were entered; only special character will be removed
eTAPIDIALNUMBERFORMATDIALABLEPLAIN	number	3	Plain numbers will be dialed like they were entered, supercanonical numbers will be formatted. The PBX will always get dialable numbers.

### 2.3.3 AsnERemoteTapiNumberFormat

Remote Tapi Treiber Rufnummern Formatierung

AsnERemoteTapiNumberFormat is an Enumeration

Name	Type	Value	Comment
eREMOTETAPINUMBERFORMATPLAIN	number	0	Plain, wie von PBX
eREMOTETAPINUMBERFORMATPREFORMAT	number	1	Vorformatiert, aber nicht Superkanonisch
eREMOTETAPINUMBERFORMATSUPERCANONIC	number	2	Superkanonisch

### 2.3.4 AsnERemoteTapiDialFormat

Remote Tapi Treiber Rufnummern Wahl Formatierung

AsnERemoteTapiDialFormat is an Enumeration

Name	Type	Value	Comment
eREMOTETAPIDIALFORMATPLAIN	number	0	Plain wählen, nur PC Wahl Final anwenden
eREMOTETAPIDIALFORMATALL	number	1	Komplett Formatieren

### 2.3.5 AsnERemoteTapiLineNames

MultiLine TAPI Treiber - Name der Leitungen

AsnERemoteTapiLineNames is an Enumeration

Name	Type	Value	Comment
eREMOTETAPILINENAMESORIGINAL	number	0	Wie vom TAPI-Treiber gemeldet
eREMOTETAPILINENAMESLINENUMBER	number	1	Mit Standortinformationen erweitert

### 2.3.6 AsnForwardMode

The different forwarding modes a line could probably support.

AsnForwardMode is an Enumeration

Name	Type	Value	Comment
iCTIFORWARDUNKNOWN	number	0	Forward unknown
iCTIFORWARDIMMEDIATE	number	1	Forward Immediate
iCTIFORWARDBUSY	number	2	Forward on Busy
iCTIFORWARDNOANSW	number	3	Forward on No Answer
iCTIFORWARDBUSYINT	number	4	Forward on Busy for internal
iCTIFORWARDBUSYEXT	number	5	Forward on Busy for external
iCTIFORWARDNOANSINT	number	6	Forward on No answer for int
iCTIFORWARDNOANSEXT	number	7	Forward on No answer for ext
iCTIFORWARDIMMINT	number	8	Forward immediate for intern
iCTIFORWARDIMMEXT	number	9	Forward immediate for extern
iCTIBACKENDSPECIFIC	number	10	Backend specific forwarding

### 2.3.7 AsnPresenceStateEnum

Enumeration of possible presence states of a contact.

The presence state of a contact (or line, or appointment etc.) is a DWORD (32 Bit) bit field, where the individual Bits are divided into two separate spaces: the presence state (AsnPresenceStateEnum) and the presence state flags (AsnPresenceStateFlags) which contain further details about the current presence state.

AsnPresenceStateEnum is an Enumeration

Name	Type	Value	Comment
eUNCONTROLLED	number	0	Presence is not available, contact is unknown.
eAVAILABLE	number	1	Contact is available.
eBUSY	number	2	Contact is busy.
eABSENT	number	3	Contact is absent.

eDONOTDISTURB	number	4	Contact wished to not being disturbed.
eOUTOFORDER	number	7	Something does not work, line is not connected, device is broken etc. Contact may not get into this state.

### 2.3.8 AsnPresenceStateFlags

The addition state flags for the current presenc state.

The presence state of a contcat (or line, or appointment etc.) is a DWORD (32 Bit) bit field, where the individual Bits are devided into two seperate spaces: the presence state (AsnPresenceStateEnum) and the presence state flags (AsnPresenceStateFlags) which contain further deatils about the current presence state.

AsnPresenceStateFlags is an Enumeration

Name	Type	Value	Comment
eWORKINGAFTERCALL	number	65536	0x00010000 - The contact is doing work after a call and should be treated as "busy". (added after PCE 5.1)
eCONFERENCING	number	131072	0x00020000 - The contact is participating a conference with our conferencing product (added with PCE 7.1)
eRINGING	number	16777216	0x01000000 - The contact has a call ringing on one of his phone or A/V lines.
eAPPOINTMENT	number	33554432	0x02000000 - The contavct has currently an active appointment in "absent", "busy" or "free" state.
eCALL	number	67108864	0x04000000 - The contact is in a call.
eOFFLINE	number	134217728	0x08000000 - The contact is offline.
eNOTESET	number	268435456	0x10000000 - The contact has set a note.
eIDLE	number	536870912	0x20000000 - The contact does not used his mouse or keyboard for a time or is only logged in with a mobile device.
eMOBILEAVAILABLITY	number	1073741824	0x40000000 - The contact is most likely reachable on his mobile device.

### 2.3.9 AsnPresenceStateMasks

Helper masks to distinguish the presence state from the presence state flags.

AsnPresenceStateMasks is an Enumeration

Name	Type	Value	Comment
ePresenceStateMask	number	255	0x000000ff - Currently the lower byte contains the presence state
ePresenceStateFlagsMaskAdd	number	16711680	0x00ff0000 - Additional flags introduced later in the development process of ProCall after Version 5.1.
ePresenceStateFlagsMask	number	2130706432	0x7f000000 - Currently the top most byte of the DWORD contains the presence state flags. Addendum: a technical constraint in the c# library prevents the usage of the top most bit.

### 2.3.10 EnumCallState

States a call can have.

EnumCallState is an Enumeration

Name	Type	Value	Comment
eCALLSTATEUNKNOWN	number	0	Call is in an unknown state.
eCALLSTATEDESTROYED	number	1	Call was destroyed by dropping it.
eCALLSTATEOFFERING	number	2	Call is ringing inbound.
eCALLSTATEDIALING	number	4	User is dialing.
eCALLSTATERINGBACK	number	8	Call is ringing outbound (call number is complete)
eCALLSTATEBUSY	number	16	Call outbound is busy.
eCALLSTATECONNECTED	number	32	Call is connected (same for in- and outbound)
eCALLSTATECONFERENCED	number	64	Call is part of a call conference.

eCALLSTATEHOLD	number	128	Call is on hold.
eCALLSTATEDISCONNECTED	number	256	Call is disconnected by the call partner. The user should drop the call too, then it will get destroyed too.
eCALLSTATEPREPARECALL	number	512	Call is in a prepare state (special for procall, this is not a normal PBX state).

### 2.3.11 EnumCallDisconnectedReason

The disconnected state may be reached by different reasons which may be interesting for the business logic or the user.

EnumCallDisconnectedReason is an Enumeration

Name	Type	Value	Comment
eDISCONNECTEDREASONUNKNOWN	number	0	Disconnect reason unknown, even if the call was successful connected and one of the participants has dropped the call.
eDISCONNECTEDREASONUNCONNECTED	number	1	The call partner did not answer the call.
eDISCONNECTEDREASONBUSY	number	2	The call partner is busy.
eDISCONNECTEDREASONREDIRECTEDUNKNOWN	number	3	Anruf wurde aus einem ECALLSTATE_OFFERING heraus mit redirect oder Pickup weggeholt The call was redirected or picked in the state offering (eCALLSTATEOFFERING) by an unkown line or participant.
eDISCONNECTEDREASONREDIRECTEDBYLINEOWNER	number	4	The call was redirected or picked in the state offering (eCALLSTATEOFFERING) by the line owner.

### 2.3.12 EnumRemoteContactSource

Contact data source for call AsnCtiCallInformation

In a call information it can be necessary to know, where the contact data of the remote contact was found.

For example with this information, a client can decide not to overwrite a contact in a call, if the source is another client of the same user.

EnumRemoteContactSource is an Enumeration

Name	Type	Value	Comment
eUNKNOWN	number	0	Data source is unknown/not set
eSERVERPROVIDED	number	1	Server provided the contact data
eCLIENTPROVIDED	number	2	The client provided the contact data
eOTHERCLIENTPROVIDED	number	3	Another client provided the contact data (if the same user has more than one client running)

### 2.3.13 EAsnCallType

Technical type of a call.

EAsnCallType is an Enumeration

Name	Type	Value	Comment
eCALLTYPENORMAL	number	0	Just a normal call.
eCALLTYPECONSULT	number	1	Consultation call.
eCALLTYPECONFERENCECONTROLER	number	2	Conference controller call.
eCALLTYPECALLBACK	number	3	Callback call (callback while busy or callback was not answered)
eCALLTYPECONFERENCEMEMBER	number	4	Conference member call.
eCALLTYPECONFERENCECONTROLERPENDING	number	5	Conference controller while building up the conference (US conference model)
eCALLTYPECONFERENCEMEMBERPENDING	number	6	Conference member while building up the conference (US conference model)

### 2.3.14 EnumCallRecordingState

The state of the call recorder.

EnumCallRecordingState is an Enumeration

Name	Type	Value	Comment
eNOCALLRECODRING	number	0	Call recording not active.
eCALLRECORDERCALL	number	1	This is the call recording call to the ISDN/CAPI device used to record the call.
eCALLRECORDINGMEMBER	number	2	Call which will be recorded.
eWASCALLRECORDERCALL	number	3	Call which was the <b>recorder</b> call.
eWASCALLRECORDINGMEMBER	number	4	Call which was the <b>recorded</b> call.

### 2.3.15 AsnPresenceRightsFlags

AsnPresenceRightsFlags is an Enumeration

Name	Type	Value	Comment
eVisible	number	1	
eChangeable	number	2	
eAppointmentPrivate	number	16	0x0000 0010
eAppointmentPublic	number	32	0x0000 0020
ePatternUsed	number	32768	0x0000 8000
eBlocked	number	0	
ePublic	number	65536	0x0001 0000
eCompany	number	131072	0x0002 0000
eTeam	number	262144	0x0004 0000
ePersonal	number	524288	0x0008 0000

### 2.3.16 AsnPresenceRightsMasks

AsnPresenceRightsMasks is an Enumeration

Name	Type	Value	Comment
eAppointmentMask	number	240	0x0000 00F0
ePatternFlagsMask	number	983040	0x000F 0000

### 2.3.17 AsnPhoneControlRightsFlags

AsnPhoneControlRightsFlags is an Enumeration

Name	Type	Value	Comment
eBlocked	number	0	
eNumbersOutbound	number	1	0x0000 0001
eNumbersInbound	number	2	0x0000 0002
eNumbersRedirected	number	4	0x0000 0004
eSetForwards	number	256	0x0000 0100
eSetPickupCalls	number	512	0x0000 0200

### 2.3.18 AsnPresenceCommonRights

AsnPresenceCommonRights is an Enumeration

Name	Type	Value	Comment
eBlocked	number	0	0x0000 0000 Blocked / not set
ePublic	number	98305	0x0001 8001 UR_PRESENCE_PUBLIC   UR_PRESENCE_PATTERN_USED   UR_PRESENCE_VISIBLE
eCompany	number	163873	0x0002 8021 UR_PRESENCE_COMPANY   UR_PRESENCE_PATTERN_USED   UR_PRESENCE_APPOINTMENT_PUBLIC   UR_PRESENCE_VISIBLE
eTeam	number	294947	0x0004 8023 UR_PRESENCE_TEAM   UR_PRESENCE_PATTERN_USED

			UR_PRESENCE_APPOINTMENT_PUBLIC   UR_PRESENCE_CHANGEABLE   UR_PRESENCE_VISIBLE
ePersonal	number	557107	0x0008 8033 UR_PRESENCE_PERSONAL   UR_PRESENCE_PATTERN_USED   UR_PRESENCE_APPOINTMENT_PUBLIC   UR_PRESENCE_APPOINTMENT_PRIVATE   UR_PRESENCE_CHANGEABLE   UR_PRESENCE_VISIBLE

### 2.3.19 AsnPhoneControlPrimaryCommonRights

AsnPhoneControlPrimaryCommonRights is an Enumeration

Name	Type	Value	Comment
eBlocked	number	0	0x0000 Blocked / not set
eCompany	number	7	0x0007 UR_PHONE_NUMBERS_OUTBOUND   UR_PHONE_NUMBERS_INBOUND   UR_PHONE_NUMBERS_REDIRECTED
eTeam	number	519	0x0207 UR_PHONE_NUMBERS_OUTBOUND   UR_PHONE_NUMBERS_INBOUND   UR_PHONE_NUMBERS_REDIRECTED   UR_PHONE_PICKUP_CALLS
ePersonal	number	775	0x0307 UR_PHONE_NUMBERS_OUTBOUND   UR_PHONE_NUMBERS_INBOUND   UR_PHONE_NUMBERS_REDIRECTED   UR_PHONE_PICKUP_CALLS   UR_PHONE_SET_FORWARDS

### 2.3.20 AsnPhoneControlSecondaryCommonRights

AsnPhoneControlSecondaryCommonRights is an Enumeration

Name	Type	Value	Comment
eBlocked	number	0	0x0000 Blocked / not set
eTeam	number	7	0x0007 UR_PHONE_NUMBERS_OUTBOUND   UR_PHONE_NUMBERS_INBOUND   UR_PHONE_NUMBERS_REDIRECTED
ePersonal	number	775	0x0307 UR_PHONE_NUMBERS_OUTBOUND   UR_PHONE_NUMBERS_INBOUND   UR_PHONE_NUMBERS_REDIRECTED   UR_PHONE_PICKUP_CALLS   UR_PHONE_SET_FORWARDS

### 2.3.21 AsnContactFeatureSetEnum

Definitions for Bitfield iContactFeatureSet

Permissions on functions a current user can execute on another contact.  
Server filters rights and permissions.

AsnContactFeatureSetEnum is an Enumeration

Name	Type	Value	Comment
eCONTACTFEATURENONE	number	0	Nothing is allowed on this contact.
eCONTACTFEATUREDIAL	number	1	Dial on the primary line of the other contact.
eCONTACTFEATURESETFORWARDL1	number	2	Set forward on the first line of the other contact.
eCONTACTFEATURESETFORWARDL2	number	4	Set forward on the second line of the other contact.
eCONTACTFEATURESWAP	number	8	Swap Call.
eCONTACTFEATUREANSWER	number	16	Answer call.
eCONTACTFEATUREHANGUP	number	32	Hang up.
eCONTACTFEATUREPICKUPL1	number	64	Pickup a ringing call on the first line of the contact.
eCONTACTFEATUREPICKUPL2	number	128	Pickup a ringing call on the second line of the contact.
eCONTACTFEATUREHOLD	number	256	Hold the active call.
eCONTACTFEATUREMESSAGE	number	512	Send a message.
eCONTACTFEATUREREDIRECT	number	1024	Redirect a ringing call.
eCONTACTFEATURESETABSENT	number	2048	Set absent state of the contact.

### 2.3.22 AsnMetaDirectoryPasswordEncryption

AsnMetaDirectoryPasswordEncryption is an Enumeration

Name	Type	Value	Comment
iEncrypted	number	0	Passwort verschlüsselt übertragen
iPlain	number	1	Passwort als Klartext übermitteln

### 2.3.23 AsnNumberFormatRegularExpression2

Regular expression to reformat a phone number. Replaces AsnNumberFormatRegularExpression.

AsnNumberFormatRegularExpression2 is an Object

Name	Type	Optional	Comment
u8sSearch	string		
u8sReplace	string		
bMatchReplace	boolean		

### 2.3.24 AsnKeepAliveArgument

Argument for asnKeepAlive

AsnKeepAliveArgument is an Object

Name	Type	Optional	Comment
dummy	Object		no parameter

### 2.3.25 AsnGetLocationInformationArgument

Argument for asnGetLocationInformation and asnGetLocationInformation2

AsnGetLocationInformationArgument is an Object

Name	Type	Optional	Comment
u8sLocationID	string		The identifier of a location information. See asnGetLocationIDs as an example how to get a location id.

### 2.3.26 AsnSetLocationInformation2Result

AsnSetLocationInformation2Result is an Object

Name	Type	Optional	Comment

### 2.3.27 AsnGetLocationIDsArgument

Liefert die LocationIDs mit passender MD5 Prüfsumme.

Wird vom Client verwendet um zu prüfen ob seine Location Settings noch aktuell sind

AsnGetLocationIDsArgument is an Object

Name	Type	Optional	Comment
locationIDs	UTF8StringList	yes	

### 2.3.28 AsnGetLocationIDsResult

AsnGetLocationIDsResult is an Object

Name	Type	Optional	Comment
locationIDMD5ChecksumList	AsnStringPairList		first LocationID, last MD5 Checksum

### 2.3.29 AsnLocationInformationChangedArgument

AsnLocationInformationChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sLocationID	string		
optionalParams	AsnOptionalParameters	yes	optionalParams Name "MD5CheckSum" Value UTF8String MD5 Prüfsumme über den Standort

### 2.3.30 AsnUpdateMyContactConfigurationV2Argument

The changed contact details for the asnUpdateMyContactConfigurationV2 operation

AsnUpdateMyContactConfigurationV2Argument is an Object

Name	Type	Optional	Comment
contactChanged	AsnContactV2		

### 2.3.31 AsnSetUserAbsentStateArgument

Argument for asnSetUserAbsentState

Set change the manual presence of a user, a AsnAbsentState struct has to be sent to the ucserver.

AsnSetUserAbsentStateArgument is an Object

Name	Type	Optional	Comment
absentstate	AsnAbsentStateV2		The AsnAbsentState data to change the manual presence of the user.

### 2.3.32 AsnSetUserAbsentStateResult

Result of asnSetUserAbsentState if the operation executes successfully.

Result of asnAbsentStateSetUser if the operation executes successfully.

AsnSetUserAbsentStateResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		Should always be true.

### 2.3.33 Asn GetUserAbsentStateResult

Asn GetUserAbsentStateResult is an Object

Name	Type	Optional	Comment
absentstate	AsnAbsentStateV2		

### 2.3.34 AsnResetUserAbsentStateArgument

Argument for asnResetUserAbsentState

The argument for asnResetUserAbsentState contains the ContactID for the contact to reset its absent state to 'none'.

AsnResetUserAbsentStateArgument is an Object

Name	Type	Optional	Comment
u8sContactId	string		

### 2.3.35 AsnResetUserAbsentStateResult

Result of asnResetUserAbsentState that indicates, that the operation was successful.

AsnResetUserAbsentStateResult is an Object

Name	Type	Optional	Comment

### 2.3.36 AsnUpdateMyAbsentStateV2Argument

AsnUpdateMyAbsentStateV2Argument is an Object

Name	Type	Optional	Comment
absentstate	AsnAbsentStateV2		

### 2.3.37 AsnCustomNoteSetArgument

AsnCustomNoteSetArgument is an Object

Name	Type	Optional	Comment
customnote	AsnCustomNote		

### 2.3.38 AsnCustomNoteSetResult

AsnCustomNoteSetResult is an Object

Name	Type	Optional	Comment
optionalParams	AsnOptionalParameters	yes	optionalParams Name "RemoteInvokeID" Value String

### 2.3.39 AsnUpdateMyCustomNoteArgument

AsnUpdateMyCustomNoteArgument is an Object

Name	Type	Optional	Comment
customnote	AsnCustomNote		

### 2.3.40 AsnSetMetaSettingsResult

AsnSetMetaSettingsResult is an Object

Name	Type	Optional	Comment

### 2.3.41 AsnSubscribeServicesArgument

Temporay helper object for the asnSubscribeServices

AsnSubscribeServicesArgument is an Object

Name	Type	Optional	Comment
------	------	----------	---------

### 2.3.42 AsnSubscribeServicesResult

Temporay helper object for the asnSubscribeServices

AsnSubscribeServicesResult is an Object

Name	Type	Optional	Comment
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### 2.3.43 AsnNumberFormatRegExpressList2

List of AsnNumberFormatRegExpression. Replaces AsnNumberFormatRegExpressList.

AsnNumberFormatRegExpressList2 is an Array of AsnNumberFormatRegExpression2

AsnNumberFormatRegExpression2 is an Object

Name	Type	Optional	Comment
u8sSearch	string		
u8sReplace	string		
bMatchReplace	boolean		

### 2.3.44 AsnNumberFormatRegExpressions2

Encapsulates AsnNumberFormatRegExpressList2 together with a readonly flag.

AsnNumberFormatRegExpressions2 is an Object

Name	Type	Optional	Comment
blsReadOnlyFromFile	boolean		
formatRules	AsnNumberFormatRegExpressList2		

### 2.3.45 AsnLocationInformation2

Description of formatting and dialing rules for phone numbers.

Each PBX is connected to a phone network which defines the rules to apply if number should be dialed or how phone numbers are routed and transmitted.

The AsnLocationInformation contains information how to handle phone numbers to allow comfort functions for the user like formatting phone numbers to display them in a

readable manner  
or to enable the user to enter numbers in a short format etc.

Replaces AsnLocationInformation.

AsnLocationInformation2 is an Object

Name	Type	Optional	Comment
u8sLocationID	string		
u8sLocationCheckSum	string		Checksum to detect changes in the AsnLocationInformation2.
bUseVanity	boolean		
bShowExtendedSettings	boolean		
bUseTkSystem	boolean		
bUseAdvancedLCR	boolean		
bFixedNumberLenExtensionDTMFDialog	boolean		
bMultiLocationSupport	boolean		
bAutoCreateOtherLocationRules	boolean		
bAllowNumberSearchOtherLocations	boolean		
bShortenOtherLocationSCNumbersForDialing	boolean		
iCountryID	number		
iLanguage	number		
u8sCountryCode	string		
u8sLocalPrefix	string		
u8sNationalPrefix	string		
u8sInternationalPrefix	string		
u8sLocalDialingRule	string		
u8sNationalDialingRule	string		
u8sInternationalDialingRule	string		
u8sCityCodeNoPrefix	string		
u8sVanityNumbers	string		

u8sTKLocalAccessCode	string		
u8sTKLongDistanceAccessCode	string		
u8sTKInternationalAccessCode	string		
u8sTKPrivateAccessCode	string		
u8sTKForwardingAccessCode	string		
u8sTKAnschlussNr	string		
iTKMinLenInternalNumbers	number		
iTKMaxLenInternalNumbers	number		
numberFormatInternal	AsnNumberFormatRegExpressions2		
numberFormatExternal	AsnNumberFormatRegExpressions2		
numberFormatAutomaticOtherLocationsDDItoSC	AsnNumberFormatRegExpressions2		
numberFormatAutomaticOtherLocationsSCtoDDI	AsnNumberFormatRegExpressions2		
numberFormatRegExpressListIn	AsnNumberFormatRegExpressions2		
numberFormatRegExpressListOut	AsnNumberFormatRegExpressions2		
numberFormatRegExpressListDial	AsnNumberFormatRegExpressions2		
numberFormatRegExpressListFinalDial	AsnNumberFormatRegExpressions2		
projectPINRules	AsnProjectPinRuleList		
u8sDDIRangeBegin	string		
u8sDDIRangeEnd	string		
iDialingNumberFormat	number		Dialing Number Format. See AsnETAPIDialNumberFormat for details. (Linked Type: AsnETAPIDialNumberFormat)
bNoLocalDialing	boolean		

### 2.3.46 AsnGetLocationInformation2Result

Result of asnGetLocationInformation2

AsnGetLocationInformation2Result is an Object

Name	Type	Optional	Comment
asnLocationData	AsnLocationInformation2		Location information (v2) about the phone number rules on the line.

### 2.3.47 AsnSetLocationInformation2Argument

AsnSetLocationInformation2Argument is an Object

Name	Type	Optional	Comment
asnLocationData	AsnLocationInformation2		

### 2.3.48 Asn GetUserAbsentStateArgument

Asn GetUserAbsentStateArgument is an Object

Name	Type	Optional	Comment
contactId	string		

### 2.3.49 AsnGetMetaSettingsArgument

AsnGetMetaSettingsArgument is an Object

Name	Type	Optional	Comment
eSendPlainPassword	AsnMetaDirectoryPasswordEncryption		Soll das Passwort fÃ¼r das MetaDirectory verschlÃ¼sstelt Ã¼bermittelt werden 1: ja, 0(default): nein

### 2.3.50 AsnMetaDirectorySettings

AsnMetaDirectorySettings is an Object

Name	Type	Optional	Comment
iMetaEnabled	number		Meta interface enabled?

iMetaPort	number	TCP Port
u8sMetaServer	string	Servername
u8sBaseDN	string	BaseDN
iMetaForceSSL	number	Soll eine LDAPS-Verbindung aufgebaut werden
iMetaUseAccount	number	Soll User und Passwort fÃ¼r die Metaverbindung verwendet werden
u8sMetaUser	string	Username am MetaDirectory
ePasswordEncryption	AsnMetaDirectoryPasswordEncryption	Passwort ist verschlÃ¼sstelt (0) oder Plaintext (1)
u8sMetaPassword	string	Passwort des Users am MetaDirectory
iMetaUseInServer	number	Use the meta with the CTI Server
iMetaUseInClient	number	Use the meta with the ProCall Client

### 2.3.51 AsnSetMetaSettingsArgument

AsnSetMetaSettingsArgument is an Object

Name	Type	Optional	Comment
eSendPlainPassword	AsnMetaDirectoryPasswordEncryption		Soll das Passwort fÃ¼r das MetaDirectory verschlÃ¼sstelt Ã¼bermittelt werden 1: ja, 0(default): nein
metasettings	AsnMetaDirectorySettings		

### 2.3.52 AsnGetMetaSettingsResult

AsnGetMetaSettingsResult is an Object

Name	Type	Optional	Comment
metasettings	AsnMetaDirectorySettings		

### **2.3.53 AsnContactIDs**

AsnContactIDs is an Array of AsnContactID

## 3 Administration

Administration interface (workstation setup)

### Module description

This module defines structures and functions for administration the UCServer. These structures are used by the administrative console (UCServer Administration) and the ClnInst.exe (Workstation settings) on the client. These operations need an administrative login on the UCServer.

#### 3.1 Administration Operations

##### 3.1.1 asnAdminLogin

###### ArgumentType: AsnAdminLoginArgument

AsnAdminLoginArgument is an Object

Name	Type	Optional	Comment
u8sAdminUsername	string		user login daten
adminPassword	AsnAdminLoginArgumentChoice		

###### ResultType: AsnAdminLoginResult

AsnAdminLoginResult is an Object

Name	Type	Optional	Comment
result	AsnAdminLoginResultEnum		

###### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

##### 3.1.2 asnAdmin GetUserProfile

###### ArgumentType: AsnAdminGetUserProfileArgument

AsnAdminGetUserProfileArgument is an Object

Name	Type	Optional	Comment
identifier	AsnAdminGetUserProfileArgumentChoice		

**ResultType: AsnAdminGetUserProfileResult**

AsnAdminGetUserProfileResult is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 3.1.3 asnAdmin GetUserProfiles

**ArgumentType: AsnAdminGetUserProfilesArgument**

AsnAdminGetUserProfilesArgument is an Object

Name	Type	Optional	Comment
iActiveUsersOnly	number		CTI-Enabled users only
iFilterOnlineState	number		Filter with actual onlinestate -> AsnAdminUserOnlineStateFilter

**ResultType: AsnAdminGetUserProfilesResult**

AsnAdminGetUserProfilesResult is an Object

Name	Type	Optional	Comment
userProfiles	AsnUserProfileList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 3.1.4 asnAdminSetUserProfile

#### ArgumentType: AsnAdminSetUserProfileArgument

AsnAdminSetUserProfileArgument is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		
optionalParams	AsnOptionalParameters	yes	

#### ResultType: AsnAdminSetUserProfileResult

AsnAdminSetUserProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 3.1.5 asnAdminRemoveUserProfile

#### ArgumentType: AsnAdminRemoveUserProfileArgument

AsnAdminRemoveUserProfileArgument is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		Der u8sUserName muss gesetzt werden als Schlüssel

#### ResultType: AsnAdminRemoveUserProfileResult

AsnAdminRemoveUserProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

#### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### **3.1.6 asnAdminAddUserProfile**

#### **ArgumentType: AsnAdminAddUserProfileArgument**

AsnAdminAddUserProfileArgument is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		

#### **ResultType: AsnAdminAddUserProfileResult**

AsnAdminAddUserProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

#### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### **3.1.7 asnAdminGetComputerProfile**

#### **ArgumentType: AsnAdminGetComputerProfileArgument**

AsnAdminGetComputerProfileArgument is an Object

Name	Type	Optional	Comment
u8sClientComputerName	string		Computer login daten wenn Computername leer, dann leeres default profile liefern

### **ResultType: AsnAdminGetComputerProfileResult**

AsnAdminGetComputerProfileResult is an Object

Name	Type	Optional	Comment
computerProfile	AsnComputerProfile		

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## **3.1.8 asnAdminSetComputerProfile**

### **ArgumentType: AsnAdminSetComputerProfileArgument**

AsnAdminSetComputerProfileArgument is an Object

Name	Type	Optional	Comment
computerProfile	AsnComputerProfile		

### **ResultType: AsnAdminSetComputerProfileResult**

AsnAdminSetComputerProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 3.1.9 asnAdminAddComputerProfile

#### ArgumentType: AsnAdminAddComputerProfileArgument

AsnAdminAddComputerProfileArgument is an Object

Name	Type	Optional	Comment
computerProfile	AsnComputerProfile		

#### ResultType: AsnAdminAddComputerProfileResult

AsnAdminAddComputerProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 3.1.10 asnAdminFindUser

#### ArgumentType: AsnAdminFindUserArgument

AsnAdminFindUserArgument is an Object

Name	Type	Optional	Comment
find	AsnAdminFindUserArgumentChoice		
iMaxResults	number		Maximale Anzahl der gewÃ¼nschten user (0 fÃ¼r alle)

**ResultType: AsnAdminFindUserResult**

AsnAdminFindUserResult is an Object

Name	Type	Optional	Comment
userlist	AsnAdminFindUserProfileList		Liste der gefundenen User. Das sind evtl nicht alle
iLimitReached	number		Wenn es mehr gibt, als wir abfragen kÃ¶nnen, dann ist das gesetzt

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**3.1.11 asnAdminFindGroupProfiles****ArgumentType: AsnAdminFindGroupProfilesArgument**

AsnAdminFindGroupProfilesArgument is an Object

Name	Type	Optional	Comment
iSearchFilter	number		Searchfilter-Wert, siehe dazu AsnAdminFindGroupProfilesFilter Enumeration
u8sStringParameter	string		Stringparameter fÃ¼r verschiedene Searchfilter

**ResultType: AsnAdminFindGroupProfilesResult**

AsnAdminFindGroupProfilesResult is an Object

Name	Type	Optional	Comment
listGroupProfiles	AsnGroupProfileList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 3.1.12 asnAdminSetGroupProfile

#### ArgumentType: AsnAdminSetGroupProfileArgument

AsnAdminSetGroupProfileArgument is an Object

Name	Type	Optional	Comment
groupProfile	AsnGroupProfile		

#### ResultType: AsnAdminSetGroupProfileResult

AsnAdminSetGroupProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 3.1.13 asnAdminAddGroupProfile

#### ArgumentType: AsnAdminAddGroupProfileArgument

AsnAdminAddGroupProfileArgument is an Object

Name	Type	Optional	Comment
groupProfile	AsnGroupProfile		

#### ResultType: AsnAdminAddGroupProfileResult

AsnAdminAddGroupProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**3.1.14 asnAdminRemoveGroupProfile****ArgumentType: AsnAdminRemoveGroupProfileArgument**

AsnAdminRemoveGroupProfileArgument is an Object

Name	Type	Optional	Comment
groupProfile	AsnGroupProfile		

**ResultType: AsnAdminRemoveGroupProfileResult**

AsnAdminRemoveGroupProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		AD Implementierung lässt das Löschen von Gruppen nicht zu, aber es wird TRUE zurückgeliefert

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**3.1.15 asnGetDatabaseManagerSettings****ArgumentType: AsnGetDatabaseManagerSettingsArgument**

AsnGetDatabaseManagerSettingsArgument is an Object

Name	Type	Optional	Comment
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### **ResultType: AsnGetDatabaseManagerSettingsResult**

AsnGetDatabaseManagerSettingsResult is an Object

Name	Type	Optional	Comment
u8sEngine	string		mssql_mdac, jet
u8sServer	string		SQL-Server Name
u8sFilePath	string		Filepath zur Datenbank im jet/MSAccess Fall
u8sLoginName	string		Loginname bei SQL-Server Fall; Ist der Name leer, wird der SQL-Server mit Windows-Anmeldung verwendet. Enthält der Name etwas, wird SQL-Server internes Benutzerverwaltung verwendet.
u8sPassword	string		Passwort fü r den Loginname; wird nur benötigt, wenn SQL-Server Benutzerkennwörter verlangt
u8sDatabaseName	string		Datenbanknamen-Prefix fü r jet-Datenbanken
u8sOfflineTable	string		Name der Offline-Journal Datenbank/Tabelle
u8sJournalTable	string		Name der Journal Datenbank/Table
u8sTrackerTable	string		Name der Call-Tracker Datenbank/Table
u8sConversationTable	string		Name der Conversation Datenbank/Table (Chat)
u8sAppointmentTable	string		Name der Termin Datenbank/Tabelle
u8sTaskTable	string		Name der Aufgaben/geplante Anrufe Datenbank/Tabelle

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### **3.1.16 asnGetNetworkInterfacePorts**

#### **ArgumentType: AsnGetNetworkInterfacePortsArgument**

AsnGetNetworkInterfacePortsArgument is an Object

Name	Type	Optional	Comment
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### **ResultType: AsnGetNetworkInterfacePortsResult**

AsnGetNetworkInterfacePortsResult is an Object

Name	Type	Optional	Comment
iAdminPort	number		
u8sAdminBindAddress	string		
iNetCtiPort	number		
u8sNetCtiBindAddress	string		
iNetTSPPort	number		
u8sNetTSPBindAddress	string		
iLDAPServerPort	number		
u8sLDAPServerBindAddress	string		
iHTTPServerPort	number		
u8sHTTPServerBindAddress	string		

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### **3.1.17 asnGetAvailableLines**

#### **ArgumentType: AsnGetAvailableLinesArgument**

AsnGetAvailableLinesArgument is an Object

Name	Type	Optional	Comment
optionalParams	AsnOptionalParameters	yes	<ul style="list-style-type: none"> <li>• Key "MobileLines" Value boolean - Add mobile lines to the result, defaults to</li> </ul>

			<p>not adding these lines</p> <ul style="list-style-type: none"> <li>• Key "SIPLines" Value boolean - Add SIP lines to the result, defaults to not adding these lines</li> <li>• Key "AVLINES" Value boolean - Add ProCall AV lines to the result, defaults to not adding these lines</li> </ul>
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**ResultType: AsnGetAvailableLinesResult**

AsnGetAvailableLinesResult is an Object

Name	Type	Optional	Comment
linelist	AsnAvailableLineDetailsList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**3.1.18 asnGetUserManagerSettings****ArgumentType: Asn GetUserManagerSettingsArgument**

Asn GetUserManagerSettingsArgument is an Object

Name	Type	Optional	Comment
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**ResultType: Asn GetUserManagerSettingsResult**

Asn GetUserManagerSettingsResult is an Object

Name	Type	Optional	Comment
iSelectedUMMode	number		
iUMSecurity	number		
iUMSelfInstall	number		

bAutoBindFirstLine	boolean		
bAutoBindSecondLine	boolean		
iPhoneNumberPreformatFormat	number		
bLDAPBaseAttributeWriteBackEnabled	boolean		
u8slistPresenceDomain	UTF8StringList		
optionalParams	AsnOptionalParameters	yes	<p>Optional Params:</p> <p>Wenn das Usermanagement auf AD gestellt ist, werden folgende Informationen noch ergänzt:</p> <ul style="list-style-type: none"> <li>ActiveDirectoryDomain [UTF8String] Die Domäne, in der der UCServer steht</li> <li>ActiveDirectoryBaseDNUsers [UTF8String] BaseDN der Benutzer (kann eine ';' getrennte Liste sein!)</li> <li>ActiveDirectoryHostName [UTF8String] Rechnername des AD</li> <li>ActiveDirectoryHostPort [INTEGER] Portnummer des AD</li> <li>ActiveDirectoryDisabledFields [UTF8StringList] Liste der UCServer Felder die in der Benutzerverwaltung optional und deaktiviert sind. (HomePhone sowie Pager sind z.B. beides optionale Felder)</li> </ul>

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### 3.1.19 asnAdminGetPhoneJournalSettings

#### ArgumentType: AsnAdminGetPhoneJournalSettingsArgument

AsnAdminGetPhoneJournalSettingsArgument is an Object

Name	Type	Optional	Comment
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**ResultType: AsnAdminGetPhoneJournalSettingsResult**

AsnAdminGetPhoneJournalSettingsResult is an Object

Name	Type	Optional	Comment
iUnansweredCallJournalOption	number		see AsnAdminPhoneJournalUnansweredEnum
iAnsweredRedirectedCallJournalOption	number		see AsnAdminPhoneJournalUnansweredEnum
bAutoMarkReadGroupCallsOnCallback	boolean		Automatically mark journal entries as read, if one member of the group answered the call

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**3.1.20 asnAdminSetAnonymousUserAccessToken**

Update accessToken for PublicUsers

**ArgumentType: AsnAdminSetAnonymousUserAccessTokenArgument**

AsnAdminSetAnonymousUserAccessTokenArgument is an Object

Name	Type	Optional	Comment
u8sAnonymousHintData	string		contact identifier
u8sAnonymousNewAccessToken	string		new access token

**ResultType: AsnAdminSetAnonymousUserAccessTokenResult**

AsnAdminSetAnonymousUserAccessTokenResult is an Object

Name	Type	Optional	Comment
success	boolean		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**3.1.21 asnAdminSetAnonymousUserContactData**

create or update contactdata for PublicUsers

**ArgumentType: AsnAdminSetAnonymousUserContactDataArgument**

AsnAdminSetAnonymousUserContactDataArgument is an Object

Name	Type	Optional	Comment
contactData	AspNetDatabaseContact		updated contactdata information

**ResultType: AsnAdminSetAnonymousUserContactDataResult**

AsnAdminSetAnonymousUserContactDataResult is an Object

Name	Type	Optional	Comment
success	boolean		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**3.1.22 asnAdminRemoveAnonymousUser**

remove PublicUser from userdatabase

**ArgumentType: AsnAdminRemoveAnonymousUserArgument**

AsnAdminRemoveAnonymousUserArgument is an Object

Name	Type	Optional	Comment
u8sAnonymousHintData	string		contact identifier

**ResultType: AsnAdminRemoveAnonymousUserResult**

AsnAdminRemoveAnonymousUserResult is an Object

Name	Type	Optional	Comment
success	boolean		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 3.2 Administration Types

### 3.2.1 AsnAdminLoginResultEnum

AsnAdminLoginResultEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
failed	number	1	

### 3.2.2 AsnAdmin GetUserProfileErrorEnum

AsnAdmin GetUserProfileErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	

usernotfound	number	1	
accessdenied	number	2	

### 3.2.3 AsnAdminUserOnlineStateFilter

AsnAdminUserOnlineStateFilter is an Enumeration

Name	Type	Value	Comment
eNOSTATEFILTER	number	0	
eISONLINEONLY	number	1	
eISOFFLINEONLY	number	2	

### 3.2.4 AsnAdmin GetUserProfilesErrorEnum

AsnAdmin GetUserProfilesErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
nouserfound	number	1	
accessdenied	number	2	

### 3.2.5 AsnAdminSetUserProfileErrorEnum

AsnAdminSetUserProfileErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	
usernotfound	number	2	
sipurialreadyoccupied	number	3	
sipurimalformed	number	4	

### 3.2.6 AsnAdminRemoveUserProfileErrorEnum

AsnAdminRemoveUserProfileErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
unknown	number	1	
accessdenied	number	2	
invalidusername	number	3	

### 3.2.7 AsnAdminAddUserProfileErrorEnum

AsnAdminAddUserProfileErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	
useralreadyexists	number	2	

### 3.2.8 AsnAdminGetComputerProfileErrorEnum

AsnAdminGetComputerProfileErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	
computernotfound	number	2	

### 3.2.9 AsnAdminSetComputerProfileErrorEnum

AsnAdminSetComputerProfileErrorEnum is an Enumeration

Name	Type	Value	Comment

success	number	0	
accessdenied	number	1	
computernotfound	number	2	

### 3.2.10 AsnAdminAddComputerProfileErrorEnum

AsnAdminAddComputerProfileErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	
computeralreadyexists	number	2	

### 3.2.11 AsnAdminFindUserErrorEnum

AsnAdminFindUserErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
invalidparameters	number	1	
accessdenied	number	2	

### 3.2.12 AsnAdminFindGroupProfilesFilter

Groupprofile vom Server holen

AsnAdminFindGroupProfilesFilter is an Enumeration

Name	Type	Value	Comment
allEnabledGroups	number	0	Alle im Usermanagement aktivierten Gruppen
allGroups	number	1	Alle Gruppen
dnPath	number	2	Spezifischer DN Pfad einer Gruppe (wird im String-Parameter

			angegeben)
groupName	number	3	Spezifischer Gruppenname (wird im String Parameter angegeben)
objectGUID	number	4	Spezifische ObjectGUID (wird im String Parameter angegeben)

### 3.2.13 AsnAdminFindGroupProfilesErrorEnum

AsnAdminFindGroupProfilesErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	
nosearchparameter	number	2	

### 3.2.14 AsnAdminSetGroupProfileErrorEnum

AsnAdminSetGroupProfileErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	
groupnotfound	number	2	
wrongprofileversion	number	3	
errorsavingprofile	number	4	

### 3.2.15 AsnAdminAddGroupProfileErrorEnum

AsnAdminAddGroupProfileErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	

accessdenied	number	1	
groupalreadyexists	number	2	
errorsavingprofile	number	3	
cantaddgroupinactivedirectory	number	4	

### 3.2.16 AsnAdminRemoveGroupProfileErrorEnum

AsnAdminRemoveGroupProfileErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	
groupdoesnotexist	number	2	

### 3.2.17 AsnGetDatabaseManagerSettingsErrorEnum

AsnGetDatabaseManagerSettingsErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	Wird in AsnRequestError als Error-Nummer verwendet
accessdenied	number	1	

### 3.2.18 AsnGetAvailableLinesErrorEnum

Attention: referenced by EUserManagerConnection

AsnGetAvailableLinesErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	

### 3.2.19 AsnGetUserManagerSettingsErrorEnum

Attention: referenced by EUserManagerConnection

AsnGetUserManagerSettingsErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	

### 3.2.20 AsnAdminPhoneJournalUnansweredEnum

AsnAdminPhoneJournalUnansweredEnum is an Enumeration

Name	Type	Value	Comment
never	number	0	
all	number	1	
first	number	2	
last	number	3	

### 3.2.21 AsnAdminGetPhoneJournalSettingsErrorEnum

AsnAdminGetPhoneJournalSettingsErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	

### 3.2.22 AsnAdminFindUserArgumentChoice

AsnAdminFindUserArgumentChoice is a Choice

Name	Type	Comment
all	Object	Wir wollen alle

u8sPhoneNumber	string	Wir suchen nach Rufnummer aus konfig
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### 3.2.23 AsnAdmin GetUserProfileArgumentChoice

AsnAdmin GetUserProfileArgumentChoice is a Choice

Name	Type	Comment
defaultprofile	Object	return a new default profile
u8sClientUsername	string	return the userprofile for the given user name

### 3.2.24 AsnAdminLoginArgumentChoice

AsnAdminLoginArgumentChoice is a Choice

Name	Type	Comment
u8sAdminPassword	string	
u8sAdminPasswordEncrypted	string	

### 3.2.25 AsnUserMonitorLine

AsnUserMonitorLine is an Object

Name	Type	Optional	Comment
u8sPhoneNumber	string		

### 3.2.26 AsnSetUserProfilesErrorListItem

AsnSetUserProfilesErrorListItem is an Object

Name	Type	Optional	Comment
u8sUserName	string		
iErrorDetail	number		A number representing the error for the User with Name "u8sUserName"

### 3.2.27 AsnAdmin GetUserProfilesArgument

User Profile laden

AsnAdmin GetUserProfilesArgument is an Object

Name	Type	Optional	Comment
iActiveUsersOnly	number		CTI-Enabled users only
iFilterOnlineState	number		Filter with actual onlinestate -> AsnAdminUserOnlineStateFilter

### 3.2.28 AsnAdminSetUserProfileResult

AsnAdminSetUserProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

### 3.2.29 AsnAdminRemoveUserProfileResult

AsnAdminRemoveUserProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

### 3.2.30 AsnAdminAddUserProfileResult

AsnAdminAddUserProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

### 3.2.31 AsnAdminGetComputerProfileArgument

Computer Profile laden

AsnAdminGetComputerProfileArgument is an Object

Name	Type	Optional	Comment
u8sClientComputerName	string		Computer login daten wenn Computername leer, dann leeres default profile liefern

### 3.2.32 AsnAdminSetComputerProfileResult

AsnAdminSetComputerProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

### 3.2.33 AsnAdminAddComputerProfileResult

AsnAdminAddComputerProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

### 3.2.34 AsnAdminFindUserProfile

AsnAdminFindUserProfile is an Object

Name	Type	Optional	Comment
u8sDNPath	string		DN Pfad AD (cn=stefan Eckabuer,cn=users,dc=estos,dc=de)
u8sUserName	string		Benutzerlogin name (ste@estos.de)
u8sFirstName	string		Vorname
u8sLastName	string		Nachname
u8sDisplayName	string		Angezeigter Name
u8sPhonePrimary	string		Eigene Rufnummer aus Konfig (+49815136856110)
u8sPhoneSecondary	string		Zweite Rufnummer aus Konfig (+49815136856185)
iCtiEnabled	number		CtiEnabled ja/nein

### 3.2.35 AsnGroupProfile

Gruppen-Konfigurationen

AsnGroupProfile is an Object

Name	Type	Optional	Comment
iEnabled	number		Member vom Baseprofile
u8sDNPath	string		
u8sGroupName	string		
u8sobjectGUID	string		
u8sPhoneNumber	string		Not used, reserved

u8sPhoneSecondary	string		Not used, reserved
u8sGroupLeaderDN	string		
u8sGroupCoLeaderDN	string		
iGroupStaticRights	number		
iGroupStaticRights2	number	yes	added in UCServer 6
asnGroupRightDetails	AsnUserDynamicRights		
asnGroupLeaderRightDetails	AsnUserDynamicRights		
listUserDNs	UTF8StringList		
u8sObjectSid	string		Active Directory objectSid - SID der Gruppe - Wird benutzt um die primären Gruppen der User zuzuordnen
iGroupProfileVersion	number		Version dieses Gruppenprofils
asnUserPropertyBag	AsnUserPropertyBag	yes	added in UCServer 6
u8sSIPURI	string	yes	added in UCServer 6
u8sMailAddress	string	yes	added in UCServer 6
optionalParams	AsnOptionalParameters	yes	optionalParams Name "SourceDB" Value string optionalParams Name "SourceDBID" Value string optionalParams Name "SourceDBStore" Value string

### 3.2.36 AsnAdminFindGroupProfilesArgument

Gruppenprofil abfragen; Je nach SearchFilter wird dann am Server nach Gruppe(n) gesucht  
Attention: referenced by ENetUC\_Mgmt.asn1

AsnAdminFindGroupProfilesArgument is an Object

Name	Type	Optional	Comment
iSearchFilter	number		Searchfilter-Wert, siehe dazu AsnAdminFindGroupProfilesFilter Enumeration
u8sStringParameter	string		Stringparameter für verschiedene Searchfilter

### 3.2.37 AsnAdminSetGroupProfileResult

AsnAdminSetGroupProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

### 3.2.38 AsnAdminAddGroupProfileResult

AsnAdminAddGroupProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

### 3.2.39 AsnAdminRemoveGroupProfileResult

AsnAdminRemoveGroupProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		AD Implementierung lÃ¤sst das LÃ¶schen von Gruppen nicht zu, aber es wird TRUE zurÃ¼ckgeliefert

### 3.2.40 AsnGetDatabaseManagerSettingsArgument

DatabaseManager Settings

AsnGetDatabaseManagerSettingsArgument is an Object

Name	Type	Optional	Comment

### 3.2.41 AsnGetDatabaseManagerSettingsResult

AsnGetDatabaseManagerSettingsResult is an Object

Name	Type	Optional	Comment
u8sEngine	string		mssql_mdac, jet
u8sServer	string		SQL-Server Name
u8sFilePath	string		Filepath zur Datenbank im jet/MSAccess Fall
u8sLoginName	string		Loginname bei SQL-Server Fall; Ist der Name leer, wird der SQL-Server mit Windows-Anmeldung verwendet. EnthÃ¤lt der Name etwas, wird SQL-Server internes Benutzerverwaltung verwendet.
u8sPassword	string		Passwort fÃ¼r den Loginname; wird nur benÃ¶tigt, wenn SQL-Server BenutzerkennwÃ¶rter verlangt

u8sDatabaseName	string		Datenbanknamen-Prefix fÃ¼r jet-Datenbanken
u8sOfflineTable	string		Name der Offline-Journal Datenbank/Tabelle
u8sJournalTable	string		Name der Journal Datenbank/Tabelle
u8sTrackerTable	string		Name der Call-Tracker Datenbank/Tabelle
u8sConversationTable	string		Name der Conversation Datenbank/Tabelle (Chat)
u8sAppointmentTable	string		Name der Termin Datenbank/Tabelle
u8sTaskTable	string		Name der Aufgaben/geplante Anrufe Datenbank/Tabelle

### 3.2.42 AsnGetNetworkInterfacePortsArgument

Alle verfÃ¼gbaren TCP Ports und BindIP Adressen abfragen

AsnGetNetworkInterfacePortsArgument is an Object

Name	Type	Optional	Comment

### 3.2.43 AsnGetNetworkInterfacePortsResult

AsnGetNetworkInterfacePortsResult is an Object

Name	Type	Optional	Comment
iAdminPort	number		
u8sAdminBindAddress	string		
iNetCtiPort	number		
u8sNetCtiBindAddress	string		
iNetTSPPort	number		
u8sNetTSPBindAddress	string		
iLDAPServerPort	number		
u8sLDAPServerBindAddress	string		
iHTTPServerPort	number		
u8sHTTPServerBindAddress	string		

### 3.2.44 AsnGetAvailableLinesArgument

Alle verfÃ¼gbaren Leitungen zur Auswahl im ClnInst abfragen

AsnGetAvailableLinesArgument is an Object

Name	Type	Optional	Comment
optionalParams	AsnOptionalParameters	yes	<ul style="list-style-type: none"> <li>• Key "MobileLines" Value boolean - Add mobile lines to the result, defaults to not adding these lines</li> <li>• Key "SIPLines" Value boolean - Add SIP lines to the result, defaults to not adding these lines</li> <li>• Key "AVLines" Value boolean - Add ProCall AV lines to the result, defaults to not adding these lines</li> </ul>

### 3.2.45 AsnAvailableLineDetails

AsnAvailableLineDetails is an Object

Name	Type	Optional	Comment
u8sLineURI	string		
u8sLineName	string		
u8sCurrentLineOwner	string		

### 3.2.46 AsnGetUserManagerSettingsArgument

UserManager Settings und aktiver UserManager

Attention: referenced by ENetUC\_Mgmt.asn1

AsnGetUserManagerSettingsArgument is an Object

Name	Type	Optional	Comment
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### 3.2.47 AsnGetUserManagerSettingsResult

Attention: referenced by ENetUC\_Mgmt.asn1

AsnGetUserManagerSettingsResult is an Object

Name	Type	Optional	Comment
iSelectedUMMode	number		
iUMSecurity	number		
iUMSelfInstall	number		

bAutoBindFirstLine	boolean		
bAutoBindSecondLine	boolean		
iPhoneNumberPreformatFormat	number		
bLDAPBaseAttributeWriteBackEnabled	boolean		
u8slistPresenceDomain	UTF8StringList		
optionalParams	AsnOptionalParameters	yes	<p>Optional Params:</p> <p>Wenn das Usermanagement auf AD gestellt ist, werden folgende Informationen noch ergänzt:</p> <ul style="list-style-type: none"> <li>ActiveDirectoryDomain [UTF8String] Die Domäne, in der der UCServer steht</li> <li>ActiveDirectoryBaseDNUsers [UTF8String] BaseDN der Benutzer (kann eine ';' getrennte Liste sein!)</li> <li>ActiveDirectoryHostName [UTF8String] Rechnername des AD</li> <li>ActiveDirectoryHostPort [INTEGER] Portnummer des AD</li> <li>ActiveDirectoryDisabledFields [UTF8StringList] Liste der UCServer Felder die in der Benutzerverwaltung optional und deaktiviert sind. (HomePhone sowie Pager sind z.B. beides optionale Felder)</li> </ul>

### 3.2.48 AsnAdminGetPhoneJournalSettingsArgument

Unbeantwortete Anrufe, Einstellungen abholen

AsnAdminGetPhoneJournalSettingsArgument is an Object

Name	Type	Optional	Comment

### 3.2.49 AsnAdminGetPhoneJournalSettingsResult

AsnAdminGetPhoneJournalSettingsResult is an Object

Name	Type	Optional	Comment

iUnansweredCallJournalOption	number		see AsnAdminPhoneJournalUnansweredEnum
iAnsweredRedirectedCallJournalOption	number		see AsnAdminPhoneJournalUnansweredEnum
bAutoMarkReadGroupCallsOnCallback	boolean		Automatically mark journal entries as read, if one member of the group answered the call

### 3.2.50 AsnAdminSetAnonymousUserAccessTokenArgument

AsnAdminSetAnonymousUserAccessTokenArgument is an Object

Name	Type	Optional	Comment
u8sAnonymousHintData	string		contact identifier
u8sAnonymousNewAccessToken	string		new access token

### 3.2.51 AsnAdminSetAnonymousUserAccessTokenResult

AsnAdminSetAnonymousUserAccessTokenResult is an Object

Name	Type	Optional	Comment
success	boolean		

### 3.2.52 AsnAdminSetAnonymousUserContactDataArgument

AsnAdminSetAnonymousUserContactDataArgument is an Object

Name	Type	Optional	Comment
contactData	AsnNetDatabaseContact		updated contactdata information

### 3.2.53 AsnAdminSetAnonymousUserContactDataResult

AsnAdminSetAnonymousUserContactDataResult is an Object

Name	Type	Optional	Comment
success	boolean		

### 3.2.54 AsnAdminRemoveAnonymousUserArgument

AsnAdminRemoveAnonymousUserArgument is an Object

Name	Type	Optional	Comment
u8sAnonymousHintData	string		contact identifier

### 3.2.55 AsnAdminRemoveAnonymousUserResult

AsnAdminRemoveAnonymousUserResult is an Object

Name	Type	Optional	Comment
success	boolean		

### 3.2.56 AsnAdminLoginArgument

UserManager Settings und aktiver UserManager  
CtiServer Administrator login

AsnAdminLoginArgument is an Object

Name	Type	Optional	Comment
u8sAdminUsername	string		user login daten
adminPassword	AsnAdminLoginArgumentChoice		

### 3.2.57 AsnAdminLoginResult

AsnAdminLoginResult is an Object

Name	Type	Optional	Comment
result	AsnAdminLoginResultEnum		

### 3.2.58 AsnUserMonitorLineList

Benutzer Account (EUserProfile) verwalten

AsnUserMonitorLineList is an Array of AsnUserMonitorLine

AsnUserMonitorLine is an Object

Name	Type	Optional	Comment

u8sPhoneNumber	string		
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### 3.2.59 AsnUserProfile

AsnUserProfile is an Object

Name	Type	Optional	Comment
iEnabled	number		
u8sDNPath	string		
u8sUserName	string		
u8sSIPURI	string		
u8sobjectGUID	string		
u8sPhoneNumber	string		
u8sPhoneSecondary	string		
userMonitorLineList	AsnUserMonitorLineList		
iMonitorLineRights	number		
u8sSAMAccountName	string		
u8sPassword	string		
u8sCallRecordingNumber	string		
u8sMailboxNumber	string		
u8sHomeServer	string		
iUserStaticRights	number		
iUserStaticRights2	number	yes	added in UCServer 6
userDynamicRights	AsnUserDynamicRightsList		
asnUserContact	AsnNetDatabaseContact		
asnUserPropertyBag	AsnUserPropertyBag		
optionalParams	AsnOptionalParameters	yes	<p>Additional information which were added later (for backward compatibility):</p> <ul style="list-style-type: none"> <li>• Key "ADDdisabled" Value boolean - User profile is disabled in the Active Directory</li> <li>• Key "SourceDB" Value AsnString - User profile is</li> </ul>

			replicated from DB (name) <ul style="list-style-type: none"> <li>• Key "SourceDBID" Value AsnString - User profile is replicated from DB (ID)</li> <li>• Key "SourceDBStore" Value AsnString - User profile is replicated from DB (StoreID inside the DB)</li> <li>• Key "primaryGroupID" Value int - ID of the primary group of a Active Directory user</li> <li>• Key "objectSID" Value AsnString - ObjectSID of the user Object in the Active Directory</li> </ul>
bWritePicture	boolean	yes	

### 3.2.60 AsnUserProfileList

AsnUserProfileList is an Array of AsnUserProfile

AsnUserProfile is an Object

Name	Type	Optional	Comment
iEnabled	number		
u8sDNPath	string		
u8sUserName	string		
u8sSIPURI	string		
u8sobjectGUID	string		
u8sPhoneNumber	string		
u8sPhoneSecondary	string		
userMonitorLineList	AsnUserMonitorLineList		
iMonitorLineRights	number		
u8sSAMAccountName	string		
u8sPassword	string		
u8sCallRecordingNumber	string		
u8sMailboxNumber	string		

u8sHomeServer	string		
iUserStaticRights	number		
iUserStaticRights2	number	yes	added in UCServer 6
userDynamicRights	AsnUserDynamicRightsList		
asnUserContact	AsnNetDatabaseContact		
asnUserPropertyBag	AsnUserPropertyBag		
optionalParams	AsnOptionalParameters	yes	<p>Additional information which were added later (for backward compatibility):</p> <ul style="list-style-type: none"> <li>• Key "ADDDisabled" Value boolean - User profile is disabled in the Active Directory</li> <li>• Key "SourceDB" Value AsnString - User profile is replicated from DB (name)</li> <li>• Key "SourceDBID" Value AsnString - User profile is replicated from DB (ID)</li> <li>• Key "SourceDBStore" Value AsnString - User profile is replicated from DB (StoreID inside the DB)</li> <li>• Key "primaryGroupID" Value int - ID of the primary group of a Active Directiry user</li> <li>• Key "objectSID" Value AsnString - ObjectSID of the user Object in the Active Directory</li> </ul>
bWritePicture	boolean	yes	

### 3.2.61 AsnSetUserProfilesErrorList

AsnSetUserProfilesErrorList is an Array of AsnSetUserProfilesErrorListItem

AsnSetUserProfilesErrorListItem is an Object

Name	Type	Optional	Comment
u8sUserName	string		
iErrorDetail	number		A number representing the error for the User with Name

			"u8sUserName"
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### 3.2.62 AsnAdminGetUserProfileArgument

User Profile laden

AsnAdminGetUserProfileArgument is an Object

Name	Type	Optional	Comment
identifier	AsnAdminGetUserProfileArgumentChoice		

### 3.2.63 AsnAdminGetUserProfileResult

AsnAdminGetUserProfileResult is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		

### 3.2.64 AsnAdminGetUserProfilesResult

AsnAdminGetUserProfilesResult is an Object

Name	Type	Optional	Comment
userProfiles	AsnUserProfileList		

### 3.2.65 AsnAdminSetUserProfileArgument

User Profile speichern

AsnAdminSetUserProfileArgument is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		
optionalParams	AsnOptionalParameters	yes	

### 3.2.66 AsnAdminRemoveUserProfileArgument

User Profile löschen (vor allem für Test-Clients benötigt)

Anmerkung: Im AD Fall kann kein Benutzer gelöscht werden, die Funktion liefert aktuell trotzdem bSuccess == true

AsnAdminRemoveUserProfileArgument is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		Der u8sUserName muss gesetzt werden als Schlüssel

### 3.2.67 AsnAdminAddUserProfileArgument

User Profile hinzufügen

Anmerkung: Im AD Fall kann kein Benutzer hinzugefügt werden, die Funktion liefert aktuell trotzdem bSuccess == true

AsnAdminAddUserProfileArgument is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		

### 3.2.68 AsnComputerProfile

Computer Account (EComputerProfile) verwalten

AsnComputerProfile is an Object

Name	Type	Optional	Comment
iEnabled	number		Member vom Baseprofile
u8sDNPath	string		
u8sComputerLogin	string		
u8sComputerPassword	string		
u8sobjectGUID	string		
u8sPhoneNumber	string		
u8sPhoneSecondary	string		
userMonitorLineList	AsnUserMonitorLineList		
iMonitorLineRights	number		
asnUserPropertyBag	AsnUserPropertyBag		
optionalParams	AsnOptionalParameters	yes	optionalParams Name "SourceDB" Value string optionalParams Name "SourceDBID" Value string optionalParams Name "SourceDBStore" Value string

### 3.2.69 AsnAdminGetComputerProfileResult

AsnAdminGetComputerProfileResult is an Object

Name	Type	Optional	Comment
computerProfile	AsnComputerProfile		

### 3.2.70 AsnAdminSetComputerProfileArgument

Computer Profile speichern

AsnAdminSetComputerProfileArgument is an Object

Name	Type	Optional	Comment
computerProfile	AsnComputerProfile		

### 3.2.71 AsnAdminAddComputerProfileArgument

Computer Profile hinzufügen

AsnAdminAddComputerProfileArgument is an Object

Name	Type	Optional	Comment
computerProfile	AsnComputerProfile		

### 3.2.72 AsnAdminFindUserProfileList

Benutzer Suchen für User Chooser

AsnAdminFindUserProfileList is an Array of AsnAdminFindUserProfile

AsnAdminFindUserProfile is an Object

Name	Type	Optional	Comment
u8sDNPath	string		DN Pfad AD (cn=stefan Eckabuer,cn=users,dc=estos,dc=de)
u8sUserName	string		Benutzerlogin name (ste@estos.de)
u8sFirstName	string		Vorname
u8sLastName	string		Nachname
u8sDisplayName	string		Angezeigter Name
u8sPhonePrimary	string		Eigene Rufnummer aus Konfig (+49815136856110)

u8sPhoneSecondary	string		Zweite Rufnummer aus Konfig (+49815136856185)
iCtiEnabled	number		CtiEnabled ja/nein

### 3.2.73 AsnAdminFindUserArgument

User Profile finden

AsnAdminFindUserArgument is an Object

Name	Type	Optional	Comment
find	AsnAdminFindUserArgumentChoice		
iMaxResults	number		Maximale Anzahl der gewünschten user (0 für alle)

### 3.2.74 AsnAdminFindUserResult

AsnAdminFindUserResult is an Object

Name	Type	Optional	Comment
userlist	AsnAdminFindUserProfileList		Liste der gefundenen User. Das sind evtl nicht alle
iLimitReached	number		Wenn es mehr gibt, als wir abfragen können, dann ist das gesetzt

### 3.2.75 AsnGroupProfileList

AsnGroupProfileList is an Array of AsnGroupProfile

AsnGroupProfile is an Object

Name	Type	Optional	Comment
iEnabled	number		Member vom Baseprofile
u8sDNPath	string		
u8sGroupName	string		
u8sobjectGUID	string		
u8sPhoneNumber	string		Not used, reserved
u8sPhoneSecondary	string		Not used, reserved
u8sGroupLeaderDN	string		

u8sGroupCoLeaderDN	string		
iGroupStaticRights	number		
iGroupStaticRights2	number	yes	added in UCServer 6
asnGroupRightDetails	AsnUserDynamicRights		
asnGroupLeaderRightDetails	AsnUserDynamicRights		
listUserDNs	UTF8StringList		
u8sObjectSid	string		Active Directory objectSid - SID der Gruppe - Wird benötigt um die primären Gruppen der User zuzuordnen
iGroupProfileVersion	number		Version dieses Gruppenprofils
asnUserPropertyBag	AsnUserPropertyBag	yes	added in UCServer 6
u8sSIPURI	string	yes	added in UCServer 6
u8sEmailAddress	string	yes	added in UCServer 6
optionalParams	AsnOptionalParameters	yes	optionalParams Name "SourceDB" Value string optionalParams Name "SourceDBID" Value string optionalParams Name "SourceDBStore" Value string

### 3.2.76 AsnAdminFindGroupProfilesResult

AsnAdminFindGroupProfilesResult is an Object

Name	Type	Optional	Comment
listGroupProfiles	AsnGroupProfileList		

### 3.2.77 AsnAdminSetGroupProfileArgument

Gruppenprofile speichern

Die Gruppe wird im Server modifiziert; die Gruppe wird dabei durch die GUID referenziert (stimmt diese nicht, schlägt der Aufruf fehl).

Die Daten, die übernommen werden hängen vom Backend ab.

Änderungen von Datenfeldern, die vom AD verwaltet werden (ObjectSID, GUID, DNPath, Member-Liste, Gruppenname) werden NICHT übernommen.

iGroupProfileVersion kann auch nicht geändert werden, da dies von der UCServer Version abhängig ist.

AsnAdminSetGroupProfileArgument is an Object

Name	Type	Optional	Comment
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groupProfile	AsnGroupProfile		
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### 3.2.78 AsnAdminAddGroupProfileArgument

Group Profile hinzufügen

AsnAdminAddGroupProfileArgument is an Object

Name	Type	Optional	Comment
groupProfile	AsnGroupProfile		

### 3.2.79 AsnAdminRemoveGroupProfileArgument

Group Profile löschen

AsnAdminRemoveGroupProfileArgument is an Object

Name	Type	Optional	Comment
groupProfile	AsnGroupProfile		

### 3.2.80 AsnAvailableLineDetailsList

AsnAvailableLineDetailsList is an Array of AsnAvailableLineDetails

AsnAvailableLineDetails is an Object

Name	Type	Optional	Comment
u8sLineURI	string		
u8sLineName	string		
u8sCurrentLineOwner	string		

### 3.2.81 AsnGetAvailableLinesResult

Attention: referenced by ENetUC\_Mgmt.asn1

AsnGetAvailableLinesResult is an Object

Name	Type	Optional	Comment
linelist	AsnAvailableLineDetailsList		

### 3.2.82 AsnAdminSetUserProfilesListArgument

User Profiles Liste speichern

AsnAdminSetUserProfilesListArgument is an Object

Name	Type	Optional	Comment
userProfiles	AsnUserProfileList		

### 3.2.83 AsnAdminSetUserProfilesListResult

AsnAdminSetUserProfilesListResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		
errorList	AsnSetUserProfilesErrorList	yes	

### 3.2.84 AsnComputerProfileList

AsnComputerProfileList is an Array of AsnComputerProfile

AsnComputerProfile is an Object

Name	Type	Optional	Comment
iEnabled	number		Member vom Baseprofile
u8sDNPath	string		
u8sComputerLogin	string		
u8sComputerPassword	string		
u8sobjectGUID	string		
u8sPhoneNumber	string		
u8sPhoneSecondary	string		
userMonitorLineList	AsnUserMonitorLineList		
iMonitorLineRights	number		
asnUserPropertyBag	AsnUserPropertyBag		
optionalParams	AsnOptionalParameters	yes	optionalParams Name "SourceDB" Value string optionalParams Name "SourceDBID" Value string

			optionalParams Name "SourceDBStore" Value string
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## 4 Agent

Agent/AgentGroup/ACD interface.

### Module description

This module describes the functions for agents for ACD and contact portal functionalities.

A client represents a user who can be a member in any number of agent groups.

An agent is described by the ContactURI of the user (SIP address incl. "sip:" before) or a LineURI (Cti line, format "tel:xyz@pbx text").

To login to a group, for example, you usually need the AgencyURI and the GroupURI. This allows the UCServer to identify exactly which agent should be used in which group.

The client receives the necessary values when it gets them back as a result of asnAgentMonitorStart.

### Requirements for using the interface

A user gets access to the agent interface:

- If the user has activated the service "Business card for anonymous users" via his own or global profile in the UCServer administration.
- If he is a member of one or more groups that have been activated in the UCServer administration as an "agent group".
- If (identified by line ID) he has a line known to be part of an ACD group at the corresponding ECSTA.

### Functions

A user can set the following status on the interface:

- "login"/"logout"
- "Working after call"
- "ready"/"not ready" (still a "work in progress")

ProCall 5.1 supports ACD functionality only for Panasonic telephone systems.

As of ProCall 6, the agent interface is used for the contact portal and business card. Further PBX's are in development.

### Simple procedure if the agent groups are to be used

1. The user must only call asnAgentMonitorStart; this registers the agent's events and supplies the list of groups in which the user is agent.
2. From this point on, the UCServer sends events if the status of the user in these groups changes.
3. Change the state of the agent:
  - 3.1. asnAgentLogin - Sets the status of the user to "login". Note: replaces asnAgentSetState(not ready).  
More parameters may be required for the login. These can be found in the AgentGroupInfos
  - 3.2. asnAgentLogoff - Sets the status of the user to "logoff". Note: replaces asAgentSetState(noagent).
  - 3.3. asnAgentSetState - With this you can set the status to "ready", "not ready" and "working after

call". Which states can be set is provided by the server in the result of asnAgentMonitorStart. See also AsnAgentGroupInfo.

4. Log off events with asnAgentMonitorStop.

With these five functions it is possible to operate the ACD/presence groups on the UCServer.

## **AsnAgentGroupInfo**

AsnAgentGroupInfo structures are usually exchanged in the analysis and results. This structure contains the description of an agent/ACD group.

AsnAgentGroupInfo contains the data about an agent group. The following are important:

- iGroupCapabilities: This shows which status changes are supported. See also AsnAgentGroupCapabilitiesEnum. If the highest bit is set (0x80000000), this group is a PBX/ACD group. If the bit is not set, the group is managed by the UCServer.
- iAgentState: The current status of the agent, i.e. the user in this group.
- optionalParams,key "AgentLoginRequiredParameters": In the case of a PBX/ACD group, this integer contains information about which parameters are required for logging on to the ACD group. The values (bit field) are described in AsnAgentLoginRequiredParametersEnum.

## **Events**

For any changes to the agent groups and agent status, two events are sent by the UCServer to the registered clients:

- asnAgentNotifyGroupsChanged - There have been some changes in the user's available groups
- asnAgentNotifyStateChanged - The user's status in a group has changed.

## **Comment**

The API is user centered. This means if the server is asked for the AgentGroupInfos, the server displays the information concerning its group membership in a simple list. The most simple for the normal user.

## **Supervisor Interface**

Not implemented yet.

## **Anonymous users**

Anonymous users can query which groups are available, including users, and then display the corresponding presence and login/logout status based on the use case.

### **4.1 Agent Operations**

#### **4.1.1 asnAgentMonitorStart**

Agent Monitor Start

This function starts monitoring for all groups of a client.

The individual lines (for PBX ACD groups) and the individual user and group configurations are taken into account (for business card/contact portal).

**ArgumentType: AsnAgentMonitorStartArgument**

AsnAgentMonitorStartArgument is an Object

Name	Type	Optional	Comment
u8sAgentURI	string		Agent URI e.g. "sip:xyz@domain.de". An empty string is supplemented by the UCServer with the ID of the logged on user.

**ResultType: AsnAgentMonitorStartResult**

AsnAgentMonitorStartResult is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the associated events
listGroups	AsnAgentGroupInfoList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**4.1.2 asnAgentMonitorStop**

Agent Monitor Stop

End monitoring for the specified CrossRefID

**ArgumentType: AsnAgentMonitorStopArgument**

AsnAgentMonitorStopArgument is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		

**ResultType: AsnAgentMonitorStopResult**

AsnAgentMonitorStopResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**4.1.3 asnAgentLogin**

Login for the agent/ACD functionality on a line or group.

This function ensures that the user is logged in to the agent or ACD group.

**ArgumentType: AsnAgentLoginArgument**

AsnAgentLoginArgument is an Object

Name	Type	Optional	Comment
u8sAgentURI	string		Group agent URI (LineURI or ContactURI) e.g. "tel:" or "sip:". If the URI starts with "tel:", the login is transferred to the specified line and then to the telephone system. "sip:" indicates that the user is logging in for the contact portal/business card. The information can be obtained from the AsnGroupInfo
u8sGroupURI	string		Group URI (e.g. "pbxg:601@ECSTA for Panasonic" or "sip:mygroup@estos.de"). This identifies the group to which the user is to be logged in to. The information can be obtained from the AsnGroupInfo.
acdLoginData	AsnAgentACDLoginData	yes	For PBX ACD, additional data may be required for login. See AsnAgentACDLoginData for details.

**ResultType: AsnAgentLoginResult**

AsnAgentLoginResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**4.1.4 asnAgentLogoff**

Logoff agent for ACD(Automatic Call Distribution)

**ArgumentType: AsnAgentLogoffArgument**

AsnAgentLogoffArgument is an Object

Name	Type	Optional	Comment
u8sAgentURI	string		Group agent URI (LineURI or ContactURI) e.g. "tel:" or "sip:"
u8sGroupURI	string		Group URI (e.g. "pbxg:601@ECSTA for Panasonic" or "sip:mygroup@estos.de").

**ResultType: AsnAgentLogoffResult**

AsnAgentLogoffResult is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**4.1.5 asnAgentSetState**

Agent for setting the ACD status (call distribution)

ACD means Automatic Call Distribution and is a system for the automated control of incoming and outgoing customer interactions, such as calls, faxes and e-mails

**ArgumentType: AsnAgentSetStateArgument**

AsnAgentSetStateArgument is an Object

Name	Type	Optional	Comment
u8sAgentURI	string		Group agent URI (LineURI or ContactURI) e.g. "tel:" or "sip:"
u8sGroupURI	string	yes	Group URI (e.g. "pbxg:601@ECSTA for Panasonic" or "sip:mygroup@estos.de"). The information can be obtained from the AsnGroupInfo.
iAgentState	number		Agent status of the agent to be set as defined in AsnAgentStateEnum.

**ResultType: AsnAgentSetStateResult**

AsnAgentSetStateResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**4.2 Agent Events****4.2.1 asnAgentNotifyGroupsChanged**

The event for changes to the user's agent groups.

The entire list of the user's agent groups is always transmitted.

Groups may have been removed or added, or the properties of a group may have changed.  
This event is not used for AgentState changes

**ArgumentType: AsnAgentNotifyGroupsChangedEventArgs**

AsnAgentNotifyGroupsChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		
listGroups	AsnAgentGroupInfoList		complete List of groups

#### 4.2.2 asnAgentNotifyStateChanged

Event when the state of the agent in a group has changed.

##### **ArgumentType: AsnAgentNotifyStateChangedArgument**

AsnAgentNotifyStateChangedArgument is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for associated events
u8sAgentURI	string		Agent group URI (LineURI or ContactURI)
u8sGroupURI	string		Group URI- must be unique in the UCServer
iAgentState	number		AgentState of the agent in the group

#### 4.2.3 asnAgentNotifyBlockedRTCChanged

Event dispatched if blocked state was changed for anonymous user

The argument contains all anonymous user URIs which are currently blocked for the notified agent

##### **ArgumentType: AsnAgentNotifyBlockedRTCChangedEventArgs**

AsnAgentNotifyBlockedRTCChangedEventArgs is an Object

Name	Type	Optional	Comment
listu8sBlockedUserURIs	UTF8StringList		list of all blocked users

### 4.3 Agent Types

#### 4.3.1 AsnAgentLoginRequiredParametersEnum

Bit field values for the OptionalParameter "AgentLoginRequiredParameters" in AsnAgentGroupInfo

Defines the bits that a PBX can set to request specific credentials from the user.

AsnAgentLoginRequiredParametersEnum is an Enumeration

Name	Type	Value	Comment
eAGENTLOGINREQUIRESAGENTID	number	1	AgentID Required (for example, the PIN)
eAGENTLOGINREQUIRESGROUPID	number	2	GroupID Required
eAGENTLOGINREQUIRESPASSWORD	number	4	Password Required

eAGENTLOGINREQUIRESDEVICEID	number	8	DeviceID Required
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#### 4.3.2 AsnSupportedAgentStatesEnum

Bit field values for the optional parameter "SupportedAgentStates" in AsnAgentGroupInfo

These bits indicate which states are supported for agents in the group.

If others are set, it is up to the PBX/ACD/UCServer to decide what the result will be, or whether it is rejected with an error.

To set or read the current value for an agent, use the values in the AsnAgentStateEnum

AsnSupportedAgentStatesEnum is an Enumeration

Name	Type	Value	Comment
eAGENTSTATELOGGEDOUT	number	1	"logout" / "no agent"
eAGENTSTATELOGGEDINNOTREADY	number	2	"not ready"
eAGENTSTATELOGGEDINREADY	number	4	"ready"
eAGENTSTATELOGGEDINBUSY	number	8	"busy"
eAGENTSTATELOGGEDINWORKINGAFTERCALL	number	16	"working after call"

#### 4.3.3 AsnAgentStateEnum

The possible states the agent can have.

This is the state of the agent; hence it is an integer and not a bit field.

This value is to be used for server messages as well as for setting these states.

AsnAgentStateEnum is an Enumeration

Name	Type	Value	Comment
eAGENTSTATENOAGENT	number	0	Agent logged out from group - (is set implicitly at AgentLogoff() by the server)
eAGENTSTATENOTREADY	number	1	Agent unavailable
eAGENTSTATEREADY	number	2	Agent available in group - (is initially set at AgentLogin() by the server)
eAGENTSTATEBUSY	number	3	Agent is busy

eAGENTSTATEWORKINGAFTERCALL	number	4	Agent is working after a call
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#### 4.3.4 AsnAgentGroupCapabilitiesEnum

The agent group supports a combination of the following agent states.

The highest DWORD bit indicates whether it is a PBX ACD group or not.

eAGENTCAPISPBXACDGROUP(2147483648, 0x80000000) This agent group is an ACD group in a PBX; unfortunately there is a problem with the tool which prevents the conversion of this ENUM value into .Net.

AsnAgentGroupCapabilitiesEnum is an Enumeration

Name	Type	Value	Comment
eAGENTCAPSUPPORTEDAGENTREQUESTSLOGIN	number	1	(0x01) "login" is supported
eAGENTCAPSUPPORTEDAGENTREQUESTSLOGOUT	number	2	(0x02) "logout" is supported / same as state eAGENTSTATENOAGENT
eAGENTCAPSUPPORTEDAGENTREQUESTSNOTREADY	number	4	(0x04) "not ready" is supported
eAGENTCAPSUPPORTEDAGENTREQUESTSREADY	number	8	(0x08) "ready" is supported
eAGENTCAPSUPPORTEDAGENTREQUESTSBUSY	number	16	(0x10) "busy" is supported
eAGENTCAPSUPPORTEDAGENTREQUESTSWORKINGAFTERCALL	number	32	(0x20) "working after call" is supported
eAGENTCAPSUPPORTEDAGENTREQUESTSMASK	number	255	(0xff) (currently not supported)
eAGENTCAPISPORTALGROUP	number	536870912	(0x20000000) The group is a (Contact)Portal Group
eAGENTCAPISPUBLICCHATGROUP	number	1073741824	(0x40000000) The agents in this group

			can handle PUBLIC-CHATS See AsnConversationType.
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#### 4.3.5 AsnAgentGroupInfo

AsnAgentGroupInfo encapsulates the data for an agent (ACD) group from the agent's point of view.

An AsnAgentGroupInfo can only be uniquely identified with the combination of u8sAgentURI and u8sGroupURI.

#### OptionalParameters - Subsequent Enhancements to the data structure

- "PhoneNumber" String phone number to be displayed in the client; only server to client.
- "AgentLoginRequiredParameters" DWORD bit flags that indicate which data the PBX requires for the user/line logon. Only sent server to client. Not filled for contact portal/business card. See AsnAgentLoginRequiredParametersEnum
- "SupportedAgentStates" DWORD bit flags indicating which agents status values can be used in this group. Only sent server to client. See also AsnSupportedAgentStatesEnum

AsnAgentGroupInfo is an Object

Name	Type	Optional	Comment
u8sAgentURI	string		URI of the group agent (LineURI or ContactURI) e.g. "tel:+4912345678;phys=678@ECSTA for OpenScape Business" or "sip:test.tester@test.de"
u8sGroupURI	string		URI of the group (e.g. "pbxg:601@ECSTA for Panasonic" or "sip:mygroup@estos.de").
u8sDisplayName	string		Display name of the group.
iGroupCapabilities	number		This shows which status changes are supported. See also AsnAgentGroupCapabilitiesEnum. If the highest bit is set (0x80000000), this group is a PBX/ACD group. If the bit is not set, the group is managed by the UCServer. See AsnAgentGroupCapabilitiesEnum.
iAgentState	number		Agent status of the agent within the group as defined in AsnAgentStateEnum. See AsnAgentStateEnum.
optionalParams	AsnOptionalParameter	yes	OptionalParameters - Subsequent extensions

			<p>s to the data structure</p> <ul style="list-style-type: none"> <li>• "PhoneNumber" String phone number for display in client; only server to client.</li> <li>• "AgentLoginRequiredParameters" DWORD bit flags that indicate which data the PBX requires for the user/line logon. Only sent server to client. Not filled for contact portal/business card. See AsnAgentLoginRequiredParametersEnum.</li> <li>• "SupportedAgentStates" DWORD bit flags indicating which agents status values can be used in this group. Only sent server to client. See AsnSupportedAgentStatesEnum.</li> </ul>
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#### 4.3.6 AsnAgentMonitorStartArgument

AsnAgentMonitorStartArgument is an Object

Name	Type	Optional	Comment
u8sAgentURI	string		Agent URI e.g. "sip:xyz@domain.de". An empty string is supplemented by the UCServer with the ID of the logged on user.

#### 4.3.7 AsnAgentMonitorStopArgument

The CrossRefID that was returned by the server at asnAgentMonitorStart

AsnAgentMonitorStopArgument is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		

#### 4.3.8 AsnAgentMonitorStopResult

This structure is only restored if successful. If the call is unsuccessful, it will return an AsnRequestError

AsnAgentMonitorStopResult is an Object

Name	Type	Optional	Comment

### 4.3.9 AsnAgentLoginArgument

Parameters for Agent Login

Parameters for logging in to the agent/ACD functionality of the PC server (business card, contact portal) or the telephone system.

AsnAgentLoginArgument is an Object

Name	Type	Optional	Comment
u8sAgentURI	string		<p>Group agent URI (LineURI or ContactURI) e.g. "tel:" or "sip:". If the URI starts with "tel:", the login is transferred to the specified line and then to the telephone system. "sip:" indicates that the user is logging in for the contact portal/business card. The information can be obtained from the AsnGroupInfo</p>
u8sGroupURI	string		<p>Group URI (e.g. "pbxg:601@ECSTA for Panasonic" or "sip:mygroup@estos.de"). This identifies the group to which the user is to be logged in to. The information can be obtained from the AsnGroupInfo.</p>
acdLoginData	AsnAgentACDLoginData	yes	For PBX ACD, additional data may be required for login. See AsnAgentACDLoginData for details.

### 4.3.10 AsnAgentLoginResult

Result for agent login

If the server returns the result, the login was successful.  
 If the login fails, the AsnRequestError is returned as the result.  
 This contains more details about the error.

This structure is only returned if successful. If the call is unsuccessful, AsnRequestError is returned.

AsnAgentLoginResult is an Object

Name	Type	Optional	Comment

### 4.3.11 AsnAgentLogoffArgument

Argument for agent logoff(Automatic Call Distribution)

AsnAgentLogoffArgument is an Object

Name	Type	Optional	Comment
u8sAgentURI	string		Group agent URI (LineURI or ContactURI) e.g. "tel:" or "sip:"
u8sGroupURI	string		Group URI (e.g. "pbxg:601@ECSTA for Panasonic" or "sip:mygroup@estos.de").

#### 4.3.12 AsnAgentLogoffResult

Result for agent logoff

This structure is only returned if successful. If the call is unsuccessful, an AsnRequestError is returned.

AsnAgentLogoffResult is an Object

Name	Type	Optional	Comment
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#### 4.3.13 AsnAgentSetStateArgument

Set new Agent State

AsnAgentSetStateArgument is an Object

Name	Type	Optional	Comment
u8sAgentURI	string		Group agent URI (LineURI or ContactURI) e.g. "tel:" or "sip:"
u8sGroupURI	string	yes	Group URI (e.g. "pbxg:601@ECSTA for Panasonic" or "sip:mygroup@estos.de"). The information can be obtained from the AsnGroupInfo.
iAgentState	number		Agent status of the agent to be set as defined in AsnAgentStateEnum.

#### 4.3.14 AsnAgentSetStateResult

Result for AsnAgentSetState

This structure is only returned if successful. If the call is unsuccessful, an AsnRequestError is returned.

AsnAgentSetStateResult is an Object

Name	Type	Optional	Comment
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#### 4.3.15 AsnAgentNotifyStateChangedArgument

Argument for AgentNotifyStateChanged. Included is the CrossRefID for which the event is transmitted, the AgencyURI and GroupURI (unique agent group assignment) and the new agent state.

AsnAgentNotifyStateChangedArgument is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for associated events
u8sAgentURI	string		Agent group URI (LineURI or ContactURI)
u8sGroupURI	string		Group URI- must be unique in the UCServer
iAgentState	number		AgentState of the agent in the group

#### 4.3.16 AsnAgentNotifyBlockedRTCChangedArgument

Argument for AgentNotifyAnonymousBlockedChanged.

AsnAgentNotifyBlockedRTCChangedEventArgs is an Object

Name	Type	Optional	Comment
listu8sBlockedUserURIs	UTF8StringList		list of all blocked users

#### 4.3.17 AsnAgentGroupInfoList

List of Agent Groups

AsnAgentGroupInfoList is an Array of AsnAgentGroupInfo

AsnAgentGroupInfo is an Object

Name	Type	Optional	Comment
u8sAgentURI	string		URI of the group agent (LineURI or ContactURI) e.g. "tel:+4912345678;phys=678@ECSTA for OpenScape Business" or "sip:test.tester@test.de"
u8sGroupURI	string		URI of the group (e.g. "pbxg:601@ECSTA for Panasonic" or "sip:mygroup@estos.de").
u8sDisplayName	string		Display name of the group.
iGroupCapabilities	number		This shows which status changes are supported. See also AsnAgentGroupCapabilitiesEnum. If the highest bit is set (0x80000000), this group is a PBX/ACD group. If the bit is not set, the group is managed by the UCServer. See AsnAgentGroupCapabilitiesEnum.
iAgentState	number		Agent status of the agent within the group as

			defined in AsnAgentStateEnum. See AsnAgentStateEnum.
optionalParams	AsnOptionalParameters	yes	<p>OptionalParameters - Subsequent extensions to the data structure</p> <ul style="list-style-type: none"> <li>• "PhoneNumber" String phone number for display in client; only server to client.</li> <li>• "AgentLoginRequiredParameters" DWORD bit flags that indicate which data the PBX requires for the user/line logon. Only sent server to client. Not filled for contact portal/business card. See AsnAgentLoginRequiredParametersEnum.</li> <li>• "SupportedAgentStates" DWORD bit flags indicating which agents status values can be used in this group. Only sent server to client. See AsnSupportedAgentStatesEnum.</li> </ul>

#### 4.3.18 AsnAgentMonitorStartResult

AsnAgentMonitorStartResult is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the associated events
listGroups	AsnAgentGroupInfoList		

#### 4.3.19 AsnAgentNotifyGroupsChangedArgument

Argument contains the CrossRefID for which the event is sent and the list of the user's agent groups.

AsnAgentNotifyGroupsChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		
listGroups	AsnAgentGroupInfoList		complete List of groups

## 5 Appointments

Appointment interface.

### Appointments Modul

#### Module description

This module contains all operations and structures used for transferring appointments from and to the appointment database in the UCServer.

#### 5.1 Appointments Operations

##### 5.1.1 asnAppointmentSetEntryList

Send list of appointments of a user to the server

Send a complete list of appointments to the server. This will replace the whole list currently on the server. Currently the clients should only send a timeframe of the next 30 days to the server for reducing resource consumption.

- Anonymous access: no
- Admin access for other users: yes (e.g. EWS Calendar Replicator)
- User access for other users: no (server will ignore given u8sOwner)
- User access: yes (u8sOwner not necessary)

#### ArgumentType: AsnAppointmentSetEntryListArgument

AsnAppointmentSetEntryListArgument is an Object

Name	Type	Optional	Comment
u8sOwner	string		Username of the user (NOT the identity/sip address). The server will use the logged in user's name. The parameter is only used, if a user with admin rights will set appointments for other users (e.g. EWS Calendar Replicator).
u8sDataSource	string		<p>A String to indicate the source of the appointments. Following strings are used by now:</p> <ul style="list-style-type: none"> <li>• <i>MAPI</i> - MAPI Connector to Microsoft Outlook</li> <li>• <i>EWS</i> - EWS Calendar Replicator to a Microsoft Exchange Server</li> <li>• <i>LOTUSNOTES</i> - IBM Notes</li> <li>• <i>Exchange Web Services</i> - UCClient EWS Connector</li> <li>• <i>Windows Contacts</i> - Appointment data from the Windows 10 "Calendar"</li> <li>• <i>Google</i> - Google GSUITE (or other Google online Calendar)</li> </ul>

			<ul style="list-style-type: none"> <li>• <i>TOBIT</i> - (depricated) Tobit David</li> </ul> <p>Name of the Source Database (e.g. MAPI, NOTES, TOBIT etc.)..</p>
appointments	SEQAppointmentList		List of AsnAppointmentEntry objects.

### **ResultType: AsnAppointmentSetEntryListResult**

AsnAppointmentSetEntryListResult is an Object

Name	Type	Optional	Comment
iResult	number		<p>Result of the operation.</p> <p>0: No error, the list was saved successfully.</p> <p>Other values: An error occured in the businesslogic [TBD: more details].</p>

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### **5.1.2 asnAppointmentSetSeriesEntriesList**

Send a complete list of recurrent appointments to the server.

Send a complete list of recurrent appointments to the server. Each entry must have the same entryID.

### **ArgumentType: AsnAppointmentSetSeriesEntriesListArgument**

AsnAppointmentSetSeriesEntriesListArgument is an Object

Name	Type	Optional	Comment
u8sOwner	string		Name of the owner of the appointments. It is only necessary if the appointments were set for another user (as admin). For user logins, the server will get the username from the logged in user profile.
u8sDataSource	string		Name of the data source. See AsnAppointmentSetEntryListArgument for possible

			strings.
appointments	SEQAppointmentList		List of AsnAppointmentEntry. In this case the u8sEntryID should alle be the same.

**ResultType: AsnAppointmentSetSeriesEntriesListResult**

AsnAppointmentSetSeriesEntriesListResult is an Object

Name	Type	Optional	Comment
iResult	number		0: The call went well, other values indicates, that the database could not be updated. If the call to the server fails, an AsnRequestError will be returned instead of AsnAppointmentSetSeriesEntriesListResult.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**5.1.3 asnAppointmentRemoveEntry**

Removes an Entry from the Server.

With this operation the caller can remove an entry from the appointment database identified by its u8sEntryID.

**ArgumentType: AsnAppointmentRemoveEntryArgument**

AsnAppointmentRemoveEntryArgument is an Object

Name	Type	Optional	Comment
u8sEntryID	string		The EntryID of the appointment database entry which should be removed.

**ResultType: AsnAppointmentRemoveEntryResult**

AsnAppointmentRemoveEntryResult is an Object

Name	Type	Optional	Comment
iResult	number		0: The call went well and the entry has been removed; all other values

			indicates, that removing the entry failed on database level.
--	--	--	--

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 5.1.4 asnAppointmentSetEntry

Send one Entry to the Server.

Send one appointment entry to the UCServer for storing it into the appointment database.

### ArgumentType: AsnAppointmentSetEntryArgument

AsnAppointmentSetEntryArgument is an Object

Name	Type	Optional	Comment
appointment	AsnAppointmentEntry		The filled AsnAppointmentEntry structure to save to the database.

### ResultType: AsnAppointmentSetEntryResult

AsnAppointmentSetEntryResult is an Object

Name	Type	Optional	Comment
iResult	number		0: The database operation went well; all other values indicates, that the call fails on database level.

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 5.1.5 asnAppointmentGetAllEntriesForUser

Retrieve all appointments of the user.

With this operation the client can get all known appointmentzs of the logged in user from the appointment database of the UCServer.

#### **ArgumentType: AsnAppointmentGetAllEntriesForUserArgument**

AsnAppointmentGetAllEntriesForUserArgument is an Object

Name	Type	Optional	Comment
u8sOwner	string		Should be the username of the current user. Currently the UCServer ignores this parameter and uses the username of the logged in user instead.

#### **ResultType: AsnAppointmentGetAllEntriesForUserResult**

AsnAppointmentGetAllEntriesForUserResult is an Object

Name	Type	Optional	Comment
iResult	number		0: The call went well and the listAppointments field contains the appointments found for the user.
listAppointments	SEQAppointmentList		List of AsnAppointmentEntry.

#### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 5.1.6 asnAppointmentGetActualEntryForUser

Read the currently active Entry from the Server (scope: current Usersession).

#### **ArgumentType: AsnAppointmentGetActualEntryForUserArgument**

AsnAppointmentGetActualEntryForUserArgument is an Object

Name	Type	Optional	Comment

u8sOwner	string	Should be the username of the current user. Currently the UCServer ignores this parameter and uses the username of the logged in user instead.
----------	--------	--

**ResultType: AsnAppointmentGetActualEntryForUserResult**

AsnAppointmentGetActualEntryForUserResult is an Object

Name	Type	Optional	Comment
iResult	number		0: Indicates a successful call and the listAppointments should contain all currently "active" appointments of the user.
listAppointments	SEQAppointmentList		List of AsnAppointmentEntry.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

## 5.2 Appointments Types

### 5.2.1 AsnAppointmentSetEntryListArgument

Argument for asnAppointmentSetEntryList

AsnAppointmentSetEntryListArgument is an Object

Name	Type	Optional	Comment
u8sOwner	string		Username of the user (NOT the identity/sip address). The server will use the logged in user's name. The parameter is only used, if a user with admin rights will set appointments for other users (e.g. EWS Calendar Replicator).
u8sDataSource	string		A String to indicate the source of the appointments. Following strings are used by now: <ul style="list-style-type: none"> <li>• <i>MAPI</i> - MAPI Connector to Microsoft Outlook</li> <li>• <i>EWS</i> - EWS Calendar Replicator to a Microsoft Exchange Server</li> <li>• <i>LOTUSNOTES</i> - IBM Notes</li> <li>• <i>Exchange Web Services</i> - UCClient EWS</li> </ul>

		<p>Connector</p> <ul style="list-style-type: none"> <li>• <i>Windows Contacts</i> - Appointment data from the Windows 10 "Calendar"</li> <li>• <i>Google</i> - Google GSUITE (or other Google online Calendar)</li> <li>• <i>TOBIT</i> - (depricated) Tobit David</li> </ul>
		Name of the Source Database (e.g. MAPI, NOTES, TOBIT etc.)..
appointments	SEQAppointmentList	List of AsnAppointmentEntry objects.

### 5.2.2 AsnAppointmentSetEntryListResult

The result of asnAppointmentSetEntryList

AsnAppointmentSetEntryListResult is an Object

Name	Type	Optional	Comment
iResult	number		<p>Result of the operation.</p> <p>0: No error, the list was saved successfully.</p> <p>Other values: An error occured in the businesslogic [TBD: more details].</p>

### 5.2.3 AsnAppointmentSetSeriesEntriesListArgument

Argument for asnAppointmentSetSeriesEntriesList

AsnAppointmentSetSeriesEntriesListArgument is an Object

Name	Type	Optional	Comment
u8sOwner	string		Name of the owner of the appointments. It is only necessary if the appointments were set for another user (as admin). For user logins, the server will get the username from the logged in user profile.
u8sDataSource	string		Name of the data source. See AsnAppointmentSetEntryListArgument for possible strings.
appointments	SEQAppointmentList		List of AsnAppointmentEntry. In this case the u8sEntryID should alle be the same.

### 5.2.4 AsnAppointmentSetSeriesEntriesListResult

Resul of asnAppointmentSetSeriesEntriesList

AsnAppointmentSetSeriesEntriesListResult is an Object

Name	Type	Optional	Comment
iResult	number		0: The call went well, other values indicates, that the database could not be updated. If the call to the server fails, an AsnRequestError will be returned instead of AsnAppointmentSetSeriesEntriesListResult.

### 5.2.5 AsnAppointmentRemoveEntryArgument

Argument for asnAppointmentRemoveEntry

AsnAppointmentRemoveEntryArgument is an Object

Name	Type	Optional	Comment
u8sEntryID	string		The EntryID of the appointment database entry which should be removed.

### 5.2.6 AsnAppointmentRemoveEntryResult

The result of asnAppointmentRemoveEntry

AsnAppointmentRemoveEntryResult is an Object

Name	Type	Optional	Comment
iResult	number		0: The call went well and the entry has been removed; all other values indicates, that removing the entry failed on database level.

### 5.2.7 AsnAppointmentSetEntryArgument

Argument for asnAppointmentSetEntry

AsnAppointmentSetEntryArgument is an Object

Name	Type	Optional	Comment
appointment	AsnAppointmentEntry		The filled AsnAppointmentEntry structure to save to the database.

### 5.2.8 AsnAppointmentSetEntryResult

Result of asnAppointmentSetEntry

AsnAppointmentSetEntryResult is an Object

Name	Type	Optional	Comment
iResult	number		0: The database operation went well; all other values indicates, that the call fails on database level.

### 5.2.9 AsnAppointmentGetAllEntriesForUserArgument

Argument for asnAppointmentGetAllEntriesForUser

AsnAppointmentGetAllEntriesForUserArgument is an Object

Name	Type	Optional	Comment
u8sOwner	string		Should be the username of the current user. Currently the UCServer ignores this parameter and uses the username of the logged in user instead.

### 5.2.10 AsnAppointmentGetAllEntriesForUserResult

Result of asnAppointmentGetAllEntriesForUser

AsnAppointmentGetAllEntriesForUserResult is an Object

Name	Type	Optional	Comment
iResult	number		0: The call went well and the listAppointments field contains the appointments found for the user.
listAppointments	SEQAppointmentList		List of AsnAppointmentEntry.

### 5.2.11 AsnAppointmentGetActualEntryForUserArgument

Argument for asnAppointmentGetActualEntriesForUser

AsnAppointmentGetActualEntryForUserArgument is an Object

Name	Type	Optional	Comment
u8sOwner	string		Should be the username of the current user. Currently the UCServer ignores this parameter and uses the username of the logged in user instead.

### 5.2.12 AsnAppointmentGetActualEntryForUserResult

Result of asnAppointmentGetActualEntriesForUser

AsnAppointmentGetActualEntryForUserResult is an Object

Name	Type	Optional	Comment
iResult	number		0: Indicates a successful call and the listAppointments should contain all currently "active" appointments of the user.
listAppointments	SEQAppointmentList		List of AsnAppointmentEntry.

## 6 Authentication

Authentication interface.

### Module description

This module defines structures and functions for negotiation and authentication on the UCServer.

Clients connecting to the UCServer Webservices don't need to negotiate and login by themselves, they should use "createsession" instead.

See the "Web Service Overview" section of this documentation for more details.

#### 6.1 Authentication Operations

##### 6.1.1 asnNegotiateServerConnectionV2

Negotiate server and client versions (current version)

Handshaking the core details for the client and the server

##### ArgumentType: AsnNegotiateServerConnectionV2Argument

AsnNegotiateServerConnectionV2Argument is an Object

Name	Type	Optional	Comment
u8sMinSupportedInterfaceVersion	string		the minimum supported protocol version of the client this is the oldest semver asn1 interface version the client is able to support
u8sMaxSupportedInterfaceVersion	string		the maximum supported protocol version of the client this is the newest semver asn1 interface version the client is able to support
u8sClientDeviceID	string		A device id the client provides on his side
u8sClientVersion	string		The version of the client
eClientAppID	AsnClientAppID		The application id of the client
u8sClientDeviceName	string		A client name to show in the administrative view for this connection
iClientCapabilities	number		The different capabilities the client is able to handle (Linked Type:

			AsnNegotiateServerConnectionClientCapabilities)
u8sConnectionGUID	string	yes	In case the client is reusing a connection this is the identifier of the former connection to the server
eAnonymousLogin	AsnNegotiateServerConnectionAnonymousDataArgument	yes	The client wants an anonymous login

### **ResultType: AsnNegotiateServerConnectionV2ResultChoice**

AsnNegotiateServerConnectionV2ResultChoice is a Choice

Name	Type	Comment
result	AsnNegotiateServerConnectionV2Result	regular result for the request
busy	AsnNegotiateServerConnectionV2ServerBusy	server busy, please try again later
incompatible	AsnNegotiateServerConnectionV2IncompatibleInterfaceVersion	incompatible interface version

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### **6.1.2 asnLoginV2**

Used to login to the UCServer

### **ArgumentType: AsnLoginV2Argument**

AsnLoginV2Argument is an Object

Name	Type	Optional	Comment
auth	AsnLoginV2ChoiceArgument	yes	wenn nicht vorhanden,, schickt der server eine Antwort mit den untersttzen Methoden

		wenn vorhanden, wird die entsprechende Authentisierung durchgefÃ¼hrt
--	--	--

### ResultType: AsnLoginV2Result

AsnLoginV2Result is a Choice

Name	Type	Comment
supportedAuthMethods	AsnLoginV2ResultSupportedAuthMethods	Supported auth mechanisms
succceeded	AsnLoginV2ResultSuccess	Login succeeded
serverRedirect	AsnLoginV2ResultServerRedirect	Redirect to another server
serverBusy	AsnLoginV2ResultServerBusy	The server is currently busy and asks us to retry later
ntlmRenegotiate	AsnLoginV2ResultRenegotiateNTLM	Authentication requires another step (auth continue)

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### 6.1.3 asnGetUserTokenV2

Request a user token to identify the user for other services.

#### ArgumentType: AsnGetUserTokenArgument

AsnGetUserTokenArgument is an Object

Name	Type	Optional	Comment
iType	number	yes	Type of token (default eUserTokenExternal) (Linked Type: AsnUserTokenType)
iTTL	number	yes	Desired Time to live in seconds (default 24 hours)

IstServiceType	UTF8StringList	yes	List of Service Types e.g. FAQ, RANKING
IstProfileAttributes	AsnProfileAttributeList	yes	List from profile values added as public claim as [Service_type]/[Profile elementname] : [Profile elementvalue]
adminLogin	AsnAdminLogin	yes	Admin login credentials to create token with admin rights

**ResultType: AsnGetUserTokenV2Result**

AsnGetUserTokenV2Result is an Object

Name	Type	Optional	Comment
sToken	string		JWT Token

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**6.1.4 asnGetLoggedInContactV2**

Get Properties of Loggedin User

A Client may use this function to get information about himself.  
The User Profile will be returned.

**ArgumentType: AsnGetLoggedInContactArgument**

AsnGetLoggedInContactArgument is an Object

Name	Type	Optional	Comment

**ResultType: AsnGetLoggedInContactV2Result**

AsnGetLoggedInContactV2Result is an Object

Name	Type	Optional	Comment
u8sLoggedInUser	string		The Login User Name

ownContact	AsnContactV2		Own Contact Data
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**6.2 Authentication Events****6.2.1 asnLogoff****ArgumentType: AsnLogoffArgument**

AsnLogoffArgument is an Object

Name	Type	Optional	Comment
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**6.3 Authentication Types****6.3.1 AsnClientAppID**

The different client application ids

AsnClientAppID is an Enumeration

Name	Type	Value	Comment
eCLIENTAPPIDUNKNOWN	number	0	Unbekannt
eCLIENTAPPIDPROCALL	number	1	Der Windows Client
eCLIENTAPPIDCLNINST	number	2	Das Arbeitsplatzsetup
eCLIENTAPPIDENETS	number	3	ENetSN aus der SDK
eCLIENTAPPIDNETTSC	number	4	ENetTSC aus der SDK

eCLIENTAPPIDIVRDLL	number	5	IVR DLL
eCLIENTAPPIDECTISRCMD	number	6	Kommandozeile (aus der SDK)
eCLIENTAPPIDMOBILE	number	7	Mobile Phones
eCLIENTAPPIDMOBILEPAD	number	8	Mobile iPad
eCLIENTAPPIDWEBSERVICESDK	number	9	Ein anderer Dienst über den WebService
eCLIENTAPPIDMAC	number	10	MAC-Client
eCLIENTAPPIDPROCALLWEB	number	15	Web Clients - FIVE-1411
eCLIENTAPPIDPROCALLSIP	number	16	SIP-Clients
eCLIENTAPPIDPROCALLXMPP	number	17	XMPP-Clients
eCLIENTAPPIDPROCALLNONE	number	18	Der ProCall One Client
eCLIENTAPPIDPUSHSERVICE	number	19	der PushServiceManager im Server selbst
eCLIENTAPPIDPROCALLANALYTICS	number	20	ProCall Analytics
eCLIENTAPPIDWEBLIVECHAT	number	21	LiveChat WebClient (=Agentenarbeitsplatz LC-288)
eCLIENTAPPIDEXCHANGECALENDARREPLICATOR	number	22	Der EWS Calendar Replication Service (vormals enumClientAppID::MOBILE_SDK bzw. enumClientAppID::WEBSERVICE_SDK)

eCLIENTAPPIDPROCALLPAC	number	23	Der PAC Client (gleiches Executable wie eCLIENTAPPIDPROCALL)
eCLIENTAPPIDPROCALLPCB	number	24	Der PAC Client (gleiches Executable wie eCLIENTAPPIDPROCALL)
eCLIENTAPPIDWEBCONFERENCING	number	25	ProCall Meetings Client
eCLIENTAPPIDPROCALLWEBAPP	number	26	Standalone-WebApp
eCLIENTAPPIDWEBVIEW2CLIENT	number	27	Client-Connection via WebView2
eCLIENTAPPIDMSTEAMSAPP	number	28	MS Teams App

### 6.3.2 AsnNegotiateServerConnectionClientCapabilities

The capabilities of a client as (!) BITMASK (!)

AsnNegotiateServerConnectionClientCapabilities is an Enumeration

Name	Type	Value	Comment
eNONE	number	0	0x0000 client is not offering any special capabilities
eSOFTPHONE	number	1	0x0001 client is a softphone client and implements the functionalities of ENetUC_AV.asn1
eAVLINE	number	2	0x0002 client wants to provide an AV line for ProCall to ProCall Audio Video Chats (ENetUC_AV.asn1)
eASN1V2EVENTS	number	4	0x0004 client is able to handle the new V2 events the asn1 interface is providing with the 08.2024 refactoring

### 6.3.3 AsnNegotiateServerConnectionServerTypeV2

The different server types

AsnNegotiateServerConnectionServerTypeV2 is an Enumeration

Name	Type	Value	Comment

ePROCALLENTERPRISE	number	0	A standard UCServer
eTAPISERVER	number	1	A TAPI Server UCServer (Accepts no regular ProCall Clients, only TAPI drivers)
ePROCALLINFINITY	number	2	A Infinity Server (former DataCenter)
ePROCALLNEX	number	3	A NEX Server (former UC as a service)

### 6.3.4 AsnNegotiateServerConnectionAuthenticationMethod

The different supported authentication methods

AsnNegotiateServerConnectionAuthenticationMethod is an Enumeration

Name	Type	Value	Comment
ePASSWORD	number	0	integrated password authentication
eDOMAIN	number	1	domain authentication
eOAUTH	number	2	oauth authentication

### 6.3.5 AsnLogonErrorEnum

These are the possible iErrorDetail values as part of the response to /ws/client/createsession.

AsnLogonErrorEnum is an Enumeration

Name	Type	Value	Comment
eNETLOGININTERNALSERVERERROR	number	100	An internal Server error occured.
eNETLOGININVALIDUSERNAME	number	101	User name not found or password wrong (since V6.3). Description text in error message tells now, that the user cannot be authenticated.
eNETLOGINNOMOREUSERS	number	103	No license free for user.
eNETLOGININVALIDVERSION	number	104	UCServer and UCClient version are not compatible.
eNETLOGINNEGOTIATIONREQUIRED	number	105	This is not really an error, but the server requests the next step in

			authentication from the client with this "error".
eNETLOGININVALIDAUTHENTICATIONMETHOD	number	106	The requested authentication method is not supported by the usermanager.
eNETLOGINUSERNOTENABLED	number	107	The user is not enabled on this ucserver.
eNETLOGININVALIDCOMPUTERNAME	number	108	Computer login only: the computer name is not found.
eNETLOGINDOMAINAUTHFAILED	number	109	Domain authentication failed.
eNETLOGINMISSINGRIGHTS	number	110	The user has not enough access rights to login on the server. At the moment this occurs only with a mobile client without the access right for mobiles.
eNETLOGINMISSINGRIGHTSTS	number	111	Reserved.
eNETLOGINSERVERNOTCOMPATIBLE	number	112	The requested application type (given by negotiate) is not compatible with this server.
eNETLOGINALREADYAUTENTICATED	number	113	User is already logged in.
eNETLOGINTLSREQUIRED	number	114	The has to use a TLS connection to this server.
eNETLOGINACCOUNTPASSWORDLOCKED	number	129	User account has been locked due to too many failed login attempts.
eNETLOGINTOKENEXPIRED	number	130	The given token has been expired.
eNETLOGINTOOMANYATTEMPTS	number	131	Too many failed login attempts, the user has to wait some time to try again.
eNETLOGINWRONGPACMODE	number	133	Reserved.

### 6.3.6 AsnUserTokenType

Type of AsnUserToken to request.

AsnUserTokenType is an Enumeration

Name	Type	Value	Comment
eUserTokenExternal	number	0	Token for authenticating to an external Server - does not allow to login to UCServer
eUserTokenLogin	number	1	Token that allows Login To UCServer

### 6.3.7 AsnAdminLoginChoice

Administrator password

AsnAdminLoginChoice is a Choice

Name	Type	Comment
u8sAdminPassword	string	not encrypted
u8sAdminPasswordEncrypted	string	encrypted

### 6.3.8 AsnNegotiateServerConnectionAnonymousDataArgument

In case an anonymous client wants to connect it needs to provides these details in the AsnNegotiateServerConnectionV2Argument

AsnNegotiateServerConnectionAnonymousDataArgument is an Object

Name	Type	Optional	Comment
u8sHintData	string		This is a fingerprint to reidentify the same client
u8sToken	string		This is like a password for the client to authenticate the client

### 6.3.9 AsnNegotiateServerConnectionAnonymousDataResult

When an anonymous client connects the server provides a username and a token

AsnNegotiateServerConnectionAnonymousDataResult is an Object

Name	Type	Optional	Comment
u8sUsername	string		The username of the anonymous user
u8sToken	string		This is like a password for the client to authenticate the client

### 6.3.10 AsnNegotiateServerConnectionV2ServerBusy

Server is busy result of the asnNegotiateServerConnectionV2 operation

AsnNegotiateServerConnectionV2ServerBusy is an Object

Name	Type	Optional	Comment
iServerBusyTimeout	number		In case the server is busy we tell the client when to retry again

### 6.3.11 AsnNegotiateServerConnectionV2IncompatibleInterfaceVersion

Interface not compatible result of the asnNegotiateServerConnectionV2 operation

AsnNegotiateServerConnectionV2IncompatibleInterfaceVersion is an Object

Name	Type	Optional	Comment
u8sServerInterfaceVersion	string		The asn1 interface version of the server

### 6.3.12 AsnLogoffArgument

AsnLogoffArgument is an Object

Name	Type	Optional	Comment

### 6.3.13 AsnGetUserTokenV2Result

Result of asnGetUserTokenV2

AsnGetUserTokenV2Result is an Object

Name	Type	Optional	Comment
sToken	string		JWT Token

### 6.3.14 AsnProfileAttribute

Profile values added as public claim as [Service\_type]/[Profile elementname] : [Profile elementvalue] used by asnGetUserToken.

AsnProfileAttribute is an Object

Name	Type	Optional	Comment

u8sServiceType	string		Service Type used as a namespace for a specific profile attribute
u8seName	string		
u8sValue	string	yes	Can be used as placeholder if the profile attribute does not exist

### 6.3.15 AsnGetLoggedInContactArgument

Argument for asnGetLoggedInContact.

This operation does not need any parameter since the logged in contact is already well known on the server.

AsnGetLoggedInContactArgument is an Object

Name	Type	Optional	Comment

### 6.3.16 AsnGetLoggedInContactV2Result

Result of AsnGetLoggedInContactV2.

AsnGetLoggedInContactV2Result is an Object

Name	Type	Optional	Comment
u8sLoggedInUser	string		The Login User Name
ownContact	AsnContactV2		Own Contact Data

### 6.3.17 AsnNegotiateServerConnectionV2Argument

Argument for the asnNegotiateServerConnectionV2 operation

AsnNegotiateServerConnectionV2Argument is an Object

Name	Type	Optional	Comment
u8sMinSupportedInterfaceVersion	string		the minimum supported protocol version of the client this is the oldest semver asn1 interface version the client is able to support
u8sMaxSupportedInterfaceVersion	string		the maximum supported protocol version of the client this is the newest semver asn1 interface version the client is able to support
u8sClientDeviceId	string		A device id the client provides

			on his side
u8sClientVersion	string		The version of the client
eClientAppID	AsnClientAppID		The application id of the client
u8sClientDeviceName	string		A client name to show in the administrative view for this connection
iClientCapabilities	number		The different capabilities the client is able to handle (Linked Type: AsnNegotiateServerConnection ClientCapabilities)
u8sConnectionGUID	string	yes	In case the client is reusing a connection this is the identifier of the former connection to the server
eAnonymousLogin	AsnNegotiateServerConnectionAnonymousDataArgument	yes	The client wants an anonymous login

### 6.3.18 AsnNegotiateServerConnectionV2Result

Result of the asnNegotiateServerConnectionV2 operation

AsnNegotiateServerConnectionV2Result is an Object

Name	Type	Optional	Comment
eServerType	AsnNegotiateServerConnectionServerTypeV2		The type of server we are connecting to
u8sServerInterfaceVersion	string		The asn1 interface version of the server
eAuthenticationMethod	AsnNegotiateServerConnectionAuthenticationMethod		Verifiable Login Option
sServerAuthentication	string		A realm the server wants the client to encrypt data with

stServerTime	string		The server time so that the client is able to properly display times the server is providing
u8sServerVersion	string		Technical version of the server
u8sConnectionGUID	string		The server side connection id for this connection
u8sPresenceDomains	UTF8StringList		The list of presence domains the server is handling
iOEM	number	yes	The oem of the server (only set if not estos)
u8sProductVersion	string	yes	An alternative product version (user shown product version), available if it does not match the technical server version
bPresenceServicesDisabled	boolean	yes	presence services are disable on the server (only set if false)
bUserUserRightsDisabled	boolean	yes	user user rights are

			disable on the server (only set if false)
eAnonymousDetails	AsnNegotiateServerConnectionAnonymousDataResult	yes	In case the user logged in anonymous this provides details for the anonymous user

### 6.3.19 AsnNegotiateServerConnectionV2ResultChoice

AsnNegotiateServerConnectionV2ResultChoice is a Choice

Name	Type	Comment
result	AsnNegotiateServerConnectionV2Result	regular result for the request
busy	AsnNegotiateServerConnectionV2ServerBusy	server busy, please try again later
incompatible	AsnNegotiateServerConnectionV2IncompatibleInterfaceVersion	incompatible interface version

### 6.3.20 AsnAdminLogin

UCServer administrator login credentials used as optional by AsnGetUserTokenArgument

AsnAdminLogin is an Object

Name	Type	Optional	Comment
u8sAdminUsername	string		Administrator user name
adminPassword	AsnAdminLoginChoice		Administrator password

### 6.3.21 AsnProfileAttributeList

List of AsnProfileAttribute

AsnProfileAttributeList is an Array of AsnProfileAttribute

AsnProfileAttribute is an Object

Name	Type	Optional	Comment
u8sServiceType	string		Service Type used as a namespace for a specific profile attribute
u8seName	string		
u8sValue	string	yes	Can be used as placeholder if the profile attribute does not exist

### 6.3.22 AsnGetUserTokenArgument

Argument for asnGetUserToken.

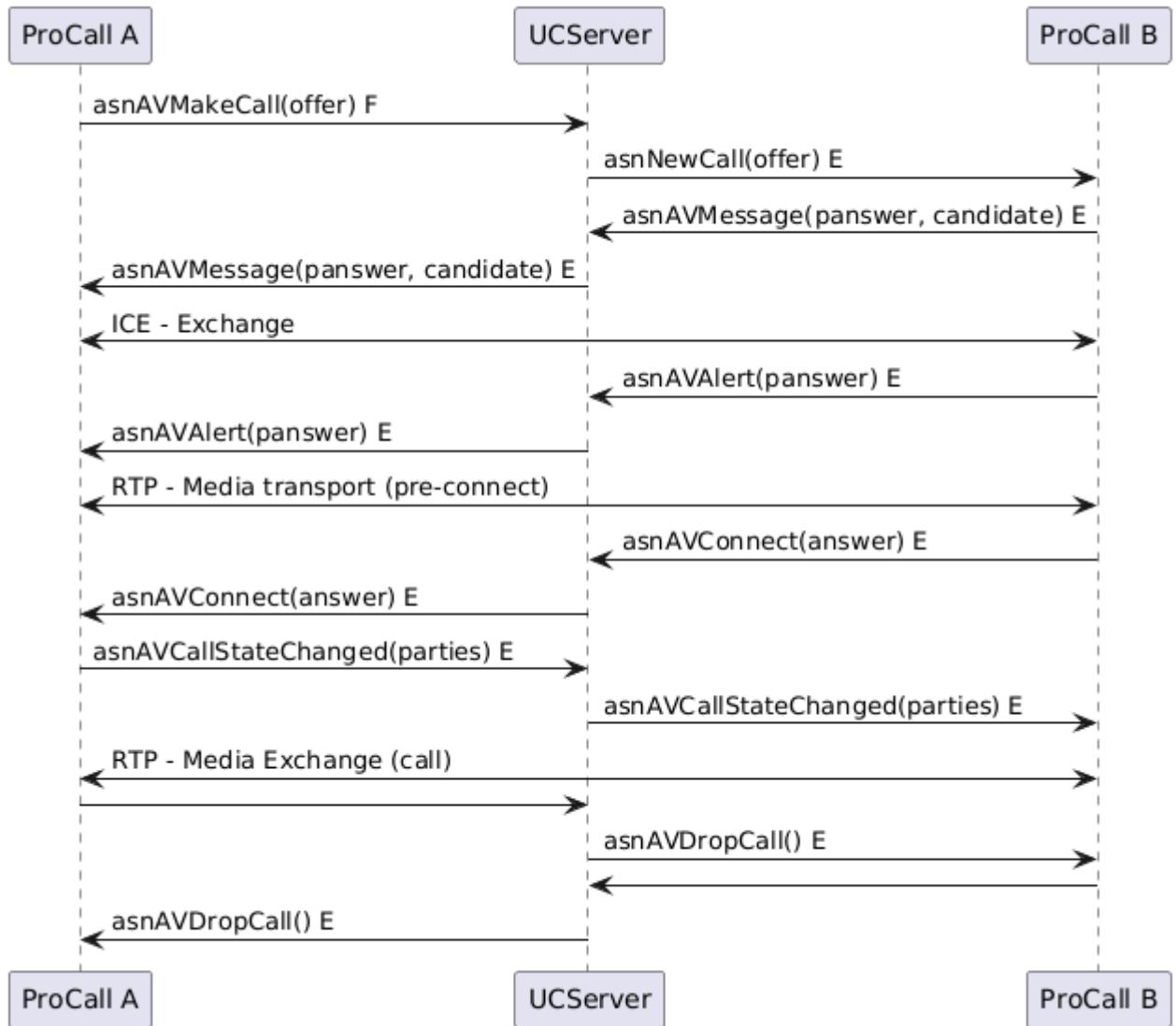
AsnGetUserTokenArgument is an Object

Name	Type	Optional	Comment
iType	number	yes	Type of token (default eUserTokenExternal) (Linked Type: AsnUserTokenType)
iTTL	number	yes	Desired Time to live in seconds (default 24 hours)
lStServiceType	UTF8StringList	yes	List of Service Types e.g. FAQ, RANKING
lStProfileAttributes	AsnProfileAttributeList	yes	List from profile values added as public claim as [Service_type]/[Profile elementname] : [Profile elementvalue]
adminLogin	AsnAdminLogin	yes	Admin login credentials to create token with admin rights

## 7 Audio-Video

## Audio/Video interface.

## **Audio / Video Conversation Modul**



## Moduledescription

This module defines structures and operations related to audio/video communication controlling.

## 7.1 Audio-Video Operations

### 7.1.1 asnAVMakeCallV2

## **ArgumentType: AsnAVMakeCallV2Argument**

`AsnAVMakeCallV2Argument` is an Object

Name	Type	Optional	Comment
callType	number		EDataStructuresAVMessages.h
u8sUriFrom	string		Eigene SIP-Identität - wenn nicht definiert oder falsch dann unkorrekte Presenceanzeigen vom Server
u8sUriTo	string		SIP-Identität des Angerufenen (Empfänger)
u8sContentType	string		derzeit L"application/sdp"
u8sBody	string		Session Description Protocol Daten (SDP Offer)
newCallParams	AsnCtiNewCallParams	yes	Additional data for the call
u8sAssociatedTextChatConversationID	string	yes	
u8sCaps	string	yes	capability strings: HOLD (details see EDataStructuresAVMessages.h)
bIsPublicCall	boolean	yes	
bIsRemoteControlCallOut	boolean	yes	
bIsRemoteControlCallIn	boolean	yes	

### ResultType: AsnAVMakeCallResult

AsnAVMakeCallResult is an Object

Name	Type	Optional	Comment
callAndConnectionID	AsnAVCallAndConnectionID		
u8sCTIConnectionID	string		CID des erzeugten EVirtualSIPAVCall-Objekts im Line-Call-Model. Nach Rücksprache mit RB leider nicht mit der AV-ConnectionID vereinbar.

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 7.1.2 asnGetSTUNandTURN

Konfiguration von STUN und TURN abholen (als operation)

#### ArgumentType: AsnGetSTUNandTURNArgument

AsnGetSTUNandTURNArgument is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnGetSTUNandTURNResult

AsnGetSTUNandTURNResult is an Object

Name	Type	Optional	Comment
listConfigSTUNandTURN	AsnConfigSTUNandTURNList		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 7.1.3 asnAVGetIceServers

Konfiguration von STUN und TURN abholen (als operation) - Result browser kompatibel

#### ArgumentType: AsnAVGetIceServersArgument

AsnAVGetIceServersArgument is an Object

Name	Type	Optional	Comment
------	------	----------	---------

#### ResultType: AsnAVGetIceServersResult

AsnAVGetIceServersResult is an Object

Name	Type	Optional	Comment
iceServers	AsnIceServerList		

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 7.2 Audio-Video Events

### 7.2.1 asnAVDropCall

#### ArgumentType: AsnAVDropCallArgument

AsnAVDropCallArgument is an Object

Name	Type	Optional	Comment
dropTarget	AsnAVCallOrConnection		will man alle Endpoints ausloesen muss man die CallID schicken (ohne connectionID) will man alle LogEndpoints eines Endpoints ausloesen muss man die EndpointID schicken
u8sCause	string		g_EAVCause.GetASNCauseStrFromEAVCause(iAvDropReason) sollte benutzt werden - String zur besseren Lesbarkeit im Trace
iAvDropReason	number		EAVCause::dropCause

### 7.2.2 asnAVNewCallV2

#### ArgumentType: AsnAVNewCallV2Argument

AsnAVNewCallV2Argument is an Object

Name	Type	Optional	Comment
callAndConnectionID	AsnAVCallAndConnectio nID		IDs fuer den Angerufenen (called party)

u8sCTIConnectionID	string		CID des erzeugten EVirtualSIPAVCall-Objekts im Line-Call-Model. Nach RÄcksprache mit RB leider nicht mit der AV-ConnectionID vereinbar.
callType	number		Media Type (Linked Type: AsnAVMediaType)
u8sUriFrom	string		SIP-Identität des Anrufenden
endpointIDFrom	string		EndpointIDs des Anrufenden (calling party)
u8sUriTo	string		SIP-Identität des Angerufenen
u8sContentType	string		application/sdp
u8sBody	string		Session Description Protocol Daten (SDP Offer)
newCallParams	AsnCtiNewCallParams	yes	Additional data for the call
u8sAssociatedTextChatConversationID	string	yes	
u8sCaps	string	yes	capability strings: HOLD, EBTRANS, BTRANS , CTRANS , CANNOT_REJECT (details see EDataStructuresAVMessage s.h)
u8sCTITrackerID	string	yes	Associated call tracker id
asnLocalContact	AsnNetDatabaseContact	yes	the resolved contact for the hold number
u8sHoldContactNumberSC	string	yes	the hold number in supercanonic notation
asnHoldContact	AsnNetDatabaseContact	yes	the resolved contact for the hold number
u8sRedirectingNumberSC	string	yes	the hold number in supercanonic notation
asnRedirectingContact	AsnNetDatabaseContact	yes	the resolved contact for the hold number
bIsRemoteControlCallOut	boolean	yes	
bIsRemoteControlCallIn	boolean	yes	

### 7.2.3 asnAVCallStateChanged

Invoked (Event) if CallState / Information has changed

#### ArgumentType: AsnAVCallStateChangedArgument

AsnAVCallStateChangedArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		Die CallID identifiziert den Call
endpointIDTo	string		ID des Message Empfängers
endpointIDFrom	string		ID des Message Sendenden
callState	number		EDataStructuresAVMessages.h
u8sUriFrom	string		Uri des Message Sendenden
u8sUriTo	string		Uri des Message Empfängers
parties	AsnAVCallPartyList		ffs - wird derzeit als empty Sequence geschickt -> EAVCallPartyList als empty list
optionalParams	AsnOptionalParameters	yes	optionalParams Name "u8sRedirectingNumberSC" Value String optionalParams Name "redirectingContact" Value BER encoded redirectingContact

### 7.2.4 asnAVCallMessageV2

Invoked (Event) if CallState / Information has changed

#### ArgumentType: AsnAVCallMessageV2Argument

AsnAVCallMessageV2Argument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		
endpointIDFrom	string		
messageType	number		MessageTypes  e.g. for stream renegotiation (like Hold over federation) EAV_MESSTYPE_RENEGOTIATE_OFFER (6),

			EAV_MESSTYPE_RENEGOTIATE_ANSWER (7), EAV_MESSTYPE_RENEGOTIATE_DECLINE (8) e.g. for Softphone EAV_MESSTYPE_REINVITE_OFFER (9), EAV_MESSTYPE_REINVITE_ANSWER (10), EAV_MESSTYPE_PRANSWER (11) or for ICE candidate handling EAV_MESSTYPE_ICE_CANDIDATE_SD (2), last candidate EAV_MESSTYPE_ICE_CANDIDATE_END (5) or for remote device control (e.g. camera) EAV_MESSTYPE_CAM_CONTROL (3) with arguments in u8sBody like STR_CAMCONTROL_PANLEFT ("PANLEFT") EDataStructuresAVMessages.h
u8sUriTo	string		Uri des Message Empfaengers - UriFrom sollte dem Message Empfaenger schon bekannt sein
u8sContentType	string	yes	derzeit L"application/camcontrol" oder L"application/mediastate"
u8sBody	string	yes	EAVCallMessageArgument::STR_...
iceCandidate	AsnAVCallMessageICEV2	yes	
u8sConnectedNumberSC	string	yes	the remote number in supercanonic notation
asnConnectedContact	AsnNetDatabaseContact	yes	the resolved contact for the remote number
u8sRedirectingNumberSC	string	yes	the redirecting number in supercanonic notation
asnRedirectingContact	AsnNetDatabaseContact	yes	the resolved contact for the redirecting number

## 7.2.5 asnAVConnectV2

### ArgumentType: AsnAVConnectV2Argument

AsnAVConnectV2Argument is an Object

Name	Type	Optional	Comment
u8sCallID	string		

endpointIDTo	string		ID des Message Empfaengers
connectedEndPointID	string		ID des Message Sendenden
callType	number		EDataStructuresAVMessages.h
u8sUriTo	string		Uri des Message Empfaengers - UriFrom sollte dem Message Empfaenger schon bekannt sein
u8sContentType	string		derzeit L"application/sdp"
u8sBody	string		Session Description Protocol Daten (SDP Answer)
u8sCaps	string	yes	capability strings: HOLD, EBTRANS, BTRANS , CTRANS , CANNOT_REJECT (details see EDataStructuresAVMessages.h)

## 7.2.6 asnAVAlertV2

### ArgumentType: AsnAVAlertV2Argument

AsnAVAlertV2Argument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers
endpointIDFrom	string		ID des Message Sendenden
u8sUriTo	string		Uri des Message Empfaengers - UriFrom sollte dem Message Empfaenger schon bekannt sein
u8sContentType	string		derzeit empty String: L"" - moeglich: L"application/sdp"
u8sBody	string		derzeit empty String: L"" - moeglich: Session Description Protocol Daten (SDP Answer)
u8sCaps	string	yes	capability strings: HOLD (details see EDataStructuresAVMessages.h)

## 7.2.7 asnRequestSTUNandTURN

Event von Client zum Server um die Konfiguration von STUN und TURN zu bekommen

### ArgumentType: AsnRequestSTUNandTURNArgument

AsnRequestSTUNandTURNArgument is an Object

Name	Type	Optional	Comment

## 7.2.8 asnSTUNandTURNConfigChanged

Event von Server zum Client wenn entweder vom Client angefordert durch asnRequestSTUNandTURN oder wenn Konfiguration am Server geändert wurde.

### ArgumentType: AsnSTUNandTURNConfigChangedEventArgs

AsnSTUNandTURNConfigChangedEventArgs is an Object

Name	Type	Optional	Comment
listConfigSTUNandTURN	AsnConfigSTUNandTURNList		

## 7.2.9 asnAVMakeMedia

### ArgumentType: AsnAVMediaChangeArgument

AsnAVMediaChangeArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfängers, hier des Peers (MediaChange messages werden im server terminiert)
connectedEndPointID	string		ID des Message Sendenden
iMediaType	number		Media this message relates to (Linked Type: AsnAVMediaType)
u8sUriFrom	string		Uri des Message Sendenden
u8sUriTo	string		Uri des Message Empfängers
u8sContentType	string		derzeit L"application/xx"
u8sBody	string		Session Description Protocol Daten (SDP Answer)
u8sMediaID	string		ID of the different Media Requests is used as the Connection ID in the journal -> generated by the client when a new media is added Note: Tracker Id of the original call is as well the Connection ID
iAvFlags	number		Media related flags, currently only IS_ORIGINATOR 0x0001L
iAvDropReason	number		EAVCause::dropCause

## 7.2.10 asnAVNewMedia

### ArgumentType: AsnAVMediaChangeArgument

AsnAVMediaChangeArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers, hier des Peers (MediaChange messages werden im server terminiert)
connectedEndPointID	string		ID des Message Sendenden
iMediaType	number		Media this message relates to (Linked Type: AsnAVMediaType)
u8sUriFrom	string		Uri des Message Sendenden
u8sUriTo	string		Uri des Message Empfaengers
u8sContentType	string		derzeit L"application/xx"
u8sBody	string		Session Description Protocol Daten (SDP Answer)
u8sMediaID	string		ID of the different Media Requests is used as the Connection ID in the journal -> generated by the client when a new media is addedbr />Note: Tracker Id of the original call is as well the Connection ID
iAvFlags	number		Media related flags, currently only IS_ORIGINATOR 0x0001L
iAvDropReason	number		EAVCause::dropCause

### 7.2.11 asnAVConnectMedia

#### ArgumentType: AsnAVMediaChangeArgument

AsnAVMediaChangeArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers, hier des Peers (MediaChange messages werden im server terminiert)
connectedEndPointID	string		ID des Message Sendenden
iMediaType	number		Media this message relates to (Linked Type: AsnAVMediaType)
u8sUriFrom	string		Uri des Message Sendenden
u8sUriTo	string		Uri des Message Empfaengers
u8sContentType	string		derzeit L"application/xx"

u8sBody	string		Session Description Protocol Daten (SDP Answer)
u8sMediaID	string		ID of the different Media Requests is used as the Connection ID in the journal -> generated by the client when a new media is addedbr />Note: Tracker Id of the original call is as well the Connection ID
iAvFlags	number		Media related flags, currently only IS_ORIGINATOR 0x0001L
iAvDropReason	number		EAVCause::dropCause

## 7.2.12 asnAVAlertMedia

### ArgumentType: AsnAVMediaChangeArgument

AsnAVMediaChangeArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers, hier des Peers (MediaChange messages werden im server terminiert)
connectedEndPointID	string		ID des Message Sendenden
iMediaType	number		Media this message relates to (Linked Type: AsnAVMediaType)
u8sUriFrom	string		Uri des Message Sendenden
u8sUriTo	string		Uri des Message Empfaengers
u8sContentType	string		derzeit L"application/xx"
u8sBody	string		Session Description Protocol Daten (SDP Answer)
u8sMediaID	string		ID of the different Media Requests is used as the Connection ID in the journal -> generated by the client when a new media is addedbr />Note: Tracker Id of the original call is as well the Connection ID
iAvFlags	number		Media related flags, currently only IS_ORIGINATOR 0x0001L
iAvDropReason	number		EAVCause::dropCause

## 7.2.13 asnAVDropMedia

### ArgumentType: AsnAVMediaChangeArgument

AsnAVMediaChangeArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers, hier des Peers (MediaChange messages werden im server terminiert)
connectedEndPointID	string		ID des Message Sendenden
iMediaType	number		Media this message relates to (Linked Type: AsnAVMediaType)
u8sUriFrom	string		Uri des Message Sendenden
u8sUriTo	string		Uri des Message Empfaengers
u8sContentType	string		derzeit L"application/xx"
u8sBody	string		Session Description Protocol Daten (SDP Answer)
u8sMediaID	string		ID of the different Media Requests is used as the Connection ID in the journal -> generated by the client when a new media is addedbr />Note: Tracker Id of the original call is as well the Connection ID
iAvFlags	number		Media related flags, currently only IS_ORIGINATOR 0x0001L
iAvDropReason	number		EAVCause::dropCause

### 7.2.14 asnAVCallHoldV2

- AV Call Hold Request  
@added 22.08.2024

#### ArgumentType: AsnAVCallMessageV2Argument

AsnAVCallMessageV2Argument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		
endpointIDFrom	string		
messageType	number		MessageTypes  e.g. for stream renegotiation (like Hold over federation) EAV_MESSTYPE_RENEGOTIATE_OFFER (6),

			EAV_MESSTYPE_RENEGOTIATE_ANSWER (7), EAV_MESSTYPE_RENEGOTIATE_DECLINE (8) e.g. for Softphone EAV_MESSTYPE_REINVITE_OFFER (9), EAV_MESSTYPE_REINVITE_ANSWER (10), EAV_MESSTYPE_PRANSWER (11) or for ICE candidate handling EAV_MESSTYPE_ICE_CANDIDATE_SD (2), last candidate EAV_MESSTYPE_ICE_CANDIDATE_END (5) or for remote device control (e.g. camera) EAV_MESSTYPE_CAM_CONTROL (3) with arguments in u8sBody like STR_CAMCONTROL_PANLEFT ("PANLEFT") EDataStructuresAVMessages.h
u8sUriTo	string		Uri des Message Empfaengers - UriFrom sollte dem Message Empfaenger schon bekannt sein
u8sContentType	string	yes	derzeit L"application/camcontrol" oder L"application/mediastate"
u8sBody	string	yes	EAVCallMessageArgument::STR_...
iceCandidate	AsnAVCallMessageICEV2	yes	
u8sConnectedNumberSC	string	yes	the remote number in supercanonic notation
asnConnectedContact	AsnNetDatabaseContact	yes	the resolved contact for the remote number
u8sRedirectingNumberSC	string	yes	the redirecting number in supercanonic notation
asnRedirectingContact	AsnNetDatabaseContact	yes	the resolved contact for the redirecting number

## 7.2.15 asnAVCallHoldAckV2

- AV Call Hold Request Acknowledgement  
@added 22.08.2024

### ArgumentType: AsnAVCallMessageV2Argument

AsnAVCallMessageV2Argument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		
endpointIDFrom	string		
messageType	number		<p>MessageTypes</p> <p>e.g. for stream renegotiation (like Hold over federation)  EAV_MESSTYPE_RENEGOTIATE_OFFER (6),  EAV_MESSTYPE_RENEGOTIATE_ANSWER (7),  EAV_MESSTYPE_RENEGOTIATE_DECLINE (8)</p> <p>e.g. for Softphone  EAV_MESSTYPE_REINVITE_OFFER (9),  EAV_MESSTYPE_REINVITE_ANSWER (10), EAV_MESSTYPE_PRANSWER (11)</p> <p>or for ICE candidate handling  EAV_MESSTYPE_ICE_CANDIDATE_SD (2), last candidate  EAV_MESSTYPE_ICE_CANDIDATE_END (5)</p> <p>or for remote device control (e.g. camera)  EAV_MESSTYPE_CAM_CONTROL (3)</p> <p>with arguments in u8sBody like  STR_CAMCONTROL_PANLEFT ("PANLEFT")</p> <p>EDataStructuresAVMessages.h</p>
u8sUriTo	string		Uri des Message Empfaengers - UriFrom sollte dem Message Empfaenger schon bekannt sein
u8sContentType	string	yes	derzeit L"application/camcontrol" oder L"application/mediastate"
u8sBody	string	yes	EAVCallMessageArgument::STR_...
iceCandidate	AsnAVCallMessageICEV2	yes	
u8sConnectedNumberSC	string	yes	the remote number in supercanonic notation
asnConnectedContact	AsnNetDatabaseContact	yes	the resolved contact for the remote number
u8sRedirectingNumberSC	string	yes	the redirecting number in supercanonic notation

asnRedirectingContact	AsnNetDatabaseContact	yes	the resolved contact for the redirecting number
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### 7.2.16 asnAVCallRetrieveV2

- AV Call Retrieve Request  
@added 22.08.2024

#### ArgumentType: AsnAVCallMessageV2Argument

AsnAVCallMessageV2Argument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		
endpointIDFrom	string		
messageType	number		<p>MessageTypes</p> <p>e.g. for stream renegotiation (like Hold over federation)  EAV_MESSTYPE_RENEGOTIATE_OFFER (6),  EAV_MESSTYPE_RENEGOTIATE_ANSWER (7),  EAV_MESSTYPE_RENEGOTIATE_DECLINE (8)</p> <p>e.g. for Softphone  EAV_MESSTYPE_REINVITE_OFFER (9),  EAV_MESSTYPE_REINVITE_ANSWER (10), EAV_MESSTYPE_PRANSWER (11)</p> <p>or for ICE candidate handling  EAV_MESSTYPE_ICE_CANDIDATE_SDP (2), last candidate  EAV_MESSTYPE_ICE_CANDIDATE_END (5)</p> <p>or for remote device control (e.g. camera)  EAV_MESSTYPE_CAM_CONTROL (3)</p> <p>with arguments in u8sBody like  STR_CAMCONTROL_PANLEFT ("PANLEFT")  EDataStructuresAVMessages.h</p>
u8sUriTo	string		Uri des Message Empfaengers - UriFrom sollte dem Message Empfaenger schon bekannt sein
u8sContentType	string	yes	derzeit L"application/camcontrol" oder L"application/mediastate"

u8sBody	string	yes	EAVCallMessageArgument::STR_...
iceCandidate	AsnAVCallMessageICEV2	yes	
u8sConnectedNumberSC	string	yes	the remote number in supercanonic notation
asnConnectedContact	AsnNetDatabaseContact	yes	the resolved contact for the remote number
u8sRedirectingNumberSC	string	yes	the redirecting number in supercanonic notation
asnRedirectingContact	AsnNetDatabaseContact	yes	the resolved contact for the redirecting number

### 7.2.17 asnAVCallRetrieveAckV2

- AV Call Retrieve Request Acknowledgement  
@added 22.08.2024

#### ArgumentType: AsnAVCallMessageV2Argument

AsnAVCallMessageV2Argument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		
endpointIDFrom	string		
messageType	number		<p>MessageTypes</p> <p>e.g. for stream renegotiation (like Hold over federation)            EAV_MESSTYPE_RENEGOTIATE_OFFER (6),            EAV_MESSTYPE_RENEGOTIATE_ANSWER (7),            EAV_MESSTYPE_RENEGOTIATE_DECLINE (8)</p> <p>e.g. for Softphone            EAV_MESSTYPE_REINVITE_OFFER (9),            EAV_MESSTYPE_REINVITE_ANSWER (10), EAV_MESSTYPE_PRANSWER (11)</p> <p>or for ICE candidate handling            EAV_MESSTYPE_ICE_CANDIDATE_SD (2), last candidate            EAV_MESSTYPE_ICE_CANDIDATE_END (5)</p>

				or for remote device control (e.g. camera) EAV_MESSTYPE_CAM_CONTROL (3) with arguments in u8sBody like STR_CAMCONTROL_PANLEFT ("PANLEFT") EDataStructuresAVMessages.h
u8sUriTo	string			Uri des Message Empfaengers - UriFrom sollte dem Message Empfaenger schon bekannt sein
u8sContentType	string	yes		derzeit L"application/camcontrol" oder L"application/mediastate"
u8sBody	string	yes		EAVCallMessageArgument::STR_...
iceCandidate	AsnAVCallMessageICEV2	yes		
u8sConnectedNumberSC	string	yes		the remote number in supercanonic notation
asnConnectedContact	AsnNetDatabaseContact	yes		the resolved contact for the remote number
u8sRedirectingNumberSC	string	yes		the redirecting number in supercanonic notation
asnRedirectingContact	AsnNetDatabaseContact	yes		the resolved contact for the redirecting number

### 7.2.18 asnAVTransferGetID

- AV Transfer Get ID Request

#### ArgumentType: AsnAVTransferArgument

AsnAVTransferArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers
endpointIDFrom	string		ID des Message Senders
iTransferResult	number		for result Messages, SIP status, e.g.: '202' accepted, '100' trying, '200' OK
u8sUriTransferTo	string		Destination of transfer
u8sUriTransferFrom	string		Transferring Party

u8sTransferTargetID	string	yes	we ask the Consultation call (C-partner) for an ID to identify it in the transfer request to the A-partner
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### 7.2.19 asnAVTransferGetIDResult

- AV Transfer Get ID Acknowledgement

#### ArgumentType: AsnAVTransferArgument

AsnAVTransferArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers
endpointIDFrom	string		ID des Message Senders
iTransferResult	number		for result Messages, SIP status, e.g.: '202' accepted, '100' trying, '200' OK
u8sUriTransferTo	string		Destination of transfer
u8sUriTransferFrom	string		Transferring Party
u8sTransferTargetID	string	yes	we ask the Consultation call (C-partner) for an ID to identify it in the transfer request to the A-partner

### 7.2.20 asnAVTransferStart

- AV Transfer Start Request

#### ArgumentType: AsnAVTransferArgument

AsnAVTransferArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers
endpointIDFrom	string		ID des Message Senders
iTransferResult	number		for result Messages, SIP status, e.g.: '202' accepted, '100' trying, '200' OK
u8sUriTransferTo	string		Destination of transfer
u8sUriTransferFrom	string		Transferring Party
u8sTransferTargetID	string	yes	we ask the Consultation call (C-partner) for an ID to

			identify it in the transfer request to the A-partner
--	--	--	--

### 7.2.21 asnAVTransferStartResult

- AV Transfer Start Acknowledgement

#### ArgumentType: AsnAVTransferArgument

AsnAVTransferArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers
endpointIDFrom	string		ID des Message Senders
iTransferResult	number		for result Messages, SIP status, e.g.: '202' accepted, '100' trying, '200' OK
u8sUriTransferTo	string		Destination of transfer
u8sUriTransferFrom	string		Transferring Party
u8sTransferTargetID	string	yes	we ask the Consultation call (C-partner) for an ID to identify it in the transfer request to the A-partner

## 7.3 Audio-Video Types

### 7.3.1 AsnAVMakeCallErrorEnum

AsnAVMakeCallErrorEnum is an Enumeration

Name	Type	Value	Comment
general	number	100	

### 7.3.2 EnumCodecType

---

CodecConfig to set the Codecs per MediaEndpoint in Kurento --

---

EnumCodecType is an Enumeration

Name	Type	Value	Comment
------	------	-------	---------

ePCMU	number	0	
ePCMA	number	8	
eG722	number	9	
eG729	number	18	
eOPUS	number	96	
eTELEPHONE_EVENT	number	101	
eG726_16	number	110	
eG726_24	number	111	
eG726_32	number	112	
eG726_40	number	113	
eVP8	number	200	
eH264	number	264	

### 7.3.3 AsnAVMediaType

AsnAVMediaType is an Enumeration

Name	Type	Value	Comment
eMEDIATYPEAUDIOVIDEO	number	0	
eMEDIATYPEAUDIO	number	1	
eMEDIATYPEDESKTOPSHARING	number	2	
eMEDIATYPEDESTKOPREQUESTSHARING	number	3	
eMEDIATYPESIP	number	65535	

### 7.3.4 AsnAVCallAndConnectionID

ConnectionID with CallID and physical endpoint (URI / EndPointID)

-> wird benutzt wenn man keine LogEndpointID hat oder wenn alle Endpunkte einer Verbindung (LogEndpointIDs) an einer speziellen EndpointID erreicht werden sollen

AsnAVCallAndConnectionID is an Object

Name	Type	Optional	Comment
u8sCallID	string		
u8sEndpointID	string		

### 7.3.5 AsnAVMakeCallV2Argument

---

\*\*\*\*\* AVMakeCallV2 \*\*\*\*\*

---

Argument for the asnAVMakeCallV2 operation

AsnAVMakeCallV2Argument is an Object

Name	Type	Optional	Comment
callType	number		EDataStructuresAVMessages.h
u8sUriFrom	string		Eigene SIP-IdentitÄt - wenn nicht definiert oder falsch dann unkorrekte Presenceanzeigen vom Server
u8sUriTo	string		SIP-IdentitÄt des Angerufenen (EmpfÄnger)
u8sContentType	string		derzeit L"application/sdp"
u8sBody	string		Session Description Protocol Daten (SDP Offer)
newCallParams	AsnCtiNewCallParams	yes	Additional data for the call
u8sAssociatedTextChatConversationID	string	yes	
u8sCaps	string	yes	capability strings: HOLD (details see EDataStructuresAVMessages.h)
bIsPublicCall	boolean	yes	
bIsRemoteControlCallOut	boolean	yes	

bIsRemoteControlCallIn	boolean	yes	
------------------------	---------	-----	--

### 7.3.6 AsnAVCallParty

---

\*\*\*\*\* asnAVCallStateChanged \*\*\*\*\*

---

- signal call state changes

AsnAVCallParty is an Object

Name	Type	Optional	Comment
endpointID	string		endpointID of the party
endPointState	number		ffs

### 7.3.7 AsnAVCallMessageICVE2

---

\*\*\*\*\* asnAVCallMessageV2 \*\*\*\*\*

---

AsnAVCallMessageICVE2 is an Object

Name	Type	Optional	Comment
candidate	string		
sdpMid	string		
sdpMLineIndex	number		

### 7.3.8 AsnAVConnectV2Argument

---

\*\*\*\*\* asnAVConnectV2 \*\*\*\*\*

---

- Connect/accept an AV Connection and drops forked users

AsnAVConnectV2Argument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers
connectedEndPointID	string		ID des Message Sendenden
callType	number		EDataStructuresAVMessages.h
u8sUriTo	string		Uri des Message Empfaengers - UriFrom sollte dem Message Empfaenger schon bekannt sein
u8sContentType	string		derzeit L"application/sdp"
u8sBody	string		Session Description Protocol Daten (SDP Answer)
u8sCaps	string	yes	capability strings: HOLD, EBTRANS, BTRANS , CTRANS , CANNOT_REJECT (details see EDataStructuresAVMessages.h)

### 7.3.9 AsnAVAlertV2Argument

---

\*\*\*\*\* asnAVAlert \*\*\*\*\*

---

- Indicate a remote ringing device, may enable early media  
-> sofort nach Erhalt einen neuen Rufes sollte Alert oder Drop geschickt werden  
-> fuer Early media koennte im Alert ein SDP mitgeschickt werden -> derzeit schicken wirs im Connect

AsnAVAlertV2Argument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers
endpointIDFrom	string		ID des Message Sendenden
u8sUriTo	string		Uri des Message Empfaengers - UriFrom sollte dem Message Empfaenger schon bekannt sein
u8sContentType	string		derzeit empty String: L"" - moeglich: L"application/sdp"
u8sBody	string		derzeit empty String: L"" - moeglich: Session Description Protocol Daten (SDP Answer)
u8sCaps	string	yes	capability strings: HOLD (details see EDataStructuresAVMessages.h)

### 7.3.10 AsnRequestSTUNandTURNArgument

AsnRequestSTUNandTURNArgument is an Object

Name	Type	Optional	Comment

### 7.3.11 AsnGetSTUNandTURNArgument

AsnGetSTUNandTURNArgument is an Object

Name	Type	Optional	Comment

### 7.3.12 AsnGetSTUNandTURNResult

AsnGetSTUNandTURNResult is an Object

Name	Type	Optional	Comment
listConfigSTUNandTURN	AsnConfigSTUNandTURNList		

### 7.3.13 AsnSTUNandTURNConfigChangedArgument

AsnSTUNandTURNConfigChangedEventArgs is an Object

Name	Type	Optional	Comment
listConfigSTUNandTURN	AsnConfigSTUNandTURNList		

### 7.3.14 AsnIceServer

WebRtc Browser kompatible iceServers

AsnIceServer is an Object

Name	Type	Optional	Comment
username	string	yes	turn username to use
credential	string	yes	turn password to use
urls	UTF8StringList		uris

### 7.3.15 AsnAVGetIceServersArgument

AsnAVGetIceServersArgument is an Object

Name	Type	Optional	Comment
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### 7.3.16 AsnConfigCodec

AsnConfigCodec is an Object

Name	Type	Optional	Comment
iType	number		Codec type (Linked Type: EnumCodecType)

### 7.3.17 AsnAVMediaChangeArgument

---

\*\*\* asnAVMedia to inform server about media changes in \*\*\*

\*\*\* existing call (currently to enable journalling of \*\*\*

\*\*\* media switching) \*\*\*

---

- Connect/accept an AV Connection and drops forked users

AsnAVMediaChangeArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers, hier des Peers (MediaChange messages werden im server terminiert)
connectedEndPointID	string		ID des Message Sendenden
iMediaType	number		Media this message relates to (Linked Type: AsnAVMediaType)
u8sUriFrom	string		Uri des Message Sendenden
u8sUriTo	string		Uri des Message Empfaengers
u8sContentType	string		derzeit L"application/xx"
u8sBody	string		Session Description Protocol Daten (SDP Answer)
u8sMediaID	string		ID of the different Media Requests is used as the Connection ID in the journal -> generated by the client when a new media is addedbr />Note: Tracker Id of the original call is as well the Connection ID
iAvFlags	number		Media related flags, currently only IS_ORIGINATOR 0x0001L

iAvDropReason	number		EAVCause::dropCause
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### 7.3.18 AsnAVTransferArgument

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\*\*\*\*\* asnAVTransferGetID asnAVTransferStart \*\*\*\*\*

---

- transfer message argument

AsnAVTransferArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		ID des Message Empfaengers
endpointIDFrom	string		ID des Message Senders
iTransferResult	number		for result Messages, SIP status, e.g.: '202' accepted, '100' trying, '200' OK
u8sUriTransferTo	string		Destination of transfer
u8sUriTransferFrom	string		Transferring Party
u8sTransferTargetID	string	yes	we ask the Consultation call (C-partner) for an ID to identify it in the transfer request to the A-partner

### 7.3.19 AsnAVCallOrConnection

Choice with all combinations

-> wenn man eine LogEndpointID hat dann nimmt man die logconnectionID, wenn nicht und man hat aber eine EndpointID dann nimmt man die connectionID, wenn man aber alle EndpointIDs welche

-> mit dem Call verbunden sind erreichen will, dann kann man auch nur die CallID zur Adressierung verwenden

AsnAVCallOrConnection is a Choice

Name	Type	Comment
u8sCallID	string	
connectionID	AsnAVCallAndConnectionID	

### 7.3.20 AsnAVMakeCallResult

Result of the asnAVMakeCall and asnAVMakeCallV2 operation

AsnAVMakeCallResult is an Object

Name	Type	Optional	Comment
callAndConnectionID	AsnAVCallAndConnectionID		
u8sCTIConnectionID	string		CID des erzeugten EVirtualSIPAVCall-Objekts im Line-Call-Model. Nach RÃ¼cksprache mit RB leider nicht mit der AV-ConnectionID vereinbar.

### 7.3.21 AsnAVDropCallArgument

---

\*\*\*\*\* AVDropCall \*\*\*\*\*

---

- Drop an AV Connection  
to drop/reject an incoming call it is recommended to use iAvDropReason BUSY (1) or REJECT (16)  
to hang up an active call it is recommended to use iAvDropReason NORMAL\_CALL\_CLEARING (0)  
to hang up an outgoing call pending (e.g. ringback) it is recommended to use iAvDropReason CANCEL (2) or NORMAL\_CALL\_CLEARING (0)  
further cause definitions in:  
<http://svnserver:8080/svn/devprocall/trunk/estos/common/libs/enetctilib/include/EAVCause.h>  
(and the EAVCause.cpp file)

AsnAVDropCallArgument is an Object

Name	Type	Optional	Comment
dropTarget	AsnAVCallOrConnect ion		will man alle Endpoints ausloesen muss man die CallID schicken (ohne connectionID) will man alle LogEndpoints eines Endpoints ausloesen muss man die EndpointID schicken
u8sCause	string		g_EAVCause.GetASNCauseStrFromEAVCause(iAvDrop Reason) sollte benutzt werden - String zur besseren Lesbarkeit im Trace
iAvDropReas on	number		EAVCause::dropCause

### 7.3.22 AsnAVNewCallV2Argument

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\*\*\*\*\* asnAVNewCall \*\*\*\*\*

---

- Invoked (Event) signalling a new (incoming) call

AsnAVNewCallV2Argument is an Object

Name	Type	Optional	Comment
callAndConnectionID	AsnAVCallAndConnectio nID		IDs fuer den Angerufenen (called party)
u8sCTIConnectionID	string		CID des erzeugten EVirtualSIPAVCall-Objekts im Line-Call-Model. Nach Rücksprache mit RB leider nicht mit der AV- ConnectionID vereinbar.
callType	number		Media Type (Linked Type: AsnAVMediaType)
u8sUriFrom	string		SIP-Identität des Anrufenden
endpointIDFrom	string		EndpointIDs des Anrufenden (calling party)
u8sUriTo	string		SIP-Identität des Angerufenen
u8sContentType	string		application/sdp
u8sBody	string		Session Description Protocol Daten (SDP Offer)
newCallParams	AsnCtiNewCallParams	yes	Additional data for the call
u8sAssociatedTextChatConversati onID	string	yes	
u8sCaps	string	yes	capability strings: HOLD, EBTRANS, BTRANS , CTRANS , CANNOT_REJECT (details see EDataStructuresAVMessage s.h)
u8sCTITrackerID	string	yes	Associated call tracker id
asnLocalContact	AsnNetDatabaseContact	yes	the resolved contact for the hold number
u8sHoldContactNumberSC	string	yes	the hold number in

			supercanonic notation
asnHoldContact	AsnNetDatabaseContact	yes	the resolved contact for the hold number
u8sRedirectingNumberSC	string	yes	the hold number in supercanonic notation
asnRedirectingContact	AsnNetDatabaseContact	yes	the resolved contact for the hold number
bIsRemoteControlCallOut	boolean	yes	
bIsRemoteControlCallIn	boolean	yes	

### 7.3.23 AsnAVCallPartyList

AsnAVCallPartyList is an Array of AsnAVCallParty

AsnAVCallParty is an Object

Name	Type	Optional	Comment
endpointID	string		endpointID of the party
endPointState	number		ffs

### 7.3.24 AsnAVCallStateChangedArgument

AsnAVCallStateChangedArgument is an Object

Name	Type	Optional	Comment
u8sCallID	string		Die CallID identifiziert den Call
endpointIDTo	string		ID des Message Empfaengers
endpointIDFrom	string		ID des Message Sendenden
callState	number		EDataStructuresAVMessages.h
u8sUriFrom	string		Uri des Message Sendenden
u8sUriTo	string		Uri des Message Empfaengers
parties	AsnAVCallPartyList		ffs - wird derzeit als empty Sequence geschickt -> EAVCallPartyList als empty list
optionalParams	AsnOptionalParameters	yes	optionalParams Name "u8sRedirectingNumberSC" Value String optionalParams Name "redirectingContact" Value BER encoded redirectingContact

### 7.3.25 AsnAVCallMessageV2Argument

- send end to end messages

AsnAVCallMessageV2Argument is an Object

Name	Type	Optional	Comment
u8sCallID	string		
endpointIDTo	string		
endpointIDFrom	string		
messageType	number		<p>MessageTypes</p> <p>e.g. for stream renegotiation (like Hold over federation)  EAV_MESSTYPE_RENEGOTIATE_OFFER (6),  EAV_MESSTYPE_RENEGOTIATE_ANSWER (7),  EAV_MESSTYPE_RENEGOTIATE_DECLINE (8)</p> <p>e.g. for Softphone  EAV_MESSTYPE_REINVITE_OFFER (9),  EAV_MESSTYPE_REINVITE_ANSWER (10), EAV_MESSTYPE_PRANSWER (11)  or for ICE candidate handling  EAV_MESSTYPE_ICE_CANDIDATE_SDP (2), last candidate  EAV_MESSTYPE_ICE_CANDIDATE_END (5)</p> <p>or for remote device control (e.g.  camera)  EAV_MESSTYPE_CAM_CONTROL (3)  with arguments in u8sBody like  STR_CAMCONTROL_PANLEFT ("PANLEFT")  EDataStructuresAVMessages.h</p>
u8sUriTo	string		Uri des Message Empfaengers - UriFrom sollte dem Message Empfaenger schon bekannt sein
u8sContentType	string	yes	derzeit L"application/camcontrol" oder L"application/mediastate"
u8sBody	string	yes	EAVCallMessageArgument::STR_...
iceCandidate	AsnAVCallMessageICEV2	yes	
u8sConnectedNumberS	string	yes	the remote number in supercanonic

C			notation
asnConnectedContact	AsnNetDatabaseContact	yes	the resolved contact for the remote number
u8sRedirectingNumberSC	string	yes	the redirecting number in supercanonic notation
asnRedirectingContact	AsnNetDatabaseContact	yes	the resolved contact for the redirecting number

### 7.3.26 AsnIceServerList

AsnIceServerList is an Array of AsnIceServer

AsnIceServer is an Object

Name	Type	Optional	Comment
username	string	yes	turn username to use
credential	string	yes	turn password to use
urls	UTF8StringList		uris

### 7.3.27 AsnAVGetIceServersResult

AsnAVGetIceServersResult is an Object

Name	Type	Optional	Comment
iceServers	AsnIceServerList		

### 7.3.28 AsnConfigCodecList

AsnConfigCodecList is an Array of AsnConfigCodec

AsnConfigCodec is an Object

Name	Type	Optional	Comment
iType	number		Codec type (Linked Type: EnumCodecType)

### 7.3.29 AsnConfigPorts

AsnConfigPorts is an Object

Name	Type	Optional	Comment

minPort	number		minimum config port
maxPort	number		maximum config port

## 8 BinaryTransfer

Data structures and methods to transport binary data between clients and the server

The binary transfer can be used to transport any binary data blob between clients. It's primary targeting to transfer

files within the chat but may be used to implement file sharing in remote desktop sessions as well as to implement a new procall function:

Providing files for customers.

The interface is simple and has no other dependencies.

Primary target is to be able to transport the file contents inband in the asn.1 connection.

Later the implementation will also target 3rd party file shares like onedrive, awss3, dropbox or ucweb.

### 8.1 BinaryTransfer Operations

#### 8.1.1 asnGetBinaryTransferSettings

Getting file transfer settings from the server

#### ArgumentType: AsnGetBinaryTransferSettingsArgument

AsnGetBinaryTransferSettingsArgument is an Object

Name	Type	Optional	Comment
------	------	----------	---------

#### ResultType: AsnGetBinaryTransferSettingsResult

AsnGetBinaryTransferSettingsResult is an Object

Name	Type	Optional	Comment
asnBinaryTransferSettingsList	AsnBinaryTransferSettingsList		BinaryTransfer settings for the different services (chat, screensharing, etc.)

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

#### 8.1.2 asnInitBinaryTransferUpload

request a transferid for uploading a file towards the server

**ArgumentType: AsnInitBinaryTransferUploadArgument**

AsnInitBinaryTransferUploadArgument is an Object

Name	Type	Optional	Comment
asnMetaData	AsnBinaryTransferMetaData		The client filled meta data for the binary transfer
eServiceType	number		Defines the type of service this transfer is for (chat, screensharing, etc) The service will then decide which AsnBinaryTransferStorageTypeEnum the transfer is sent to (Linked Type: AsnBinaryTransferServiceTypeEnum)

**ResultType: AsnInitBinaryTransferUploadResult**

AsnInitBinaryTransferUploadResult is an Object

Name	Type	Optional	Comment
eTargetType	number		Tells the client which storage provider it shall use for the binary transfer Server will set itself if no further transfer is necessary (e.g. vcf or location sent to the server)
u8sTransferID	string		The server provided id identifying the transfer
u8sTargetServiceDetails	AsnStringPairList	yes	Service/Target specific configuration, members see AsnBinaryTransferStorageTypeEnum (only for 3rd party storage providers)

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**8.1.3 asnSendBinaryChunk**

Sending a file chunk to the server via asn.1

**ArgumentType: AsnSendBinaryChunkArgument**

AsnSendBinaryChunkArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		The server provided id identifying the transfer
iDataOffset	number		Data Offset in the file (0 based)
osChunkData	string		the binary data when using json encoding the sender has to base64 encode this chunkdata

### ResultType: AsnSendBinaryChunkResult

AsnSendBinaryChunkResult is an Object

Name	Type	Optional	Comment
iNewPosition	number		Tells the client the new position to write for the file. The client has to examine this value in order to be aware of missing chunks on the server the iDataOffset of the Function calling argument together with the length of the osChunkData should match this value if the value matches the client can continue (or the file transfer is completed) if the value differs the client must send a new chunk beginning with iWritingPosition next.

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### 8.1.4 asnBinaryTransferUploadCompleted

binarytransfer upload completed

Telling the server that a file upload to a 3rd party target was completed (or failed)

### ArgumentType: AsnBinaryTransferUploadCompletedArgument

AsnBinaryTransferUploadCompletedArgument is an Object

Name	Type	Optional	Comment
------	------	----------	---------

u8sTransferID	string		The id identifying the transfer (provided by the server in AsnInitBinaryTransferUploadArgument)
bUploadCompleted	boolean		File upload was successfully completed (true) or failed (false)
u8s3rdPartyFileReference	string	yes	Contains information to download the binary from 3rd party storage services
u8sUploadError	string	yes	Custom error information from a 3rd party backend for logging purposes (in case of bUploadCompleted = false)

**ResultType: AsnBinaryTransferUploadCompletedResult**

AsnBinaryTransferUploadCompletedResult is an Object

Name	Type	Optional	Comment
------	------	----------	---------

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**8.1.5 asnInitBinaryTransferDownload**

Initializing fileDownload (getting Download source for the file with u8sTransferID)

**ArgumentType: AsnInitBinaryTransferDownloadArgument**

AsnInitBinaryTransferDownloadArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		ID of the binary we want to download
bProvideMetaData	boolean		If the client wants to have the meta data for the download (e.g. wants to know the file size or mime type and has not yet been able to get those)

**ResultType: AsnInitBinaryTransferDownloadResult**

AsnInitBinaryTransferDownloadResult is an Object

Name	Type	Optional	Comment
eSourceType	number		
asnMetaData	AsnBinaryTransferMetaData	yes	The meta data for the binary transfer (if they were requested in the argument)
u8sTargetServiceDetails	AsnStringPairList	yes	Service/Target specific configuration, members see AsnBinaryTransferStorageTypeEnum
u8s3rdPartyFileReference	string	yes	Contains information to download the binary from 3rd party storage services

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**8.1.6 asnReceiveBinaryChunk**

Sending a file chunk from the server via asn.1

**ArgumentType: AsnReceiveBinaryChunkArgument**

AsnReceiveBinaryChunkArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		The id identifying the transfer
iDataOffset	number		Data Offset in the file (0 based)
iChunkSize	number		Chunk size the client wants to receive

**ResultType: AsnReceiveBinaryChunkResult**

AsnReceiveBinaryChunkResult is an Object

Name	Type	Optional	Comment

osChunkData	string		the chunk binary data when using json encoding the data will be base64 encoded
bCompleted	boolean		tells the client that there is no more data on the server

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**8.1.7 asnBinaryTransferDownloadCompleted**

Telling the server that a file download

Telling the server that a file download from a 3rd party target was completed (or failed)

**ArgumentType: AsnBinaryTransferDownloadCompletedArgument**

AsnBinaryTransferDownloadCompletedArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		The id identifying the transfer (provided by the server in AsnInitBinaryTransferDownloadArgument)
bDownloadCompleted	boolean		File Download was successfully completed
u8sDownloadError	string	yes	Custom error information from a 3rd party backend for logging purposes (in case of bDownloadCompleted = false)

**ResultType: AsnBinaryTransferDownloadCompletedResult**

AsnBinaryTransferDownloadCompletedResult is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment

iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 8.1.8 asnGetBinaryTransferMetaData

Retrieves MetaData for a transfer id from the server

#### ArgumentType: AsnGetBinaryTransferMetaDataArgument

AsnGetBinaryTransferMetaDataArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		The id identifying the transfer (provided by the server in AsnInitBinaryTransferDownloadArgument)

#### ResultType: AsnGetBinaryTransferMetaDataResult

AsnGetBinaryTransferMetaDataResult is an Object

Name	Type	Optional	Comment
asnMetaData	AsnBinaryTransferMetaData		The meta data for the binary transfer

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 8.1.9 asnBinaryTransferRemoveElement

remove file for a transfer id from the server - also the state inside the metadata base will be set

removal of file and metadata will only be allowed for the origin sender of the file

#### ArgumentType: AsnBinaryTransferRemoveElementArgument

AsnBinaryTransferRemoveElementArgument is an Object

Name	Type	Optional	Comment

u8sTransferID	string		The id identifying the transfer (provided by the server in AsnInitBinaryTransferDownloadArgument)
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**ResultType: AsnBinaryTransferRemoveElementResult**

AsnBinaryTransferRemoveElementResult is an Object

Name	Type	Optional	Comment
bRemoved	boolean		entry removed

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**8.1.10 asnBinaryTransferForwardElement**

not yet implemented - reserved for future use

not yet implemented - reserved for future use

**ArgumentType: AsnBinaryTransferForwardElementArgument**

AsnBinaryTransferForwardElementArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		The id identifying the transfer (provided by the server in AsnInitBinaryTransferDownloadArgument)

**ResultType: AsnBinaryTransferForwardElementResult**

AsnBinaryTransferForwardElementResult is an Object

Name	Type	Optional	Comment
u8sOrigTransferID	string		original transferID
u8sForwardTransferID	string		transferID for forwarding the file

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 8.2 BinaryTransfer Types

### 8.2.1 AsnBinaryTransferMetaDataTypeEnum

embedded metadata types

These are well known metadata types which are embedded in the AsnBinaryTransferMetaData osMetaData

AsnBinaryTransferMetaDataTypeEnum is an Enumeration

Name	Type	Value	Comment
empty	number	0	Binary data is empty mimetype:
picture	number	1	preview jpg picture (take care about the limits in AsnBinaryTransferSettings), mimetype: image/jpeg
vcard	number	2	a vcf in version 2.1 or 3 ( <a href="https://de.wikipedia.org/wiki/VCard">https://de.wikipedia.org/wiki/VCard</a> ) mimetype: text/vcard
geodata	number	3	Location information as Keyhole Markup Language ( <a href="https://de.wikipedia.org/wiki/Keyhole_Markup_Language">https://de.wikipedia.org/wiki/Keyhole_Markup_Language</a> ) mimetype: application/vnd.google-earth.kml+xml
voicemessage	number	4	Voice Message as ogg/opus file mimetype: text/stringtable ( <a href="https://www.xiph.org/vorbis/doc/v-comment.html">https://www.xiph.org/vorbis/doc/v-comment.html</a> )

### 8.2.2 AsnBinaryTransferRequestErrorEnum

eror values of binarytransfer

These are the possible error values in AsnRequestError

AsnBinaryTransferRequestErrorEnum is an Enumeration

Name	Type	Value	Comment

noerror	number	0	no error
serverBusy	number	1	server is currently serving to many downloads, please try again later
extensionNotAllowed	number	2	the file type (extension) is not allowed for file transfer
fileTooBig	number	3	the file size is too big
unknownTransferID	number	4	the server does not know this transferID (may occur in upload and download)
transferTerminated	number	5	the server terminated the transfer (e.g. shutting down or denied for user profile)
invalidPosition	number	6	the client was requesting a position which is not within the file being downloaded
filedeleted	number	7	the file was already deleted
invalidMetaData	number	8	the metaData is not allowed or invalid (may occur when initiating upload)
databaseFail	number	9	either the connection or read/write from server database failed (see server log for details)
generalServerError	number	9999	general error within server request processing (see server log for details)

### 8.2.3 AsnBinaryTransferStorageTypeEnum

storage service provider

These are the possible storage service provider

AsnBinaryTransferStorageTypeEnum is an Enumeration

Name	Type	Value	Comment
ucserver	number	0	Transfer via ASN1 functions asnSendBinaryChunk/asnReceiveBinaryChunk
ucweb	number	1	Transfer via UCWeb REST API - DETAILS TO FOLLOW
dropbox	number	2	Transfer via DropBox API - DETAILS TO FOLLOW

awss3	number	3	Transfer via AWS S3 Storage - DETAILS TO FOLLOW
onedrive	number	4	Transfer via OneDrive Storage - DETAILS TO FOLLOW

#### 8.2.4 AsnBinaryTransferServiceTypeEnum

binarytransfer service settings

These are the possible binary transfer services the settings are used for

AsnBinaryTransferServiceTypeEnum is an Enumeration

Name	Type	Value	Comment
chat	number	0	Settings are for chat
screensharing	number	1	Settings are for screensharing file transfer
toexternal	number	2	Settings are for providing files to external (customers, uploading them to a public available storage where customers may download the content)

#### 8.2.5 AsnBinaryTransferSettings

Data structure describing binary transfer settings

This data structure is used to inform the clients about the configuration for binary transfer for the different services (chat, screensharing, etc...).

AsnBinaryTransferSettings is an Object

Name	Type	Optional	Comment
eServiceType	number		Defines the type of service these settings are for (chat, screensharing, etc) (Linked Type: AsnBinaryTransferServiceTypeEnum)
bEnabled	boolean		The service is enabled, thus available to the client
u8sNotAllowedExtensions	UTF8StringList		List of extensions the server will not allow for binary transfer
iMaxChunkSizeDownload	number		Maximum supported chunk size for download in bytes, -1 defines no limit
iMaxChunkSizeUpload	number		Maximum supported chunk size for upload in bytes, -1 defines no limit

iMaxPreviewSize	number		Maximum supported preview size in bytes, -1 defines no limit
iMaxPreviewDimension	number		Maximum Dimension. Width or height must not exceed this value in pixel, -1 defines no limit
iMaxFileSizeMB	number		Maximum supported file size in megabytes, -1 defines no limit

### 8.2.6 AsnBinaryTransferStorageSettings

binary transfer storage settings

This data structure is used for admin Data structure describing binary transfer storage settings - used by admin

AsnBinaryTransferStorageSettings is an Object

Name	Type	Optional	Comment
eStorageType	number		Defines the type of storage these settings are for (Linked Type: AsnBinaryTransferStorageTypeEnum)
bEnabled	boolean		The service is enabled, thus available to the client
iMaxFileSizeMB	number		Maximum supported file size in megabytes, -1 defines no limit
iMaxStorageSizeMB	number		Maximum supported storage size in megabytes, -1 defines no limit
u8sAllowedMimeTypes	UTF8StringList		List of allowed mimetypes for binary transfer
u8sNotAllowedExtensions	UTF8StringList		List of extensions the server will not allow for binary transfer
u8sRootFolder	string		root folder for the storage
iMaxFileAgeDays	number		age of files (days) before they will be deleted (default: 90)
bRemoveOutdatedFilesEnabled	boolean		if true the files will be removed

### 8.2.7 AsnBinaryTransferMetaData

Data structure describing binary transfer settings

This data structure is used to inform the clients about the configuration for binary transfer.

AsnBinaryTransferMetaData is an Object

Name	Type	Optional	Comment
u8sFileNameWithExtension	string	yes	The original filename with extension (not available if data is only transported within the osMetaData)
u8sMimeType	string	yes	Mime-Type (always available, even if data is only transported within the osMetaData)
iContentSize	number	yes	Binary data size in bytes (may contain a 64bit value) (only available, if a file is existing / not filled if data is only transported within osMetaData)
u8sChecksum	string	yes	Sha256 Checksum of the file (only available, if a file is existing / not filled if data is only transported within osMetaData)
iMediaDuration	number	yes	Playtime audio, video in milliseconds (only available, if a media content which has a duration is transported (e.g. voice or video recording))
eMetaDataType	number	yes	Defines which kind of embedded meta data is stored in osMetaData available if osMetaData is filled (Linked Type: AsnBinaryTransferMetaDataTypeEnum)
osMetaData	string	yes	the binary meta data (content described by the eMetaDataType value) available if eMetaDataType is filled
u8sDescriptionText	string	yes	Description text for the file
u8sBinaryTransferID	string	yes	TransferID fÃ¼r binarymessage (wird vom Server bei asnInitBinaryTransferUpload erzeugt) (Linked Type: AsnInitBinaryTransferUploadResult)

### 8.2.8 AsnGetBinaryTransferSettingsArgument

Argument for the AsnGetBinaryTransferSettings

AsnGetBinaryTransferSettingsArgument is an Object

Name	Type	Optional	Comment
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### 8.2.9 AsnInitBinaryTransferUploadResult

Result for the asnInitBinaryTransferUpload

AsnInitBinaryTransferUploadResult is an Object

Name	Type	Optional	Comment
eTargetType	number		Tells the client which storage provider it shall use for the binary transfer Server will set itself if no further transfer is necessary (e.g. vcf or location sent to the server)
u8sTransferID	string		The server provided id identifying the transfer
u8sTargetServiceDetails	AsnStringPairList	yes	Service/Target specific configuration, members see AsnBinaryTransferStorageTypeEnum (only for 3rd party storage providers)

### 8.2.10 AsnSendBinaryChunkArgument

Argument for the asnSendBinaryChunk

AsnSendBinaryChunkArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		The server provided id identifying the transfer
iDataOffset	number		Data Offset in the file (0 based)
osChunkData	string		the binary data when using json encoding the sender has to base64 encode this chunkdata

### 8.2.11 AsnSendBinaryChunkResult

Result for the asnSendBinaryChunk

AsnSendBinaryChunkResult is an Object

Name	Type	Optional	Comment
iNewPosition	number		Tells the client the new position to write for the file. The client has to examine this value in order to be aware of missing chunks on the server the iDataOffset of the Function calling argument together with the length of the osChunkData should match this value if the value matches the client can continue (or the file transfer is completed) if the value differs the client must send a new chunk beginning with iWritingPosition next.

### 8.2.12 AsnBinaryTransferUploadCompletedArgument

Argument for the UploadCompleted

AsnBinaryTransferUploadCompletedArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		The id identifying the transfer (provided by the server in AsnInitBinaryTransferUploadArgument)
bUploadCompleted	boolean		File upload was successfully completed (true) or failed (false)
u8s3rdPartyFileReference	string	yes	Contains information to download the binary from 3rd party storage services
u8sUploadError	string	yes	Custom error information from a 3rd party backend for logging purposes (in case of bUploadCompleted = false)

### 8.2.13 AsnBinaryTransferUploadCompletedResult

Result for the UploadCompleted

AsnBinaryTransferUploadCompletedResult is an Object

Name	Type	Optional	Comment
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### 8.2.14 AsnInitBinaryTransferDownloadArgument

Argument for the asnInitBinaryTransferDownload

AsnInitBinaryTransferDownloadArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		ID of the binary we want to download
bProvideMetaData	boolean		If the client wants to have the meta data for the download (e.g. wants to know the file size or mime type and has not yet been able to get those)

### 8.2.15 AsnReceiveBinaryChunkArgument

Argument for the asnReceiveBinaryChunk

AsnReceiveBinaryChunkArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		The id identifying the transfer
iDataOffset	number		Data Offset in the file (0 based)
iChunkSize	number		Chunk size the client wants to receive

### 8.2.16 AsnReceiveBinaryChunkResult

Result for the asnReceiveBinaryChunk

AsnReceiveBinaryChunkResult is an Object

Name	Type	Optional	Comment
osChunkData	string		the chunk binary data when using json encoding the data will be base64 encoded
bCompleted	boolean		tells the client that there is no more data on the server

### 8.2.17 AsnBinaryTransferDownloadCompletedArgument

Argument for the asnBinaryTransferDownloadCompleted

AsnBinaryTransferDownloadCompletedArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		The id identifying the transfer (provided by the server in AsnInitBinaryTransferDownloadArgument)
bDownloadCompleted	boolean		File Download was successfully completed
u8sDownloadError	string	yes	Custom error information from a 3rd party backend for logging purposes (in case of bDownloadCompleted = false)

### 8.2.18 AsnBinaryTransferDownloadCompletedResult

Result for the asnBinaryTransferDownloadCompleted

AsnBinaryTransferDownloadCompletedResult is an Object

Name	Type	Optional	Comment

### 8.2.19 AsnGetBinaryTransferMetaDataArgument

Argument for the asnGetBinaryTransferMetaData

AsnGetBinaryTransferMetaDataTable is an Object

Name	Type	Optional	Comment
u8sTransferID	string		The id identifying the transfer (provided by the server in AsnInitBinaryTransferDownloadArgument)

### 8.2.20 AsnBinaryTransferRemoveElementArgument

Argument for the asnBinaryTransferRemoveElement

AsnBinaryTransferRemoveElementArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		The id identifying the transfer (provided by the server in AsnInitBinaryTransferDownloadArgument)

### 8.2.21 AsnBinaryTransferRemoveElementResult

Result for the asnBinaryTransferRemoveElement

AsnBinaryTransferRemoveElementResult is an Object

Name	Type	Optional	Comment
bRemoved	boolean		entry removed

### 8.2.22 AsnBinaryTransferForwardElementArgument

Argument for the asnBinaryTransferForwardElement

AsnBinaryTransferForwardElementArgument is an Object

Name	Type	Optional	Comment
u8sTransferID	string		The id identifying the transfer (provided by the server in AsnInitBinaryTransferDownloadArgument)

### 8.2.23 AsnBinaryTransferForwardElementResult

Result for the asnBinaryTransferForwardElement

AsnBinaryTransferForwardElementResult is an Object

Name	Type	Optional	Comment

u8sOrigTransferID	string		original transferID
u8sForwardTransferID	string		transferID for forwarding the file

### 8.2.24 AsnBinaryTransferSettingsList

list of AsnBinaryTransferSettings

AsnBinaryTransferSettingsList is an Array of AsnBinaryTransferSettings

AsnBinaryTransferSettings is an Object

Name	Type	Optional	Comment
eServiceType	number		Defines the type of service these settings are for (chat, screensharing, etc) (Linked Type: AsnBinaryTransferServiceTypeEnum)
bEnabled	boolean		The service is enabled, thus available to the client
u8sNotAllowedExtensions	UTF8StringList		List of extensions the server will not allow for binary transfer
iMaxChunkSizeDownload	number		Maximum supported chunk size for download in bytes, -1 defines no limit
iMaxChunkSizeUpload	number		Maximum supported chunk size for upload in bytes, -1 defines no limit
iMaxPreviewSize	number		Maximum supported preview size in bytes, -1 defines no limit
iMaxPreviewDimension	number		Maximum Dimension. Width or height must not exceed this value in pixel, -1 defines no limit
iMaxFileSizeMB	number		Maximum supported file size in megabytes, -1 defines no limit

### 8.2.25 AsnGetBinaryTransferSettingsResult

Result for the AsnGetBinaryTransferSettings

AsnGetBinaryTransferSettingsResult is an Object

Name	Type	Optional	Comment
asnBinaryTransferSettingsList	AsnBinaryTransferSettingsList		BinaryTransfer settings for the different services (chat, screensharing, etc.)

### 8.2.26 AsnInitBinaryTransferUploadArgument

Argument for the asnInitBinaryTransferUpload

AsnInitBinaryTransferUploadArgument is an Object

Name	Type	Optional	Comment
asnMetaData	AsnBinaryTransferMetaData		The client filled meta data for the binary transfer
eServiceType	number		Defines the type of service this transfer is for (chat, screensharing, etc) The service will then decide which AsnBinaryTransferStorageTypeEnum the transfer is sent to (Linked Type: AsnBinaryTransferServiceTypeEnum)

### 8.2.27 AsnInitBinaryTransferDownloadResult

Result for the asnInitBinaryTransferDownload

AsnInitBinaryTransferDownloadResult is an Object

Name	Type	Optional	Comment
eSourceType	number		
asnMetaData	AsnBinaryTransferMetaData	yes	The meta data for the binary transfer (if they were requested in the argument)
u8sTargetServiceDetails	AsnStringPairList	yes	Service/Target specific configuration, members see AsnBinaryTransferStorageTypeEnum
u8s3rdPartyFileReference	string	yes	Contains information to download the binary from 3rd party storage services

### 8.2.28 AsnGetBinaryTransferMetaDataResult

Result for the asnGetBinaryTransferMetaData

AsnGetBinaryTransferMetaDataResult is an Object

Name	Type	Optional	Comment
asnMetaData	AsnBinaryTransferMetaData		The meta data for the binary transfer

### 8.2.29 AsnBinaryTransferStorageSettingsList

list of AsnBinaryTransferStorageSettings

AsnBinaryTransferStorageSettingsList is an Array of AsnBinaryTransferStorageSettings

AsnBinaryTransferStorageSettings is an Object

Name	Type	Optional	Comment
eStorageType	number		Defines the type of storage these settings are for (Linked Type: AsnBinaryTransferStorageTypeEnum)
bEnabled	boolean		The service is enabled, thus available to the client
iMaxFileSizeMB	number		Maximum supported file size in megabytes, -1 defines no limit
iMaxStorageSizeMB	number		Maximum supported storage size in megabytes, -1 defines no limit
u8sAllowedMimeTypes	UTF8StringList		List of allowed mimetypes for binary transfer
u8sNotAllowedExtensions	UTF8StringList		List of extensions the server will not allow for binary transfer
u8sRootFolder	string		root folder for the storage
iMaxFileAgeDays	number		age of files (days) before they will be deleted (default: 90)
bRemoveOutdatedFilesEnabled	boolean		if true the files will be removed

### 8.2.30 AsnBinaryTransferMetaDataTable

list of AsnBinaryTransferMetaData

AsnBinaryTransferMetaDataTable is an Array of AsnBinaryTransferMetaData

AsnBinaryTransferMetaData is an Object

Name	Type	Optional	Comment
u8sFileNameWithExtension	string	yes	The original filename with extension (not available if data is only transported within the osMetaData)
u8sMimeType	string	yes	Mime-Type (always available, even if data is only transported within the osMetaData)

iDataSize	number	yes	Binary data size in bytes (may contain a 64bit value) (only available, if a file is existing / not filled if data is only transported within osMetaData)
u8sChecksum	string	yes	Sha256 Checksum of the file (only available, if a file is existing / not filled if data is only transported within osMetaData)
iMediaDuration	number	yes	Playtime audio, video in milliseconds (only available, if a media content which has a duration is transported (e.g. voice or video recording))
eMetaDataType	number	yes	Defines which kind of embedded meta data is stored in osMetaData available if osMetaData is filled (Linked Type: AsnBinaryTransferMetaDataTypeEnum)
osMetaData	string	yes	the binary meta data (content described by the eMetaDataType value) available if eMetaDataType is filled
u8sDescriptionText	string	yes	Description text for the file
u8sBinaryTransferID	string	yes	TransferID fÃ¼r binarymessage (wird vom Server bei asnInitBinaryTransferUpload erzeugt) (Linked Type: AsnInitBinaryTransferUploadResult)

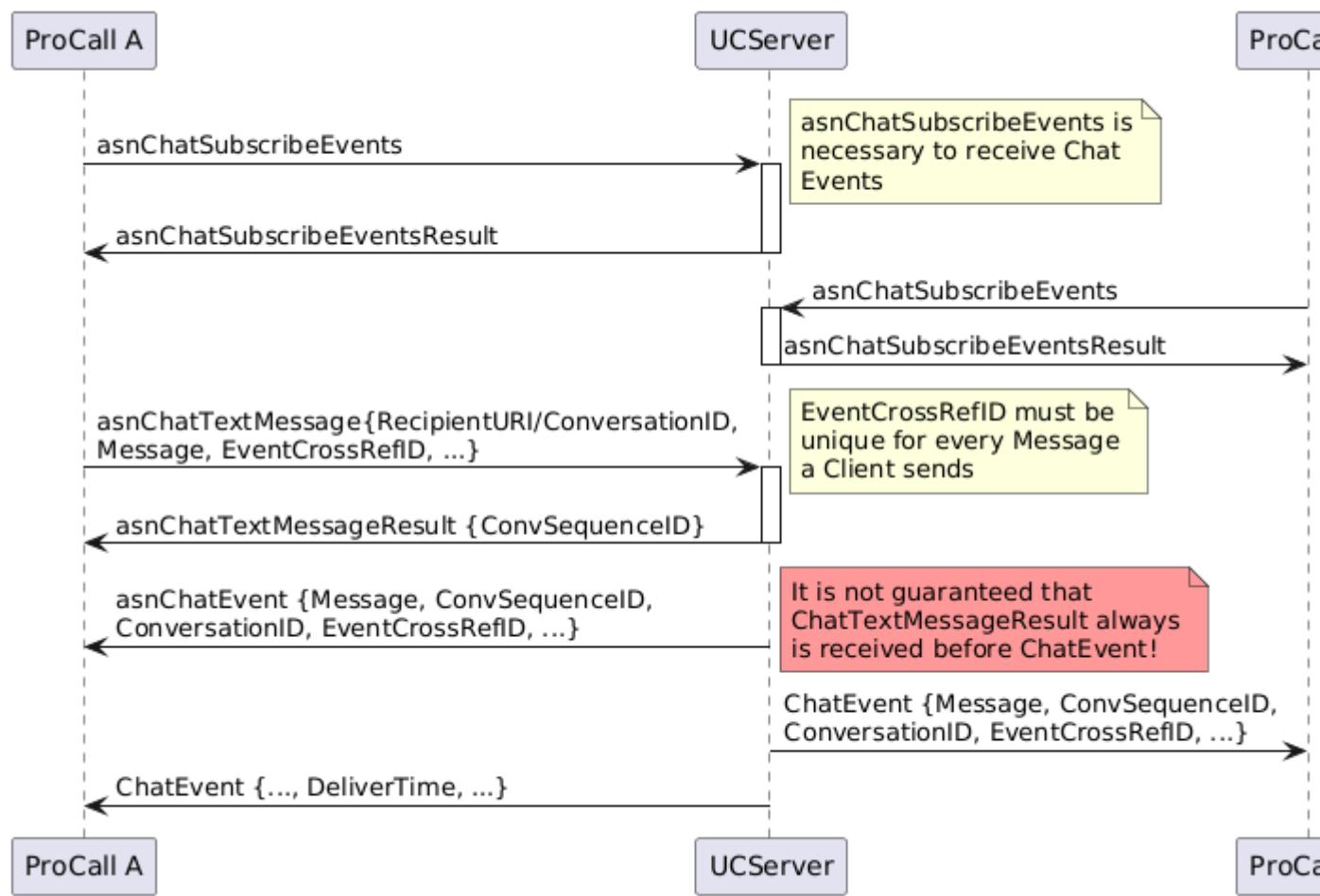
## 9 ChatV2

Text chat functions

### Module description

This module defines structures and functions for the text chat functionality of the UCServer.

Example for sending a Chat Message from "ProCall A" to "ProCall B":



### 9.1 ChatV2 Operations

#### 9.1.1 `asnChatSubscribeEvents`

Subscribe to chat notifications, get the changes

Subscribing to chat events allows you to get the div of the last known transaction ID to the current one on the server

#### ArgumentType: `AsnChatSubscribeEventsArgument`

`AsnChatSubscribeEventsArgument` is an Object

Name	Type	Optional	Comment
bReceiveChatEvents	boolean		Chat Events abbonieren (true = subscribe / false = unsubscribe)
iLastKnownGlobTransactionID	number	yes	last known global TransactionID
iMaxEvents	number	yes	Max x events back (will be set to 100 by the server if not specified)
u8sEventListCrossRefID	string	yes	The event list that is sent back by the server based on this request contains this CrossRefID. This enables the client to assign events to a request sent by it. The CrossRefID must be assigned by the client and cannot be generated by the server and returned in the return. The reason for this is that there is no guarantee that the return will reach the client before the event list.
optionalParams	AsnOptionalParameters	yes	<ul style="list-style-type: none"> <li>• optionalParams name "bFilterAVJournalEvents" Value BOOLEAN false: AV JournalEvents are sent to the client as ChatV2 events. (Default) true: AV JournalEvents are not sent to the client as ChatV2 events.</li> <li>• optionalParams name "bSubscribeDBMaintenance" Value BOOLEAN false: ChatDatabaseMaintenance events are NOT sent to the client (default) true: ChatDatabaseMaintenance events are sent to the client</li> </ul>
bSupportReactions	boolean	yes	if NOT present treat as false

### ResultType: AsnChatSubscribeEventsResult

AsnChatSubscribeEventsResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**9.1.2 asnChatGetDatabaseID**

Query the database ID

Returns a unique ID of the database that clients can use to determine whether the server is using a new database.

This can e.g. then be the case if the server database has been deleted.

**ArgumentType: AsnChatGetDatabaseIDArgument**

AsnChatGetDatabaseIDArgument is an Object

Name	Type	Optional	Comment
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**ResultType: AsnChatGetDatabaseIDResult**

AsnChatGetDatabaseIDResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
u8sDatabaseID	string		Unique ID of the current server database

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error

u8sErrorString	string		A string representing the error
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### 9.1.3 asnChatGetDiffUpdate

Pick up changes, even for individual conversations

Differential update with the last known TransactionID and ConversationID

#### ArgumentType: AsnChatGetDiffUpdateArgument

AsnChatGetDiffUpdateArgument is an Object

Name	Type	Optional	Comment
iLastKnownGlobTransactionID	number	yes	last known global TransactionsID
iMaxEvents	number	yes	Max x events back (will be set to 100 by the server if not specified)
u8sEventListCrossRefID	string	yes	The event list that is sent back by the server based on this request contains this CrossRefID. This enables the client to assign events to a request sent by it. The CrossRefID must be assigned by the client and cannot be generated by the server and returned in the return. The reason for this is that there is no guarantee that the return will reach the client before the event list.
u8sConversationID	string	yes	Conversation ID (if not specified, Diff Update will be fetched for all conversations)
iMaxSequenceID	number	yes	If a conversation ID has been specified, this parameter can be used to limit the update up to iMaxSequenceID. The client then only receives updates for data records that it already knows. New records can be fetched using paging.

#### ResultType: AsnChatGetDiffUpdateResult

AsnChatGetDiffUpdateResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 9.1.4 asnChatGetConversationOverview

Overview of conversations

Delivers new conversations with the last or unread messages in these conversations

#### ArgumentType: AsnChatGetConversationOverviewArgument

AsnChatGetConversationOverviewArgument is an Object

Name	Type	Optional	Comment
iLastKnownGlobTransactionID	number	yes	last known global TransactionsID (for diff update)
iMaxConversations	number	yes	Conversation limit, all if not specified
u8sEventListCrossRefID	string	yes	The event list that is sent back by the server based on this request contains this CrossRefID. This enables the client to assign events to a request sent by it. The CrossRefID must be assigned by the client and cannot be generated by the server and returned in the return. The reason for this is that there is no guarantee that the return will reach the client before the event list.
iNumLastMessages	number	yes	Number of the latest message events that are delivered for each conversation
bAddUnread	boolean	yes	Provide unread message events for every requested conversation

#### ResultType: AsnChatGetConversationOverviewResult

AsnChatGetConversationOverviewResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### 9.1.5 asnChatTextMessage

Chat Text Send message

Send new chat message

#### ArgumentType: AsnChatTextMessageArgument

AsnChatTextMessageArgument is an Object

Name	Type	Optional	Comment
u8sRecipientURIs	UTF8StringList		URIs of the recipients, must be filled if the ConversationID is empty
u8sMessage	string		Message that will be sent
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!
u8sConversationID	string	yes	Chat ID, can be empty if it is a 1: 1 chat and the recipient is named
u8sConversationName	string	yes	Title of the Chatrooms
iConversationType	number	yes	AsnConversationType enum for the type of chat. e.g. One-to-one, group, static, public ...
iReplyToSequenceID	number	yes	Text Message is a reply to another message with SequenceID = iReplyToSequenceID

#### ResultType: AsnChatTextMessageResult

AsnChatTextMessageResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
iConvSequenceID	number		Sequence ID des Events
u8sConversationID	string		Reference ID for the chat,

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 9.1.6 asnChatBinaryMessage

Send chat binary message

Send a new binary message to the server

#### ArgumentType: AsnChatBinaryMessageArgument

AsnChatBinaryMessageArgument is an Object

Name	Type	Optional	Comment
u8sRecipientURIs	UTF8StringList		URIs of the recipient, must be filled if the ConversationID is empty
u8sTransferID	string		ID assigned by the BinaryTransfer Manager (The BinaryTransfer Manager takes care of the binary data, the chat only references it here)
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!
u8sConversationID	string	yes	Chat ID, can be empty if it is a 1: 1 chat and the recipient is named
u8sMessage	string	yes	Binary message text, e.g. caption
iConversationType	number	yes	AsnConversationType enum for the type of chat. e.g. One-to-one, group, static, public ...
iReplyToSequenceID	number	yes	Binary Message is a reply to another message with SequenceID = iReplyToSequenceID
u8sConversationName	string	yes	Title des Chatrooms

#### ResultType: AsnChatBinaryMessageResult

AsnChatBinaryMessageResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

iConvSequenceID	number		Sequence ID des Events
u8sConversationID	string		Reference ID for the chat,

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**9.1.7 asnChatForwardMessage**

Forward a message

Used to forward a single message to another user or to a chat room

**ArgumentType: AsnChatForwardMessageArgument**

AsnChatForwardMessageArgument is an Object

Name	Type	Optional	Comment
u8sSourceConversationID	string		ConversationID of the forwarded Message
iSourceSequenceID	number		Sequence ID of the forwarded Message
asnForwardDestinationIDChoice	AsnConversationIDChoice		Destination for forward
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!

**ResultType: AsnChatForwardMessageResult**

AsnChatForwardMessageResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 9.1.8 **asnChatUserlistModify**

Add, remove, or forward chat to users

Add or remove users In one-to-one chats you can signal "leave" by removing yourself.

Add to a one-to-one chat creates a new multi-user chat, which then remains a multi-user chat.

#### **ArgumentType: AsnChatUserlistModifyArgument**

AsnChatUserlistModifyArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Reference ID for the chat
iChatUserlistModify	number		AsnChatUserlistModify enum added or removed for users
u8sUserURIs	UTF8StringList		List of URIs that are added / removed, or URI of the user to be forwarded to
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!

#### **ResultType: AsnChatUserlistModifyResult**

AsnChatUserlistModifyResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
iConvSequenceID	number		Sequence ID des Events
u8sConversationID	string	yes	New reference ID for the chat, e.g. when a 1: 1 chat becomes a conference (by adding a user)

#### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 9.1.9 asnChatFindEvents

Search chat events on server

Searches for a search string in the chat text messages of the logged-in user and returns all events in which there was a match.

(!) With this search, the ProCall client also receives hits that match the contact details (e.g. first name, last name or email) of the sender of a message.

#### ArgumentType: AsnChatFindEventsArgument

AsnChatFindEventsArgument is an Object

Name	Type	Optional	Comment
u8sSearchString	string		String to search for
iMaxEvents	number		Number of search results
iOffset	number	yes	Paging offset, 0 if not specified
u8sConversationID	string	yes	Can optionally be specified if you only want to search within a specific conversation. Otherwise, all of the user's conversations are searched.

#### ResultType: AsnChatFindEventsResult

AsnChatFindEventsResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
iNumTotalResults	number		Total search results (asnChatEventList is limited to AsnChatFindEventsArgument.iMaxEvents)
asnChatEventList	AsnChatEventList		Paged Search Result

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment

iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 9.1.10 asnChatGetEventsRange

Chat Events Range vom Server holen

Get messages for a ConversationID before or after a Sequence ID (paging).

#### ArgumentType: AsnChatGetEventsRangeArgument

AsnChatGetEventsRangeArgument is an Object

Name	Type	Optional	Comment
asnConversationIDChoice	AsnConversationIDChoice		Conversation ID Choice
iSequenceID	number	yes	Starting point for the range. The parameters iNumLessThanSeqID and iNumGreaterThanOrEqualSeqID can be used to determine how many events will be returned before and after the iSequenceID. If iSequenceID is not specified, the highest (newest) SequenceID + 1 in the conversation is used.
iNumLessThanSeqID	number	yes	Maximum number of events that are BEFORE the iSequenceID. Restricted to 100 if not specified.
iNumGreaterThanOrEqualSeqID	number	yes	Maximum number of events that are AFTER the iSequenceID. Is set to 0 if not specified. If no iSequenceID was specified, iNumGreaterThanOrEqualSeqID is ignored.
u8sEventListCrossRefID	string	yes	The event list that is sent back by the server based on this request contains this CrossRefID. This enables the client to assign events to a request sent by it. The CrossRefID must be assigned by the client and cannot be generated by the server and

returned in the return. The reason for this is that there is no guarantee that the return will reach the client before the event list.

### **ResultType: AsnChatGetEventsRangeResult**

AsnChatGetEventsRangeResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### **9.1.11 asnChatGetBinaryMessageEvents**

Query BinaryMessageEvents which were sent or received from another user or in a certain conversation

The following example shows how paging works. We assume the asnConversationIDChoice is the same for both requests. The Client gets the first ten events with the first request and the remaining seven events with the second request.



### **ArgumentType: AsnChatGetBinaryMessageEventsArgument**

AsnChatGetBinaryMessageEventsArgument is an Object

Name	Type	Optional	Comment
asnConversationIDChoice	AsnConversationIDChoice		Conversation ID Choice
iPageSize	number		Number of elements for the page. Allowed values: 1-100
iPageOffset	number	yes	Offset for Paging, Default = 0. iPageOffset = 0 returns the first Page. For example, if iPageSize = 10, the iPageOffset for the second page would be 10, for the third 20 and so on.
iLastKnownGlobTransactionID	number	yes	can be set to request a diff update
u8sEventListCrossRefID	string	yes	The event list returned by the server based on this request contains this CrossRefID. This enables the client to match events to a request that it has sent.

### **ResultType: AsnChatGetBinaryMessageEventsResult**

AsnChatGetBinaryMessageEventsResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### **9.1.12 asnChatSetMessagesStatus**

Set status of chat messages in the server

Set status (e.g. mark read)

### **ArgumentType: AsnChatSetMessagesStatusArgument**

AsnChatSetMessagesStatusArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		ID of Chats
iStatus	number		Status Type (see enum AsnChatMessageStatus)
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!
asnSequenceIDSet	AsnChatSequenceIDSet		Description of the sequence IDs for which the status is to be set

### **ResultType: AsnChatSetMessagesStatusResult**

AsnChatSetMessagesStatusResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### **9.1.13 asnChatGetConversations**

Get information about chat rooms

Get information about chat rooms on the server (name, members, permissions, last message, etc.)

### **ArgumentType: AsnChatGetConversationsArgument**

AsnChatGetConversationsArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string	yes	ID of the chat room, if empty all of the user
u8sContactURI	string	yes	delivers all conversations in which the requesting user and u8sContactURI are participants
bStaticConversations	boolean	yes	Get information about static conversations

**ResultType: AsnChatGetConversationsResult**

AsnChatGetConversationsResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
asnConversationList	AsnChatConversationList		Description of the conversations

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**9.1.14 asnChatGetConversationID**

Returns the ConversationID for a one-to-one chat

**ArgumentType: AsnChatGetConversationIDArgument**

AsnChatGetConversationIDArgument is an Object

Name	Type	Optional	Comment
u8sContactURI	string		Contact for whom the ConversationID should be queried

**ResultType: AsnChatGetConversationIDResult**

AsnChatGetConversationIDResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
u8sConversationID	string		Conversation ID

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment

iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 9.1.15 asnChatForward

Forward a conversation

#### ArgumentType: AsnChatForwardArgument

AsnChatForwardArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		ID of the conversation from which to forward. The forwarding may result in a new ConversationID
u8sForwardURI	string		URI of the subscriber who is forwarded
u8sForwardToURIs	UTF8StringList		URIs of the participants to be forwarded to
u8sMessage	string		Forwarding message, will be sent to the participants to whom the forwarding will take place
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!

#### ResultType: AsnChatForwardResult

AsnChatForwardResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
iConvSequenceID	number		Sequence ID des Events

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 9.1.16 asnChatIsGlobalDisabled

Query whether chat is deactivated globally

#### **ArgumentType: AsnChatIsGlobalDisabledArgument**

AsnChatIsGlobalDisabledArgument is an Object

Name	Type	Optional	Comment
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#### **ResultType: AsnChatIsGlobalDisabledResult**

AsnChatIsGlobalDisabledResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
bDisabled	boolean		true: Chat ist global disabled, false: Chat ist global enabled

#### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### 9.1.17 asnChatWatchConversation

watching a public chat conversation room

Receiving chat events for a public chat conversation room allows you to pick up the div of the last known ConvSequenceID for the current one on the server

#### **ArgumentType: AsnChatWatchConversationArgument**

AsnChatWatchConversationArgument is an Object

Name	Type	Optional	Comment
iWatchMode	number		(Linked Type: AsnChatWatchModeEnum)
u8sConversationID	string		ConversationID subscribe/unsubscribe
iConvSequenceID	number	yes	last SequenceID known in the client for the chat room (without an iConvSequenceID no events are implicitly

			delivered)
iMaxEvents	number	yes	Max x events back (will be set to 100 by the server if not specified)
u8sEventListCrossRefID	string	yes	The event list that is sent back by the server based on this request contains this CrossRefID. This enables the client to assign events to a request sent by it. The CrossRefID must be assigned by the client and cannot be generated by the server and returned in the return. The reason for this is that there is no guarantee that the return will reach the client before the event list.

### ResultType: AsnChatWatchConversationResult

AsnChatWatchConversationResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 9.1.18 asnChatSetUserlist

Change the list of participants in a public chat conversation room

The list of participants in a public chat conversation room is completely replaced by the UserURIs transmitted in the request

### ArgumentType: AsnChatSetUserlistArgument

AsnChatSetUserlistArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Reference ID for the chat
u8sUserURIs	UTF8StringList		Complete list of URIs that should be the new conversation participants from now on
u8sEventListCrossRefID	string		The event list that is sent back by the server

			based on this request contains this CrossRefID. This enables the client to assign events to a request sent by it. The CrossRefID must be assigned by the client and cannot be generated by the server and returned in the return. The reason for this is that there is no guarantee that the return will reach the client before the event list.
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### **ResultType: AsnChatSetUserlistResult**

AsnChatSetUserlistResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
iConvSequenceID	number		Sequence ID des Events

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### **9.1.19 asnChatMuteConversation**

mute conversation for user - events are still dispatched, client should check on his site

User wants to mute the conversation - events are still dispatched from UCServer, so client needs to adopt its logic about the stuff

### **ArgumentType: AsnChatMuteConversationArgument**

AsnChatMuteConversationArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Reference ID for the chat
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!
asnMutedUntilTime	string	yes	Time until this channel should be handled muted (UTC time)

### **ResultType: AsnChatMuteConversationResult**

AsnChatMuteConversationResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 9.1.20 asnChatUnmuteConversation

unmute conversation for user

User wants to unmute the conversation

### ArgumentType: AsnChatUnmuteConversationArgument

AsnChatUnmuteConversationArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Reference ID for the chat
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!

### ResultType: AsnChatUnmuteConversationResult

AsnChatUnmuteConversationResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment

iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 9.1.21 asnChatSetConversationAvatar

set conversation avatar

set avatar for conversationID - members will be informed by event

#### ArgumentType: AsnChatSetConversationAvatarArgument

AsnChatSetConversationAvatarArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Reference ID for the chat
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!
u8sImageData	string		binaryData (base64 encoded jpg) of the image

#### ResultType: AsnChatSetConversationAvatarResult

AsnChatSetConversationAvatarResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 9.1.22 asnChatGetConversationAvatar

get conversation avatar

get avatar for conversationID - only relevant in group-chat context

#### ArgumentType: AsnChatGetConversationAvatarArgument

AsnChatGetConversationAvatarArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Reference ID for the chat
u8sKnownHash	string	yes	If the client has an image already, it sends its hash so the server can determine if the image has changed.

### **ResultType: AsnChatGetConversationAvatarResult**

AsnChatGetConversationAvatarResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
ilImageResult	number		
u8sImageHash	string	yes	If an image is send to the client, this field contains the corresponding hash value for that image.
u8sImageData	string	yes	If an image is send to the client, this field contains the binaryData (base64 encoded jpg)

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### **9.1.23 asnChatSetReaction**

Set the reaction to a chat message for the calling user

Set the reaction to a chat message for the calling user

### **ArgumentType: AsnChatSetReactionArgument**

AsnChatSetReactionArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		primaryKey (u8sConversationID, iConvSequenceID) Conversation ID (of the room)

iConvSequenceID	number		Chat Sequence ID
u8sEmoji	string		payload a single emoji

**ResultType: AsnChatSetReactionResult**

AsnChatSetReactionResult is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**9.1.24 asnChatClearReaction****ArgumentType: AsnChatSetReactionArgument**

AsnChatSetReactionArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		primaryKey (u8sConversationID, iConvSequenceID) Conversation ID (of the room)
iConvSequenceID	number		Chat Sequence ID
u8sEmoji	string		payload a single emoji

**ResultType: AsnChatSetReactionResult**

AsnChatSetReactionResult is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 9.2 ChatV2 Events

### 9.2.1 asnChatEvent

New events in a chat

Notification to a client that a new event has taken place in a chat.

#### ArgumentType: AsnChatEventArgs

AsnChatEventArgs is an Object

Name	Type	Optional	Comment
asnChatEventList	AsnChatEventList		Events in Chat
u8sEventListCrossRefID	string	yes	Request to EventList Correlator
bLastSegment	boolean	yes	last segment for this u8sEventListCrossRefID, TRUE if this segment is the last in a list of related event lists.
optionalParams	AsnOptionalParameters	yes	optionalParams Name "iNumTotalResults" Value INTEGER Number of total results for paged search request (e.g. asnChatGetBinaryMessageEvents)

### 9.2.2 asnChatUserStatus

New user status in a chat

New user status in a chat (typing notification)

#### ArgumentType: AsnChatUserStatusEventArgs

AsnChatUserStatusEventArgs is an Object

Name	Type	Optional	Comment
u8sConversationID	string		ID of Chats (Chatraumes)
u8sSenderURI	string		Contact URI of the sender of the message
bUserTyping	boolean	yes	User types a message or not.

### 9.2.3 asnChatDatabaseIDChanged

Change of database ID

Event is sent from the server to the client if the database ID changes at runtime. This currently happens when the use of a database for chat in the server is switched off. Then one In-memory database is used, but is deleted once a day to prevent it from being in memory Accumulate conversations.

#### **ArgumentType: AsnChatDatabaseIDChangedEventArgs**

AsnChatDatabaseIDChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sDatabaseID	string		Unique ID of the current server database

### 9.2.4 asnChatDatabaseMaintenance

Change to the database through automatic maintenance (e.g. "delete chats after X days")

Event is sent from the server to the clients if chat messages in the server database due to the function "Delete chat messages after X days" will be deleted. The event contains a sequence ID up to which the deletion was carried out.

Clients can adapt existing caches accordingly. I.e. TextMessages that have a Sequence ID less than or equal to have the ID specified in the event, must be deleted. The event is also sent to the client during the initial subscription.  
The event is only sent to clients who subscribe to it with the optional parameter "bSubscribeDBMaintenance" = true have requested.

#### **ArgumentType: AsnChatDatabaseMaintenanceEventArgs**

AsnChatDatabaseMaintenanceEventArgs is an Object

Name	Type	Optional	Comment
iDeletedToSequenceID	number		Sequence ID up to which TExt messages were deleted

### 9.2.5 asnChatMuteStatusChanged

mute status of specific conversationid was changed

Notification to a client that a mute state was changed

#### **ArgumentType: AsnChatMuteStatusChangedEventArgs**

AsnChatMuteStatusChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sConversationID	string		ID of Chats (Chatraumes)
u8sSenderURI	string		Contact URI of the sender of the message
u8sEventCrossRefID	string		For the assignment of events to the corresponding request.
bMuted	boolean		TRUE: channel should be handled as muted
asnMutedUntilTime	string	yes	Time until this channel should be handled muted (UTC time)

### 9.2.6 asnChatConversationAvatarChanged

events when conversation avatar was changed

Notification to a client that a new (group-chat) avatar was changed - client might check his local hash or request new image via asnChatGetConversationAvatar

#### ArgumentType: AsnChatConversationAvatarChangedEventArgs

AsnChatConversationAvatarChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sConversationID	string		ID of Chats (Chatraumes)
u8sSenderURI	string		Contact URI of the sender of the message (who changed the avatar)
u8sImageHash	string		the client can compare with its internal hash and request the new avatar with asnChatGetConversationAvatar

## 9.3 ChatV2 Types

### 9.3.1 AsnChatResultEnum

Nachrichtenrelevante Strukturen

AsnChatResultEnum is an Enumeration

Name	Type	Value	Comment
noerror	number	0	no error
forbidden	number	1	User is not allowed to perform this operation
invalidconversationid	number	2	Conversation ID is invalid

invalidmessageid	number	3	Message ID is invalid
tomanymessages	number	4	Too many messages, make a smaller request
unknownrecipient	number	5	unknown receiver
databasefail	number	6	Database error in the server
invalidcrossrefid	number	7	Request was not accepted because a CrossRefID that already existed in the database was used
federationfail	number	8	Message was not accepted by the federated server
requestfail	number	9	Request could not be processed, e.g. if a user is to be removed from a chat room but is not a member of the chat room
invalidparam	number	10	Invalid parameter
notsubscribed	number	11	If the client sends asnChatTextMessage, asnChatBinaryMessage, asnChatForwardMessage, asnChatForward, asnChatSetUserlist, asnChatUserlistModify or asnChatSetMessagesStatus without being subscribed (asnChatSubscribeEvents) for chat events first "notsubscribed" is returned. This means that the request of the client has been processed, but the client will not receive any events because of the missing subscription.

### 9.3.2 AsnChatUserlistModify

AsnChatUserlistModify is an Enumeration

Name	Type	Value	Comment
added	number	1	User added
removed	number	2	User removed
update	number	3	complete user list is attached, e.g. when user joins a chat room and gets the current status of the participant

### 9.3.3 AsnChatWatchModeEnum

AsnChatWatchModeEnum is an Enumeration

Name	Type	Value	Comment
watch	number	1	Chat-Raum Start observation
unwatch	number	0	Chat-Raum End observation

### 9.3.4 AsnConversationType

AsnConversationType is an Enumeration

Name	Type	Value	Comment
one_to_one	number	1	Chat between two participants
multi_user	number	2	Chat with more than two participants (chat room)
static_chatroom	number	3	
public_chatroom	number	4	Chat between participants, e.g. Anonymous and agent, participants can actively join and follow the history completely

### 9.3.5 AsnChatMessageStatus

AsnChatMessageStatus is an Enumeration

Name	Type	Value	Comment
eRead	number	1	read
eUnread	number	2	unread
eDeleted	number	3	deleted
eUndeleted	number	4	undeleted

### 9.3.6 AsnChatTypingTime

New user status in a chat (typing notification)

AsnChatTypingTime is an Enumeration

Name	Type	Value	Comment

refreshInterval	number	20	Interval in Seconds a client has to refresh the server that the user is typing
timeout	number	30	Time after which a client decides that the other side no longer is typing due to network lag/error

### 9.3.7 EnumRequestConversationAvatarResult

This enumeration describes the values possible returned by asnChatGetConversationAvatar

This are the possible returning values from getting an image from the server and the call was successful. The values represent that the result contains an image, the image has not changed and therefore there is no image data sent or there is no image for the given conversationID.

EnumRequestConversationAvatarResult is an Enumeration

Name	Type	Value	Comment
eDEFAULT	number	0	There is no image/avatar defined for the given conversationID - so please use the default one
eHASHNOTCHANGED	number	1	The image/avatar has not changed according to the given hash and therefore there is no image in the result.
eATTACHED	number	2	The requested image/avatar is attached in the result.

### 9.3.8 AsnChatParty

AsnChatParty is an Object

Name	Type	Optional	Comment
u8sContactURI	string		Contact URI, including display names jan@estos.de; display = Jan Rievenherm
u8sDisplayName	string	yes	Anzeigenname des Kontaktes, e.g. 'Jan Rievenherm'
iContactRights	number		Rights (bit mask) of the user in this chat 0x0000 0001 may write 0x0000 0002 may add and remove users
iLastReadSequenceID	number	yes	Sequence ID up to which the party read (optional, only AsnChatEventConversation)
bReadNotifySupported	boolean	yes	If a federated contact does not send read notifications, this flag is set to

			false
contactInformation	AsnNetDatabaseContact	yes	Contact information for SMS, MMS etc. where the party is NOT a CtServer user and therefore the contact information is not available on the client, is only filled and sent with PArtY Added and ConversationCreated

### 9.3.9 AsnChatSubscribeEventsArgument

AsnChatSubscribeEventsArgument is an Object

Name	Type	Optional	Comment
bReceiveChatEvents	boolean		Chat Events abbonieren (true = subscribe / false = unsubscribe)
iLastKnownGlobTransactionID	number	yes	last known global TransactionsID
iMaxEvents	number	yes	Max x events back (will be set to 100 by the server if not specified)
u8sEventListCrossRefID	string	yes	The event list that is sent back by the server based on this request contains this CrossRefID. This enables the client to assign events to a request sent by it. The CrossRefID must be assigned by the client and cannot be generated by the server and returned in the return. The reason for this is that there is no guarantee that the return will reach the client before the event list.
optionalParams	AsnOptionalParameters	yes	<ul style="list-style-type: none"> <li>• optionalParams name "bFilterAVJournalEvents" Value BOOLEAN false: AV JournalEvents are sent to the client as ChatV2 events. (Default) true: AV JournalEvents are not sent to the client as ChatV2 events.</li> <li>• optionalParams name "bSubscribeDBMaintenance" Value BOOLEAN false: ChatDatabaseMaintenance events are NOT sent</li> </ul>

			to the client (default) true: ChatDatabaseMaintenance events are sent to the client
bSupportReactions	boolean	yes	if NOT present treat as false

### 9.3.10 AsnChatSubscribeEventsResult

AsnChatSubscribeEventsResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### 9.3.11 AsnChatGetDatabaseIDArgument

AsnChatGetDatabaseIDArgument is an Object

Name	Type	Optional	Comment

### 9.3.12 AsnChatGetDatabaseIDResult

AsnChatGetDatabaseIDResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
u8sDatabaseID	string		Unique ID of the current server database

### 9.3.13 AsnChatGetDiffUpdateArgument

AsnChatGetDiffUpdateArgument is an Object

Name	Type	Optional	Comment
iLastKnownGlobTransactionID	number	yes	last known global TransactionsID
iMaxEvents	number	yes	Max x events back (will be set to 100 by the server if not specified)
u8sEventListCrossRefID	string	yes	The event list that is sent back by the server based on this request contains this CrossRefID. This enables the client to assign events to a request sent by it. The CrossRefID must be

			assigned by the client and cannot be generated by the server and returned in the return. The reason for this is that there is no guarantee that the return will reach the client before the event list.
u8sConversationID	string	yes	Conversation ID (if not specified, Diff Update will be fetched for all conversations)
iMaxSequenceID	number	yes	If a conversation ID has been specified, this parameter can be used to limit the update up to iMaxSequenceID. The client then only receives updates for data records that it already knows. New records can be fetched using paging.

### 9.3.14 AsnChatGetDiffUpdateResult

AsnChatGetDiffUpdateResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### 9.3.15 AsnChatGetConversationOverviewArgument

AsnChatGetConversationOverviewArgument is an Object

Name	Type	Optional	Comment
iLastKnownGlobTransactionID	number	yes	last known global TransactionsID (for diff update)
iMaxConversations	number	yes	Conversation limit, all if not specified
u8sEventListCrossRefID	string	yes	The event list that is sent back by the server based on this request contains this CrossRefID. This enables the client to assign events to a request sent by it. The CrossRefID must be assigned by the client and cannot be generated by the server and returned in the return. The reason for this is that there is no guarantee that the return will reach the client before the event list.
iNumLastMessages	number	yes	Number of the latest message events that are delivered for each conversation
bAddUnread	boolean	yes	Provide unread message events for every requested conversation

### 9.3.16 AsnChatGetConversationOverviewResult

AsnChatGetConversationOverviewResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### 9.3.17 AsnChatTextMessageArgument

AsnChatTextMessageArgument is an Object

Name	Type	Optional	Comment
u8sRecipientURIs	UTF8StringList		URIs of the recipients, must be filled if the ConversationID is empty
u8sMessage	string		Message that will be sent
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!
u8sConversationID	string	yes	Chat ID, can be empty if it is a 1: 1 chat and the recipient is named
u8sConversationName	string	yes	Title of the Chatrooms
iConversationType	number	yes	AsnConversationType enum for the type of chat. e.g. One-to-one, group, static, public ...
iReplyToSequenceID	number	yes	Text Message is a reply to another message with SequenceID = iReplyToSequenceID

### 9.3.18 AsnChatTextMessageResult

AsnChatTextMessageResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
iConvSequenceID	number		Sequence ID des Events
u8sConversationID	string		Reference ID for the chat,

### 9.3.19 AsnChatBinaryMessageArgument

AsnChatBinaryMessageArgument is an Object

Name	Type	Optional	Comment
u8sRecipientURIs	UTF8StringList		URIs of the recipient, must be filled if the ConversationID is empty
u8sTransferID	string		ID assigned by the BinaryTransfer Manager (The BinaryTransfer Manager takes care of the binary data, the chat only references it here)
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!
u8sConversationID	string	yes	Chat ID, can be empty if it is a 1: 1 chat and the recipient is named
u8sMessage	string	yes	Binary message text, e.g. caption
iConversationType	number	yes	AsnConversationType enum for the type of chat. e.g. One-to-one, group, static, public ...
iReplyToSequenceID	number	yes	Binary Message is a reply to another message with SequenceID = iReplyToSequenceID
u8sConversationName	string	yes	Titel des Chatrooms

### 9.3.20 AsnChatBinaryMessageResult

AsnChatBinaryMessageResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
iConvSequenceID	number		Sequence ID des Events
u8sConversationID	string		Reference ID for the chat,

### 9.3.21 AsnConversationIDChoice

AsnConversationIDChoice is a Choice

Name	Type	Comment
u8sConversationID	string	ID of Chats
u8sPartnerURI	string	ID of the other chat partner in a one-to-one chat

### 9.3.22 AsnChatForwardMessageResult

AsnChatForwardMessageResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### 9.3.23 AsnChatUserlistModifyArgument

AsnChatUserlistModifyArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Reference ID for the chat
iChatUserlistModify	number		AsnChatUserlistModify enum added or removed for users
u8sUserURIs	UTF8StringList		List of URIs that are added / removed, or URI of the user to be forwarded to
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!

### 9.3.24 AsnChatUserlistModifyResult

AsnChatUserlistModifyResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
iConvSequenceID	number		Sequence ID des Events
u8sConversationID	string	yes	New reference ID for the chat, e.g. when a 1: 1 chat becomes a conference (by adding a user)

### 9.3.25 AsnChatFindEventsArgument

AsnChatFindEventsArgument is an Object

Name	Type	Optional	Comment
u8sSearchString	string		String to search for
iMaxEvents	number		Number of search results
iOffset	number	yes	Paging offset, 0 if not specified
u8sConversationID	string	yes	Can optionally be specified if you only want to search within a specific conversation. Otherwise, all of the user's conversations are searched.

### 9.3.26 AsnChatGetEventsRangeResult

AsnChatGetEventsRangeResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### 9.3.27 AsnChatGetBinaryMessageEventsResult

AsnChatGetBinaryMessageEventsResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### 9.3.28 AsnChatSequenceIDSet

AsnChatSequenceIDSet is a Choice

Name	Type	Comment
asnSequenceIDs	SEQInteger	Sequence IDs in u8sConversationID for which the status is to be set
iLastSequenceID	number	Last sequence ID up to which the status is to be set

### 9.3.29 AsnChatSetMessagesStatusResult

AsnChatSetMessagesStatusResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### 9.3.30 AsnChatGetConversationsArgument

AsnChatGetConversationsArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string	yes	ID of the chat room, if empty all of the user
u8sContactURI	string	yes	delivers all conversations in which the requesting user and u8sContactURI are participants
bStaticConversations	boolean	yes	Get information about static conversations

### 9.3.31 AsnChatGetConversationIDArgument

AsnChatGetConversationIDArgument is an Object

Name	Type	Optional	Comment
u8sContactURI	string		Contact for whom the ConversationID should be queried

### 9.3.32 AsnChatGetConversationIDResult

AsnChatGetConversationIDResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
u8sConversationID	string		Conversation ID

### 9.3.33 AsnChatForwardArgument

AsnChatForwardArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		ID of the conversation from which to forward. The forwarding may result in a new ConversationID
u8sForwardURI	string		URI of the subscriber who is forwarded
u8sForwardToURIs	UTF8StringList		URIs of the participants to be forwarded to
u8sMessage	string		Forwarding message, will be sent to the participants to whom the forwarding will take place
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!

### 9.3.34 AsnChatForwardResult

AsnChatForwardResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
iConvSequenceID	number		Sequence ID des Events

### 9.3.35 AsnChatIsGlobalDisabledArgument

AsnChatIsGlobalDisabledArgument is an Object

Name	Type	Optional	Comment
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### 9.3.36 AsnChatIsGlobalDisabledResult

AsnChatIsGlobalDisabledResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
bDisabled	boolean		true: Chat ist global disabled, false: Chat ist global enabled

### 9.3.37 AsnChatWatchConversationArgument

AsnChatWatchConversationArgument is an Object

Name	Type	Optional	Comment
iWatchMode	number		(Linked Type: AsnChatWatchModeEnum)
u8sConversationID	string		ConversationID subscribe/unsubscribe
iConvSequenceID	number	yes	last SequenceID known in the client for the chat room (without an iConvSequenceID no events are implicitly delivered)
iMaxEvents	number	yes	Max x events back (will be set to 100 by the server if not specified)
u8sEventListCrossRefID	string	yes	The event list that is sent back by the server based on this request contains this CrossRefID. This enables the client to assign events to a request sent by it. The CrossRefID must be assigned by the client and cannot be generated by the server and returned in the return. The reason for this is that there is no guarantee that the return will reach the client before the event list.

### 9.3.38 AsnChatWatchConversationResult

AsnChatWatchConversationResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### 9.3.39 AsnChatSetUserlistArgument

AsnChatSetUserlistArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Reference ID for the chat
u8sUserURIs	UTF8StringList		Complete list of URIs that should be the new conversation participants from now on
u8sEventListCrossRefID	string		The event list that is sent back by the server based on this request contains this CrossRefID. This enables the client to assign events to a request sent by it. The CrossRefID must be assigned by the client and cannot be generated by the server and returned in the return. The reason for this is that there is no guarantee that the return will reach the client before the event list.

### 9.3.40 AsnChatSetUserlistResult

AsnChatSetUserlistResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
iConvSequenceID	number		Sequence ID des Events

### 9.3.41 AsnChatUserStatusArgument

AsnChatUserStatusArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		ID of Chats (Chatraumes)
u8sSenderURI	string		Contact URI of the sender of the message
bUserTyping	boolean	yes	User types a message or not.

### 9.3.42 AsnChatDatabaseIDChangedEventArgs

AsnChatDatabaseIDChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sDatabaseID	string		Unique ID of the current server database

### 9.3.43 AsnChatDatabaseMaintenanceArgument

AsnChatDatabaseMaintenanceArgument is an Object

Name	Type	Optional	Comment
iDeletedToSequenceID	number		Sequence ID up to which TExt messages were deleted

### 9.3.44 AsnChatMuteConversationArgument

AsnChatMuteConversationArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Reference ID for the chat
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!
asnMutedUntilTime	string	yes	Time until this channel should be handled muted (UTC time)

### 9.3.45 AsnChatMuteConversationResult

AsnChatMuteConversationResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### 9.3.46 AsnChatUnmuteConversationArgument

AsnChatUnmuteConversationArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Reference ID for the chat
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!

### 9.3.47 AsnChatUnmuteConversationResult

AsnChatUnmuteConversationResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### 9.3.48 AsnChatMuteStatusChangedEventArgs

AsnChatMuteStatusChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sConversationID	string		ID of Chats (Chatraumes)
u8sSenderURI	string		Contact URI of the sender of the message
u8sEventCrossRefID	string		For the assignment of events to the corresponding request.
bMuted	boolean		TRUE: channel should be handled as muted
asnMutedUntilTime	string	yes	Time until this channel should be handled muted (UTC time)

### 9.3.49 AsnChatSetConversationAvatarArgument

AsnChatSetConversationAvatarArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Reference ID for the chat
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!
u8sImageData	string		binaryData (base64 encoded jpg) of the image

### 9.3.50 AsnChatSetConversationAvatarResult

AsnChatSetConversationAvatarResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)

### 9.3.51 AsnChatGetConversationAvatarArgument

AsnChatGetConversationAvatarArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Reference ID for the chat
u8sKnownHash	string	yes	If the client has an image already, it sends its hash so the server can determine if the image has changed.

### 9.3.52 AsnChatGetConversationAvatarResult

AsnChatGetConversationAvatarResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
iImageResult	number		
u8sImageHash	string	yes	If an image is send to the client, this field contains the corresponding hash value for that image.
u8sImageData	string	yes	If an image is send to the client, this field contains the binaryData (base64 encoded jpg)

### 9.3.53 AsnChatConversationAvatarChangedEventArgs

AsnChatConversationAvatarChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sConversationID	string		ID of Chats (Chatraumes)
u8sSenderURI	string		Contact URI of the sender of the message (who changed the avatar)
u8sImageHash	string		the client can compare with its internal hash and request the new avatar with asnChatGetConversationAvatar

### 9.3.54 AsnChatReactionsEmoji

AsnChatReactionsEmoji is an Object

Name	Type	Optional	Comment
u8sEmoji	string		single Emoji
u8sUsers	UTF8StringList		Contact URIs voted

### 9.3.55 AsnChatSetReactionArgument

AsnChatSetReactionArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		primaryKey (u8sConversationID, iConvSequenceID) Conversation ID (of the room)
iConvSequenceID	number		Chat Sequence ID

u8sEmoji	string		payload a single emoji
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### 9.3.56 AsnChatSetReactionResult

AsnChatSetReactionResult is an Object

Name	Type	Optional	Comment
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### 9.3.57 AsnChatParties

AsnChatParties is an Array of AsnChatParty

AsnChatParty is an Object

Name	Type	Optional	Comment
u8sContactURI	string		Contact URI, including display names jan@estos.de; display = Jan Rievenherm
u8sDisplayName	string	yes	Anzeigenname des Kontaktes, e.g. 'Jan Rievenherm'
iContactRights	number		Rights (bit mask) of the user in this chat 0x0000 0001 may write 0x0000 0002 may add and remove users
iLastReadSequenceID	number	yes	Sequence ID up to which the party read (optional, only AsnChatEventConversation)
bReadNotifySupported	boolean	yes	If a federated contact does not send read notifications, this flag is set to false
contactInformation	AsnNetDatabaseContact	yes	Contact information for SMS, MMS etc. where the party is NOT a CtiServer user and therefore the contact information is not available on the client, is only filled and sent with PArtY Added and ConversationCreated

### 9.3.58 AsnChatForwardMessageArgument

AsnChatForwardMessageArgument is an Object

Name	Type	Optional	Comment
u8sSourceConversationID	string		ConversationID of the

			forwarded Message
iSourceSequenceID	number		Sequence ID of the forwarded Message
asnForwardDestinationIDChoice	AsnConversationIDChoice		Destination for forward
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!

### 9.3.59 AsnChatGetEventsRangeArgument

AsnChatGetEventsRangeArgument is an Object

Name	Type	Optional	Comment
asnConversationIDChoice	AsnConversationIDChoice		Conversation ID Choice
iSequenceID	number	yes	Starting point for the range. The parameters iNumLessThanSeqID and iNumGreaterThanOrEqualSeqID can be used to determine how many events will be returned before and after the iSequenceID. If iSequenceID is not specified, the highest (newest) SequenceID + 1 in the conversation is used.
iNumLessThanSeqID	number	yes	Maximum number of events that are BEFORE the iSequenceID. Restricted to 100 if not specified.
iNumGreaterThanOrEqualSeqID	number	yes	Maximum number of events that are AFTER the iSequenceID. Is set to 0 if not specified. If no iSequenceID was specified, iNumGreaterThanOrEqualSeqID is ignored.
u8sEventListCrossRefID	string	yes	The event list that is sent back by the server based on this request contains this CrossRefID. This enables the client to assign events to a request sent by it. The

			CrossRefID must be assigned by the client and cannot be generated by the server and returned in the return. The reason for this is that there is no guarantee that the return will reach the client before the event list.
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### 9.3.60 AsnChatGetBinaryMessageEventsArgument

AsnChatGetBinaryMessageEventsArgument is an Object

Name	Type	Optional	Comment
asnConversationIDChoice	AsnConversationIDChoice		Conversation ID Choice
iPageSize	number		Number of elements for the page. Allowed values: 1-100
iPageOffset	number	yes	Offset for Paging, Default = 0. iPageOffset = 0 returns the first Page. For example, if iPageSize = 10, the iPageOffset for the second page would be 10, for the third 20 and so on.
iLastKnownGlobTransactionID	number	yes	can be set to request a diff update
u8sEventListCrossRefID	string	yes	The event list returned by the server based on this request contains this CrossRefID. This enables the client to match events to a request that it has sent.

### 9.3.61 AsnChatSetMessagesStatusArgument

AsnChatSetMessagesStatusArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		ID of Chats
iStatus	number		Status Type (see enum AsnChatMessageStatus)
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!
asnSequenceIDSet	AsnChatSequenceIDSet		Description of the sequence IDs for which

			the status is to be set
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### 9.3.62 AsnChatReactionsEmojiList

this (payload) structure based on the client requirements

every ChatMessage covers, 0 - n (unique), Emoji(s) with a UsersList.

see also: protocol overhead "primaryKey" AND TransactionID/USN

every ResultList/SetOfEmojis from Server comes with it's USN

there is no extra type which covers AsnChatReactionsEmojiList AND it's associated USN

if you add methods which return/ship AsnChatReactionsEmojiList remember to support USN too

AsnChatReactionsEmojiList is an Array of AsnChatReactionsEmoji

AsnChatReactionsEmoji is an Object

Name	Type	Optional	Comment
u8sEmoji	string		single Emoji
u8sUsers	UTF8StringList		Contact URLs voted

### 9.3.63 AsnChatReactionsResult

AsnChatReactionsResult is an Object

Name	Type	Optional	Comment
u8sConversationID	string		primaryKey/FK (u8sConversationID, iConvSequenceID) je nach verwendeter sprache/Implementierung ist das optional/mandatory. ein JavaScript kann evtl. ueber ein closure zugreifen ... Conversation ID (of the room)
iConvSequenceID	number		Chat Sequence ID
iTransactionID	number		the TransactionID
asnEmojiList	AsnChatReactionsEmojiList		payload eine map von ->

### 9.3.64 AsnChatEventConversation

AsnChatEventConversation is an Object

Name	Type	Optional	Comment
u8sConversationName	string	yes	chatname (changed)

			Name of the conversation
asnChatParties	AsnChatParties	yes	conversationparties (changed) Chat participants with their permissions (after adding, removing a party)
iChatUserlistModify	number	yes	users added, removed AsnChatUserlistModify enum added or removed for users
u8sUsersModified	UTF8StringList	yes	Contact URIs of added, removed contacts
u8sForwardedFromURI	string	yes	forwarding URL of the user who forwarded
u8sForwardedURI	string	yes	URI of the user who was forwarded
u8sLinkedConversationID	string	yes	link to other conversation Link to another conversation if group chat was created from one-to-one or if it was forwarded.
iConversationType	number	yes	Type of conversation AsnConversationType enum for the type of chat. e.g. One-to-one, group, static, public ...
bDeleted	boolean	yes	Conversation Deleted Conversation has been deleted
optionalParams	AsnOptionalParameters	yes	<p><i>Liste der optionalen Parameter:</i></p> <ul style="list-style-type: none"> <li>• optionalParams Name "IsMuted" Value BOOLEAN ('TRUE' fÃ¼r aktiv) fÃ¼r den Client des EmpfÃ¤ngers soll diese ConversationID gemuted sein</li> <li>• optionalParams Name "MutedUntilTime" Value AsnSystemTime Time until this conversationID should be handled as muted (UTC time)</li> <li>• optionalParams Name "AvatarID" Value UTF8String - AvatarID/hash fÃ¼r den jeweiligen Chat - kann via asnChatGetConversationAvatar abgeholt werden</li> </ul> <p>Optional parameters</p>

### 9.3.65 AsnChatConversation

AsnChatConversation is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Conversation ID (of the room)
u8sConversationName	string		Name of the conversation
iConversationType	number		AsnConversationType enum for the type of chat. e.g. One-to-one, group, static, public ...
iConvSequenceID	number		Chat Sequence ID
iGlobTransactionID	number		globale Transaction ID
asnChatParties	AsnChatParties		Chat participants with their permissions

### 9.3.66 AsnChatConversationList

AsnChatConversationList is an Array of AsnChatConversation

AsnChatConversation is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Conversation ID (of the room)
u8sConversationName	string		Name of the conversation
iConversationType	number		AsnConversationType enum for the type of chat. e.g. One-to-one, group, static, public ...
iConvSequenceID	number		Chat Sequence ID
iGlobTransactionID	number		globale Transaction ID
asnChatParties	AsnChatParties		Chat participants with their permissions

### 9.3.67 AsnChatGetConversationsResult

AsnChatGetConversationsResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
asnConversationList	AsnChatConversationList		Description of the conversations

### 9.3.68 AsnChatEvent

AsnChatEvent is an Object

Name	Type	Optional	Comment
u8sEventCrossRefID	string		For the assignment of events to a request. u8sEventCrossRefID must not be longer than 80 characters!
u8sConversationID	string		Conversation ID (of the room)
iConvSequenceID	number		Index of the event within the corresponding conversation. If iConvSequenceID = 0, the event changes communicated to a conversation, but which should not be visible in the course of the conversation. e.g. Update the iLastReadSequenceID of a party in multi-user chat
iGlobTransactionID	number		global transaction ID
bUpdate	boolean		false = new data record, true = update for existing data record
u8sSenderURI	string	yes	Contact URI of the sender of the message. e.g. 'sip: jan@estos.de'
asnCreateTime	string	yes	Time at which the event was triggered (e.g. when a read revision was sent for a user)
asnChatMessage	AsnChatEventMessage	yes	message (changed) A text message, binary message, or journal entry
asnChatConversation	AsnChatEventConversation	yes	conversation, users, name (changed) Conversation description
iError	number	yes	error code (Linked Type: AsnChatResultEnum)
optionalParams	AsnOptionalParameters	yes	<p><i>Liste der optionalen Parameter:</i></p> <ul style="list-style-type: none"> <li>• optionalParams Name "IsMuted" Value BOOLEAN ('TRUE' fÃ¼r aktiv) fÃ¼r den Client des EmpfÃ¤ngers soll diese ConversationID gemuted sein</li> <li>• optionalParams Name "AvatarID" Value UTF8String - AvatarID/hash fÃ¼r den jeweiligen Chat - kann via</li> </ul>

			asnChatGetConversationAvatar abgeholt werden
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### 9.3.69 AsnChatEventMessage

AsnChatEventMessage is an Object

Name	Type	Optional	Comment
u8sMessage	string	yes	textmessage Chat message
asnBinaryDescription	AsnBinaryTransferMetaData	yes	binarymessage Description of the binary data
journalEntry	AspNetDatabaseJournal	yes	journalentry Journal entry (CTI / AV)
asnDeliverTime	string	yes	messageupdate Time at which the message was delivered to the recipient
asnReadTime	string	yes	Time at which the message was read by the recipient
bRead	boolean	yes	Message was read by the recipient
bDeleted	boolean	yes	Message has been deleted
asnReplyToEvent	AsnChatEvent	yes	reply If this parameter exists, this message is a reply to the in Message contained asnReplyToEvent
u8sForwardOrigin	string	yes	message forward  SIP URI of the original sender of a forwarded message. If this parameter is set, this is a forwarded message.
asnReactions	AsnChatReactionsEmojiList	yes	reactions Reactions to this message

### 9.3.70 AsnChatEventList

AsnChatEventList is an Array of AsnChatEvent

AsnChatEvent is an Object

Name	Type	Optional	Comment
u8sEventCrossRefID	string		For the assignment of events to a

			request. u8sEventCrossRefID must not be longer than 80 characters!
u8sConversationID	string		Conversation ID (of the room)
iConvSequenceID	number		Index of the event within the corresponding conversation. If iConvSequenceID = 0, the event changes communicated to a conversation, but which should not be visible in the course of the conversation. e.g. Update the iLastReadSequenceID of a party in multi-user chat
iGlobTransactionID	number		global transaction ID
bUpdate	boolean		false = new data record, true = update for existing data record
u8sSenderURI	string	yes	Contact URI of the sender of the message. e.g. 'sip: jan@estos.de'
asnCreateTime	string	yes	Time at which the event was triggered (e.g. when a read revision was sent for a user)
asnChatMessage	AsnChatEventMessage	yes	message (changed) A text message, binary message, or journal entry
asnChatConversation	AsnChatEventConversation	yes	conversation, users, name (changed) Conversation description
iError	number	yes	error code (Linked Type: AsnChatResultEnum)
optionalParams	AsnOptionalParameters	yes	<p><i>Liste der optionalen Parameter:</i></p> <ul style="list-style-type: none"> <li>• optionalParams Name "IsMuted" Value BOOLEAN ('TRUE' fÃ¼r aktiv) fÃ¼r den Client des EmpfÃ¤ngers soll diese ConversationID gemuted sein</li> <li>• optionalParams Name "AvatarID" Value UTF8String - AvatarID/hash fÃ¼r den jeweiligen Chat - kann via asnChatGetConversationAvatar abgeholt werden</li> </ul>

### 9.3.71 AsnChatFindEventsResult

AsnChatFindEventsResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnChatResultEnum)
iNumTotalResults	number		Total search results (asnChatEventList is limited to AsnChatFindEventsArgument.iMaxEvents)
asnChatEventList	AsnChatEventList		Paged Search Result

### 9.3.72 AsnChatEventArgument

AsnChatEventArgument is an Object

Name	Type	Optional	Comment
asnChatEventList	AsnChatEventList		Events in Chat
u8sEventListCrossRefID	string	yes	Request to EventList Correlator
bLastSegment	boolean	yes	last segment for this u8sEventListCrossRefID, TRUE if this segment is the last in a list of related event lists.
optionalParams	AsnOptionalParameters	yes	optionalParams Name "iNumTotalResults" Value INTEGER Number of total results for paged search request (e.g. asnChatGetBinaryMessageEvents)

### 9.3.73 AsnChatAppActionNavigateArgument

execute action from App

the following type's prefixed with AsnChatAppAction currently not part of the client/server communication it will be used within the Win32-Client to communicate with the ProCallApp for Web the advantage using different types is, keep the action and its parameters together! navigate to existing room, args

AsnChatAppActionNavigateArgument is an Object

Name	Type	Optional	Comment
u8sConversationID	string		Conversation ID (of the room)

### 9.3.74 AsnChatAppActionCreateRoomArgument

trigger Action/Wizzard for new Multiparty-Chat, args list of UserId's

AsnChatAppActionCreateRoomArgument is an Object

Name	Type	Optional	Comment
u8sUsers	UTF8StringList		Contact URLs of initial room member

### 9.3.75 AsnChatReactionsResultList

Dieser ResultType wrapped den reinen payload (AsnChatReactionsEmojiList) mit verwaltungs/protokoll-infos: primaryKey/FK & TransactionID/USN  
 Da wir fuer das DiffUpdate die uebergeordnete iGlobTransactionID wieder-verwenden wird dieser im Interface NICHT referenziert!  
 das UCServer (private) InMemory-Model nutzt diesen type.

AsnChatReactionsResultList is an Array of AsnChatReactionsResult

AsnChatReactionsResult is an Object

Name	Type	Optional	Comment
u8sConversationID	string		primaryKey/FK (u8sConversationID, iConvSequenceID) je nach verwendeter sprache/implementierung ist das optional/mandatory. ein JavaScript kann evtl. ueber ein closure zugreifen ... Conversation ID (of the room)
iConvSequenceID	number		Chat Sequence ID
iTransactionID	number		the TransactionID
asnEmojiList	AsnChatReactionsEmojiList		payload eine map von ->

## 10 ClientCapabilities

Data structures and methods to transport and notify client capabilities between clients and the server

Each client has certain capabilities he is able to handle. They are used to tell other clients the kind of interactions each client is able to process.

If a client wants to start an audio call to another client both clients have to be able to process audio (speakers and microphone present).

As soon as a client is capable to handle audio it tells the server and thus other clients that the client is now ready to process audio requests.

Beside well known capabilities clients may exchange customs capabilities. (e.g. client is capable for some sort of sharing and the appropriate sharing resource id)

### 10.1 ClientCapabilities Operations

#### 10.1.1 asnSetClientCapabilitiesV2

Event to send client capabilities to the server

#### ArgumentType: AsnSetClientCapabilitiesV2Argument

AsnSetClientCapabilitiesV2Argument is an Object

Name	Type	Optional	Comment
capabilities	AsnClientCapabilitiesV2		

#### ResultType: AsnSetClientCapabilitiesV2Result

AsnSetClientCapabilitiesV2Result is an Object

Name	Type	Optional	Comment
------	------	----------	---------

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

#### 10.1.2 asnGetClientCapabilitiesV2

Event to send client capabilities to the server

#### ArgumentType: AsnGetClientCapabilitiesV2Argument

AsnGetClientCapabilitiesV2Argument is an Object

Name	Type	Optional	Comment
u8slistContactIDs	UTF8StringList		ContactIDs we want to have the capabilities for

### **ResultType: AsnGetClientCapabilitiesV2Result**

AsnGetClientCapabilitiesV2Result is an Object

Name	Type	Optional	Comment
capabilities	AsnClientCapabilitiesV2ByIDList		List of capabilities

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

## **10.2 ClientCapabilities Events**

### **10.2.1 asnClientCapabilitiesV2Changed**

Event the server will send if client capabilites have changed

The server will dispatch events for subscribed contacts towards the clients  
The List will contain a list of client capabiliites with the user ids the refer to

### **ArgumentType: AsnClientCapabilitiesV2ChangedEventArgs**

AsnClientCapabilitiesV2ChangedEventArgs is an Object

Name	Type	Optional	Comment
capabilities	AsnClientCapabilitiesV2ByIDList		Client capabilities by user list

## **10.3 ClientCapabilities Types**

### **10.3.1 AsnClientCapabilityEnum**

These are well known capabilities the system is aware of  
Other implementation specific capablities are exchange using a property value list

AsnClientCapabilityEnum is an Enumeration

Name	Type	Value	Comment
bNothing	number	0	nothing, dummy value to set an empty list
bAudio	number	1	client/connection is capable to handle audio
bVideo	number	2	client/connection is capable to handle video
bScreenShare	number	3	client/connection is capable to handle desktop/screen sharing
bCalendarExchange	number	4	client/connection is capable to replicate exchange calendar data
bCalendarNotes	number	5	client/connection is capable to replicate notes calendar data
bCameraControl	number	6	client/connection is capable to control a camera for video (movement, zoom, ...)
bPublicChat	number	7	client/connection is capable to handle public group chats via LiveChat
bPublicCall	number	8	client/connection is capable to handle public audio/video calls via LiveChat
bConferencing	number	9	client/connection is capable to handle conferencing
bAudioRemoteControlServer	number	10	client/connection is capable to handle remote control server extensions for Audio (AV)
bAudioRemoteControlClient	number	11	client/connection is capable to handle remote control client extensions for Audio (AV)

### 10.3.2 AsnClientCapabilitiesV2

Data structure to transport capabilities a client/connection is capable to handle

This data structure is used to transport client capabilities between the clients and the server. In an invoke towards the server the client tells what the client is capable to handle. This list contains well known properties as well as custom properties a client wants to exchange with other clients. Well known capabilities are an integer list which contains enum values of the AsnClientCapabilityEnum. Additionally clients may specify additional information they need to exchange with other clients using the customCapabilities.

The server builds a sum over all connected clients and notifies clients via the PresenceV2 implementation or changed events within this interface.

AsnClientCapabilitiesV2 is an Object

Name	Type	Optional	Comment
eClientCapabilities	SEQInteger		List of capabilities the client or connection is capable to handle (Linked Type: AsnClientCapabilityEnum)
customCapabilities	AsnStringPairList		Custom capabilites clients share with each other as a name:value list the server creates a sum over the client provided capabilites if clients provide properties with same name but different values the list will contain names multiple times

### 10.3.3 AsnSetClientCapabilitiesV2Result

AsnSetClientCapabilitiesV2Result is an Object

Name	Type	Optional	Comment
------	------	----------	---------

### 10.3.4 AsnGetClientCapabilitiesV2Argument

Argument for the asnGetClientCapabilitiesV2 event

AsnGetClientCapabilitiesV2Argument is an Object

Name	Type	Optional	Comment
u8slistContactIDs	UTF8StringList		ContactIDs we want to have the capabilities for

### 10.3.5 AsnClientCapabilitiesV2ByID

Client Capabilities with the user identifier to whom they belong

AsnClientCapabilitiesV2ByID is an Object

Name	Type	Optional	Comment
u8sID	string		ContactID or Connection GUI the clientCaps belong to
capabilities	AsnClientCapabilitiesV2		The client capabilities

### 10.3.6 AsnClientCapabilitiesV2ByIDList

List of client capabilities with user identifier

AsnClientCapabilitiesV2ByIDList is an Array of AsnClientCapabilitiesV2ByID

AsnClientCapabilitiesV2ByID is an Object

Name	Type	Optional	Comment
u8sID	string		ContactID or Connection GUI the clientCaps belong to
capabilities	AsnClientCapabilitiesV2		The client capabilities

### 10.3.7 AsnSetClientCapabilitiesV2Argument

Argument for the asnSetClientCapabilitiesV2 event

AsnSetClientCapabilitiesV2Argument is an Object

Name	Type	Optional	Comment
capabilities	AsnClientCapabilitiesV2		

### 10.3.8 AsnGetClientCapabilitiesV2Result

AsnGetClientCapabilitiesV2Result is an Object

Name	Type	Optional	Comment
capabilities	AsnClientCapabilitiesV2ByIDList		List of capabilities

### 10.3.9 AsnClientCapabilitiesV2ChangedEventArgs

Argument for the asnClientCapabilitiesV2Changed method

AsnClientCapabilitiesV2ChangedEventArgs is an Object

Name	Type	Optional	Comment
capabilities	AsnClientCapabilitiesV2ByIDList		Client capabilities by user list

## 11 ClientContactsList

Client content interface (Favorite/Monitor contacts) aka "ClientContent"

### Module description

This module describes the interface for the client content, which are the contacts in the "Favorites" tab in the main window and the contacts in the contact monitor.

### Client content data model

The client content consists of contact data (the data shown to the user, mainly AsnNetDatabaseContact objects) and the arrangement of the contacts in the favorites/monitor, the data structure.

The data is divided in a list of contacts and a tree structure of groupclusters, groups and items.

The root is the "contentstructure" which contains a list of groupclusters (AsnClientContentGroupCluster).

Each groupcluster contains groups (AsnClientContentGroup) and each group contains items (AsnClientContentItem).

Finally the item contains the reference to the contact data in the contactlist.

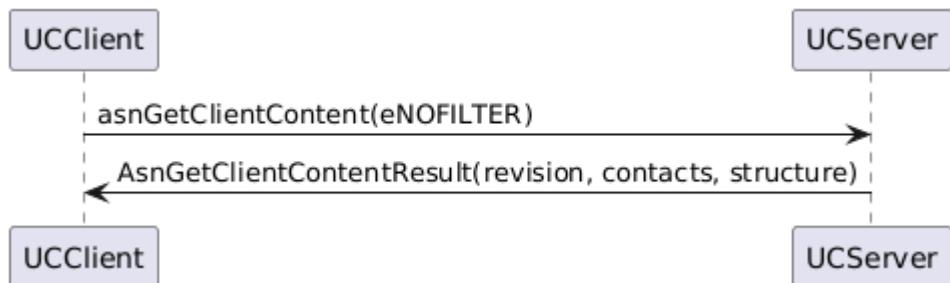
```
contactlist
contentstructure
|+- listGroupClusters
| + - listGroups
| | + - listItems
| | | + - item (== only a reference to the contact in the contactlist; normally its ENetDatabaseContactID.
| | | + - item
| | | + - item
| | .
| .
.
```

### How to use the API

This API is highly flexible - it can be used to get client content with contact data and/or content structure and with/without eventing for updates.

#### Synchronously without any events:

Example for a new client, getting all the content (incl. photos) for the first time without any eventing. It is using asnGetClientContent, which is always sending back all the contacts and structure. Only the pictures can be left out to save bandwidth.

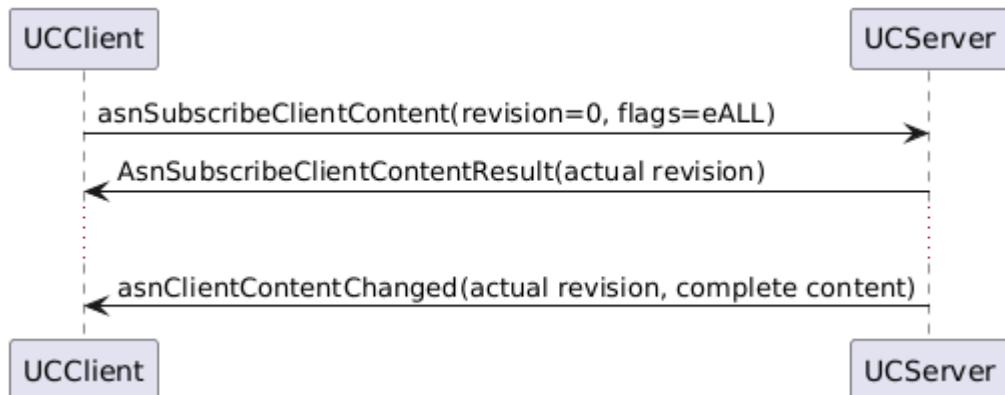


### Asynchronously and with eventing:

Example for a client, getting all the content and subscribe for events using `asnSubscribeClientContent`.

This Call subscribes to all Events and is asynchronous. The client content will be sent from the server by the change event `asnClientContentChanged`.

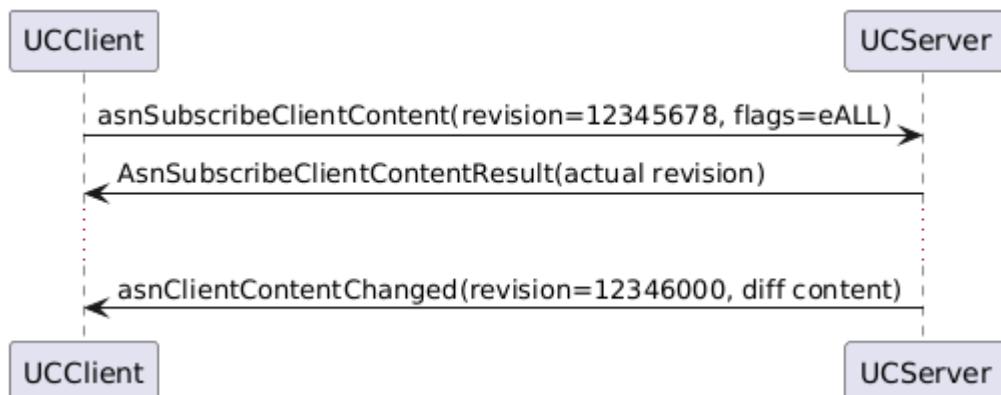
The event will then always occur if there are changes to the client content data or structure. What has changed is described in `asnClientContentChanged`.



### Subscribe for events with differential update:

If a client has already a cached version of the client content, it can request a differential update from the server by sending his last known revision.

The resulting event contains only the changed entries (see `AsnClientContentChangedEventArgs` for Details) and the client has to update its state/cache accordingly.



The synchronous and asynchronous can be used together, e.g. if it makes sense to fetch the complete content at first and then subscribe to the events later on.

**Remarks:**

"Changecounter" or "Revision" of the client content, a 64 Bit Integer.

- For historical reasons the same data is stored sometimes in strings "u8sContentRevision" or "u8sRevision" and mostly as a 64 bit integer in "iRevision". It is the same value, just transported with a different representation.
- The revision is a timestamp and will be defined by the server; the client cannot alter this value on the server directly, only by changing parts of the client content.
- A new revision from the server is always higher than an old one.

Setting the iEventFlagsToSubscribe parameter to

- eCONTACTS will only result in contact data events
- eSTRUCTURE will only result in structure events
- eJPEGPHOTO will include the jpeg photos directly in the events; if not set, the contact data will only contain hash values for the pictures and the client can request the pictures via asnRequestContactImage if needed.

**Details on GroupCluster- and Group-IDs**

- GroupCluster IDs
- The GroupCluster ID is a normal number, starting with '100' and counting up.
- Reserved numbers are between 0-199:
  - "0" to "99" -> Reserved
  - "100" -> The favorites tab in the Windows client main window.
  - "101" -> First group cluster of the Windoes client which will be shown in the monitor window.
  - "150" to "199" -> Reserved for possible administrative purposes.
  - "200" -> First group the user can define by himself, so make sure new groupclusters has an id greater or equals than that.
- Group IDs
- A Group ID is formatted like this "g:G[number]", but with the exception of the following reserved IDs they can be any unique string inside a group cluster.  
It is recommended to follow the naming convention and make the IDs unique over the whole structure.
- Following the standard formatting of the Group ids, new ones should start at "g:G800" and upwards.
- GroupID "g:G770" - "g:G778": reserved for special groups.
- "g:G770" - Group with additional phone line items of the user; only visible in the windows client if enabled in the client settings.
- "g:G771" - Group for the administrative "Jeder sieht jeden im Monitor" setting in the windows client monitor window.
- "g:G772" - Reserved.
- GroupID "g:G779" is the first freely usable group ID inside a group cluster.  
For historical reasons the Windows client is always starting with "g:G779" in every group cluster, which is possible, but makes it a bit harder to distinct between the groups over the whole structure.

**Client Content Tagging**

A client can "tag" contacts if changes on these contacts (presence, data etc.) are of special interest for the user.

Technically the "tags" are just the contact IDs in a list. The API provided here makes it possible to change the list on the UCServer and get events, if another client of the same user makes changes to the list.

In the Windows client it is used to inform the user of specific presence state changes of the contacts the user tagged in the UI (e.g. available again, has a call to pickup etc.).

## 11.1 ClientContactsList Operations

### 11.1.1 asnGetClientContent

Get the client content data and structure with a single request without any event subscriptions.

For some use cases only the transfer of the client content and structure is needed. In this case one can use this request and get the content synchronously.

#### ArgumentType: AsnGetClientContentArgument

AsnGetClientContentArgument is an Object

Name	Type	Optional	Comment
iContactFilter	number		Filter the results - mainly for suppressing the pictures in the result. (Linked Type: AsnClientContentContactFilter)

#### ResultType: AsnGetClientContentResult

AsnGetClientContentResult is an Object

Name	Type	Optional	Comment
u8sContentRevision	string		Actual revision of the client content on the server.
contactList	AsnNetDatabaseContactList		List of the contacts in this client content.
contentstructure	AsnClientContentStructure		Tree structure of the items in this client content; the leave items of the tree are pointing to the contact objects in the contacts-list.
optionalParams	AsnOptionalParameters	yes	If the server cannot open the client content for this user in the optional parameters: <ul style="list-style-type: none"> <li>• key "ClientContentXMLError", value error number 0xfffff01 - The XML file cannot be read on the server side.</li> <li>• key "FileErrorCode", value is the file access error code</li> </ul>

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 11.1.2 asnSubscribeClientContent

Subscribe to the client content of the current user.

Client can get the client content asynchronously with this request and the client will be registered for change events (asnClientContentChanged) of the content.

#### ArgumentType: AsnSubscribeClientContentArgument

AsnSubscribeClientContentArgument is an Object

Name	Type	Optional	Comment
iRevision	number	yes	<p>Transaction counter known by the client, the server can return just the changes since last request.</p> <p>Send 0 here to get the complete client content known by the server.</p>
iEventFlagsToSubscribe	number	yes	Subscribe to specific or all events and define the behaviour according the jpeg photos in the contact datasets. See AsnSubscribeClientContentFlags for details. (Linked Type: AsnSubscribeClientContentFlags)
u8sGroupClusterIDRestriction	UTF8StringList	yes	If set the server will only send back the given groupclusters. The field contains a list of groupcluster IDs.

#### ResultType: AsnSubscribeClientContentResult

AsnSubscribeClientContentResult is an Object

Name	Type	Optional	Comment
iRevision	number		The actual transaction counter known by the server.

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 11.1.3 asnUnsubscribeClientContent

Unsubscribe from the change events for the client content.

Unsubscribing from the events cannot be parameterized so the call will always unregister all events.

#### ArgumentType: AsnUnsubscribeClientContentArgument

AsnUnsubscribeClientContentArgument is an Object

Name	Type	Optional	Comment
------	------	----------	---------

#### ResultType: AsnUnsubscribeClientContentResult

AsnUnsubscribeClientContentResult is an Object

Name	Type	Optional	Comment
------	------	----------	---------

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 11.1.4 asnChangeClientContent

Change the client content of the user.

A client can use this request to change the client content. It can change the contact informations and the structure of the content.

#### ArgumentType: AsnChangeClientContentArgument

AsnChangeClientContentArgument is an Object

Name	Type	Optional	Comment
------	------	----------	---------

		l	
iRevision	number		The revision the changes are based on.
u8sVersion	string		Version of the content structure
iIsEditable	number		Defines if the user may change the contents or not (usually 1 - change is allowed)
addedOrChangedContacts	AsnNetDatabaseContactList	yes	List of contacts (AsnNetDatabaseContact) to add or change. In case of an initial update as a result of asnSubscribeClientContent this list contains all contacts.
removedContacts	AsnNetDatabaseContactIDList	yes	List of contacts, specified by their IDs, to remove from the content.
listContentstructure	AsnClientContentGroupClusterList	yes	New layout of the client content tree.
iFlags	number		If this flag is set to 1 the UCServer should remove all existing data and set the new ones instead. (Linked Type: AsnChangeClientContentFlags)

### ResultType: AsnChangeClientContentResult

AsnChangeClientContentResult is an Object

Name	Type	Optional	Comment
iRevision	number		The resulting, new revision of the client content.

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### 11.1.5 asnClientContentSubscribeToTags

Subscribe to changes of the tagging status of a contact

A user can set "tags" on a contact, for getting notifies if the presence state of that contact is changing. This is called here "tagging". These tags are saved as a list on the UCServer and with this subscription the client will be evented if the list changes on the server.

There is no dedicated unsubscribe mechanism implemented yet; the client will be automatically unsubscribed by logging off or at losing the connection.

#### **ArgumentType: AsnClientContentSubscribeToTagsArgument**

AsnClientContentSubscribeToTagsArgument is an Object

Name	Type	Optional	Comment
iSubscribe	number		always 1

#### **ResultType: AsnClientContentSubscribeToTagsResult**

AsnClientContentSubscribeToTagsResult is an Object

Name	Type	Optional	Comment
------	------	----------	---------

#### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 11.1.6 asnClientContentSaveTags

Change tags on contacts.

To change the list of tagged contacts, this request will be send to the server with the new list of contact IDs. To clear the tags just send an empty list.

#### **ArgumentType: AsnClientContentSaveTagsArgument**

AsnClientContentSaveTagsArgument is an Object

Name	Type	Optional	Comment
------	------	----------	---------

u8sTaggedIDs	UTF8StringList		List of contacts to toggle tag state - new contactIDs get tagged, missing contact IDs will be untagged.
iRevision	number		Reserved

**ResultType: AsnClientContentSaveTagsResult**

AsnClientContentSaveTagsResult is an Object

Name	Type	Optional	Comment
iRevision	number		Reserved

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**11.1.7 asnGetAndSubscribeAdministrativeMonitorContent**

Client gets the contacts especial for a attendant console and can subscribe to events if the groups are changing.

For fast call transfer or agent consulting it must be possible to get contact for this purpose, because that enables additional, specialized features for them in the UI for this use case.

The UCServer will gather the groups and the user IDs according the configuration set by the admin.

**ArgumentType: AsnGetAndSubscribeAdministrativeMonitorContentArgument**

AsnGetAndSubscribeAdministrativeMonitorContentArgument is an Object

Name	Type	Optional	Comment
iEventFlagsToSubscribe	number	yes	Optional parameter. If left out the UCServer assume eAdministrativeMonitorContentGroupChanges (1) as default. This parameter can be set to eAdministrativeMonitorContentGroupNoEvents (0) for requesting the actual content list but not to subscribe to events. (Linked Type: AsnAdministrativeMonitorContentSubscriptionFlags)

**ResultType: AsnGetAndSubscribeAdministrativeMonitorContentResult**

AsnGetAndSubscribeAdministrativeMonitorContentResult is an Object

Name	Type	Optional	Comment
listAdministrativeMonitorGroups	AsnAdministrativeMonitorGroupList		List of AsnAdministrativeMonitorGroup objects the clients user is configured for on the UCServer.

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

#### 11.1.8 asnUnsubscribeAdministrativeMonitorContent

Unsubscribe from events about the Administrative Monitor Content.

To stop eventing of changes about the AdministrativeMonitorContent call this function.

#### ArgumentType: AsnUnsubscribeAdministrativeMonitorContentArgument

AsnUnsubscribeAdministrativeMonitorContentArgument is an Object

Name	Type	Optional	Comment

#### ResultType: AsnUnsubscribeAdministrativeMonitorContentResult

AsnUnsubscribeAdministrativeMonitorContentResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true if successful (if some error happens, AsnRequestError will contain the reason)

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment

iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 11.2 ClientContactsList Events

### 11.2.1 asnClientContentChanged

Event from the server to the client if the client content was changed.

The server send an event to all connected client for this user to update the client content if one of the clients has changed it.

#### ArgumentType: AsnClientContentChangedEventArgs

AsnClientContentChangedEventArgs is an Object

Name	Type	Optional	Comment
iRevision	number		Actual revision of the client content.
addedOrChangedContacts	AspNetDatabaseContactList	yes	List of added or changed contacts.
removedContacts	AspNetDatabaseContactIDList	yes	List of contact IDs of removed contacts.
listContentstructure	AsnClientContentGroupClusterList	yes	New layout of the client content tree.
iFlags	number		If 0 replace the transmitted data with the current one in the client. The contacts will change independently, the structure always as a whole. In the future other values will be possible. (Linked Type: AsnClientContentChangedFlags)

### 11.2.2 asnClientContentTaggedIDsChanged

Event from server to client if tags on contacts have changed.

If another client changes the tag list, this event will be fired to all clients with the new list.

#### ArgumentType: AsnClientContentTaggedIDsChangedEventArgs

AsnClientContentTaggedIDsChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sTaggedIDs	UTF8StringList		New contact ID list of the contacts to be tagged.
iRevision	number		Reserved

### 11.2.3 asnAdministrativeMonitorContentGroupAdded

Event from server to client if a Administrative Monitor Content Groups has been added.

If the administrator changed something in the configuration of the groups which are part of the administrative Groups, these changes will be provided to the clients with this event.

The argument contains the AsnAdministrativeMonitorGroups if it was added.

#### ArgumentType: AsnAdministrativeMonitorContentGroupAddedArgument

AsnAdministrativeMonitorContentGroupAddedArgument is an Object

Name	Type	Optional	Comment
adminMonitorGroupAdded	AsnAdministrativeMonitorGroup		Group which was added

### 11.2.4 asnAdministrativeMonitorContentGroupChanged

Event from server to client if changes to the Administrative Monitor Content Groups were made.

If the administrator changed something in the configuration of the groups which are part of the Administrative Groups, these changes will be provided to the clients with this event.

The argument contains a AsnAdministrativeMonitorGroup if it was changed.

The changed group will contain the updated list of users, so the client must probably detect if there were users added or removed.

#### ArgumentType: AsnAdministrativeMonitorContentGroupChangedEventArgs

AsnAdministrativeMonitorContentGroupChangedEventArgs is an Object

Name	Type	Optional	Comment
adminMonitorGroupChanged	AsnAdministrativeMonitorGroup		Groups which was changed

### 11.2.5 asnAdministrativeMonitorContentGroupRemoved

Event from server to client if the Administrative Monitor Content Groups were removed.

If the administrator changed something in the configuration of the groups which are part of the administrative Groups, these changes will be provided to the clients with this event.

The argument contains the AsnAdministrativeMonitorGroup if it was removed.

#### **ArgumentType: AsnAdministrativeMonitorContentGroupRemovedArgument**

AsnAdministrativeMonitorContentGroupRemovedArgument is an Object

Name	Type	Optional	Comment
adminMonitorGroupRemoved	AsnAdministrativeMonitorGroup		Groups which was deleted

### **11.3 ClientContactsList Types**

#### **11.3.1 AsnClientContentContactFilter**

Filter for the content data sent in the result.

AsnClientContentContactFilter is an Enumeration

Name	Type	Value	Comment
eNOFILTER	number	0	No content filter, just send all data.
eNOPICTURES	number	1	Set this if the client has an own picture chache and don't want the pictures ang get hashes instead.

#### **11.3.2 AsnSubscribeClientContentFlags**

Flags how to subscribe on client content.

AsnSubscribeClientContentFlags is an Enumeration

Name	Type	Value	Comment
eALL	number	0	eALL = eCONTACTS   eSTRUCTURE   eJPEGPHOTO
eCONTACTS	number	1	Get events for changes in the contacts.
eSTRUCTURE	number	2	Get events for changes in the structure.
eJPEGPHOTO	number	4	If set, the result includes all existing contact photos. If not set the result contains only the hash values of the photos, and the client can decide if it wants to fetch the photos with asnRequestContactImage.

### 11.3.3 AsnChangeClientContentFlags

Enumeration for the field iFlags in AsnChangeClientContentArgument

AsnChangeClientContentFlags is an Enumeration

Name	Type	Value	Comment
eUPDATEORIGINATOR	number	0	reserved
eFULLUPDATE	number	1	Instead of merging the data, the server should replace the all existing data with the new ones.

### 11.3.4 AsnClientContentChangedFlags

Enumeration for iFlags in AsnClientContentChangedArgument

AsnClientContentChangedFlags is an Enumeration

Name	Type	Value	Comment
eFULLUPDATE	number	0	If nothing is set it is a full update of the given elements..

### 11.3.5 AsnAdministrativeFunctionKeyTypes

Flags describing the type of a function key

AsnAdministrativeFunctionKeyTypes is an Enumeration

Name	Type	Value	Comment
eAdministrativeFunctionKeyDial	number	0	functionkey is a dialing button, the value is simply a number to dial

### 11.3.6 AsnAdministrativeMonitorContentSubscriptionFlags

Flags describing which events (if so) the client wants to get from the server according to changes to the administrative Monitor Groups.

AsnAdministrativeMonitorContentSubscriptionFlags is an Enumeration

Name	Type	Value	Comment
eAdministrativeMonitorContentGrou	numb	0	Set value of 0 will prevent the server of sending

pNoEvents	er		events to the client. (See AsnGetAndSubscribeAdministrativeMonitorContentArgument for details).
eAdministrativeMonitorContentGroupChanges	number	1	If groups are changing on the server, an event will be send from the server to the client with the group(s) with the related groups.

### 11.3.7 AsnGetClientContentArgument

Argument for asnGetClientContent

AsnGetClientContentArgument is an Object

Name	Type	Optional	Comment
iContactFilter	number		Filter the results - mainly for suppressing the pictures in the result. (Linked Type: AsnClientContentContactFilter)

### 11.3.8 AsnSubscribeClientContentArgument

Argument for asnSubscribeClientContent

AsnSubscribeClientContentArgument is an Object

Name	Type	Optional	Comment
iRevision	number	yes	Transaction counter known by the client, the server can return just the changes since last request.  Send 0 here to get the complete client content known by the server.
iEventFlagsToSubscribe	number	yes	Subscribe to specific or all events and define the behaviour according the jpeg photos in the contact datasets. See AsnSubscribeClientContentFlags for details. (Linked Type: AsnSubscribeClientContentFlags)
u8sGroupClusterIDRestriction	UTF8StringList	yes	If set the server will only send back the given groupclusters. The field contains a list of groupcluster IDs.

### 11.3.9 AsnSubscribeClientContentResult

Result of asnSubscribeClientContent

AsnSubscribeClientContentResult is an Object

Name	Type	Optional	Comment
iRevision	number		The actual transaction counter known by the server.

### 11.3.10 AsnUnsubscribeClientContentArgument

Argument for asnUnsubscribeClientContent

AsnUnsubscribeClientContentArgument is an Object

Name	Type	Optional	Comment

### 11.3.11 AsnUnsubscribeClientContentResult

Result of asnUnsubscribeClientContent

AsnUnsubscribeClientContentResult is an Object

Name	Type	Optional	Comment

### 11.3.12 AsnChangeClientContentResult

Result of asnChangeClientContent

Event vom Client zum Server, dass sich die ClientDaten geändert haben

AsnChangeClientContentResult is an Object

Name	Type	Optional	Comment
iRevision	number		The resulting, new revision of the client content.

### 11.3.13 AsnClientContentItem

AsnClientContentItem describes the item which will be displayed in the UI.

These items are the structural placeholder for the contact data which should be displayed. It contains a 'pointer' to the data in form of the presence ID which should match a contact entry in the contacts list of the client content.

Noteable is, that the AspNetDatabaseContactIDList can contain more than one reference to a contact (AspNetDatabaseContactID)

- this makes it possible in the future, that contacts with more than one dataset from different databases can be "merged" in the UI.  
This feature is not implemented yet.

AsnClientContentItem is an Object

Name	Type	Optional	Comment
u8sID	string		Unique ID of the item in the client content, not of the contact it represents.
u8sPresenceID	string		Presence ID (aka sip-address) of the contact, which presence state should be displayed on this item. This makes it possible, that contacts from external databases can have presence information without copying the internal dataset to the contact.
iIsEditable	number		Ignore for now, may be removed in the future.
listNetDatabaseContactIDs	AsnNetDatabaseContactIDList		List of AsnNetDatabaseContactIDs which can be merged in the UI. As for now, there will be only one supported.
selectedNetDatabaseContactID	AsnNetDatabaseContactID		Last selected contact in the UI. This makes it possible, that this item could be displayed on every client. Makes only sense in desktop clients.

### 11.3.14 AsnClientContentSubscribeToTagsArgument

Argument for asnClientContentSubscribeToTags

AsnClientContentSubscribeToTagsArgument is an Object

Name	Type	Optional	Comment
iSubscribe	number		always 1

### 11.3.15 AsnClientContentSubscribeToTagsResult

Result of asnClientContentSubscribeToTags

AsnClientContentSubscribeToTagsResult is an Object

Name	Type	Optional	Comment
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### 11.3.16AsnClientContentTaggedIDsChangedArgument

Argument for event asnClientContentTaggedIDsChanged

AsnClientContentTaggedIDsChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sTaggedIDs	UTF8StringList		New contact ID list of the contacts to be tagged.
iRevision	number		Reserved

### 11.3.17AsnClientContentSaveTagsArgument

Argument for asnClientContentSaveTags

AsnClientContentSaveTagsArgument is an Object

Name	Type	Optional	Comment
u8sTaggedIDs	UTF8StringList		List of contacts to toggle tag state - new contactIDs get tagged, missing contact IDs will be untagged.
iRevision	number		Reserved

### 11.3.18AsnClientContentSaveTagsResult

Result of asnClientContentSaveTags

AsnClientContentSaveTagsResult is an Object

Name	Type	Optional	Comment
iRevision	number		Reserved

### 11.3.19AsnAdministrativeFunctionKey

Defines a function key: type (e.g. dialing) and type-dependant value

AsnAdministrativeFunctionKey is an Object

Name	Type	Optional	Comment
iType	number		AsnAdministrativeFunctionKeyType

u8sValue	string		what to do, depends on type. usually a number to dial
u8sName	string		

### 11.3.20AsnGetAndSubscribeAdministrativeMonitorContentArgument

Arguments for asnGetAndSubscribeAdministrativeMonitorContent The content will be generated by the UCServer using the logged in user.

AsnGetAndSubscribeAdministrativeMonitorContentArgument is an Object

Name	Type	Optional	Comment
iEventFlagsToSubscribe	number	yes	Optional parameter. If left out the UCServer assume eAdministrativeMonitorContentGroupChanges (1) as default. This parameter can be set to eAdministrativeMonitorContentGroupNoEvents (0) for requesting the actual content list but not to subscribe to events. (Linked Type: AsnAdministrativeMonitorContentSubscriptionFlags)

### 11.3.21AsnUnsubscribeAdministrativeMonitorContentArgument

Argument for asnUnsubscribeAdministrativeMonitorContent

AsnUnsubscribeAdministrativeMonitorContentArgument is an Object

Name	Type	Optional	Comment

### 11.3.22AsnUnsubscribeAdministrativeMonitorContentResult

Result of asnUnsubscribeAdministrativeMonitorContent

AsnUnsubscribeAdministrativeMonitorContentResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true if successful (if some error happens, AsnRequestError will contain the reason)

### 11.3.23AsnClientContentItemList

List of AsnClientContentItem objects.

AsnClientContentItemList is an Array of AsnClientContentItem

AsnClientContentItem is an Object

Name	Type	Optional	Comment
u8sID	string		Unique ID of the item in the client content, not of the contact it represents.
u8sPresenceID	string		Presence ID (aka sip: address) of the contact, which presence state should be displayed on this item. This makes it possible, that contacts from external databases can have presence information without copying the internal dataset to the contact.
iIsEditable	number		Ignore for now, may be removed in the future.
listNetDatabaseContactIDs	AsnNetDatabaseContactIDList		List of AsnNetDatabaseContactIDs which can be merged in the UI. As for now, there will be only one supported.
selectedNetDatabaseContactID	AsnNetDatabaseContactID		Last selected contact in the UI. This makes it possible, that this item could be displayed on every client. Makes only sense in desktop clients.

### 11.3.24 AsnAdministrativeFunctionKeyList

List of AsnAdministrativeFunctionKey objects.

AsnAdministrativeFunctionKeyList is an Array of AsnAdministrativeFunctionKey

AsnAdministrativeFunctionKey is an Object

Name	Type	Optional	Comment
iType	number		AsnAdministrativeFunctionKeyType
u8sValue	string		what to do, depends on type. usually a number to dial
u8sName	string		

### 11.3.25 AsnClientContentGroup

AsnClientContentGroup object contains the list of AsnClientContentItem objects and some meta data for displaying groups in the UI.

Groups structure contains a list of AsnClientContentItem objects so they can be managed/displayed in the UI.

A group contains also an unique id (unique in the client content of the user), a display name, a sort order, if the group is expanded or collapsed in the UI, editable or persistet on the server.

AsnClientContentGroup is an Object

Name	Type	Optional	Comment
u8sID	string		Unique ID of this group in the client content.
u8sName	string		Name to display in an UI
u8sOrderBy	string		Sortmechanism to use
iAutorefresh	number		ignore for now, may be removed in the future
iExpanded	number		the client should display this group 'open' (=1, items visible) or 'closed' (=0, only group header visible)
iIsEditable	number		contents of this group can be changed by the user
iIsPersistent	number		contents of this group will be saved by the server; if not, contents ist mostly automatically generated by the server and will be saved in XML/database
listItems	AsnClientContentItemList		list of items (=contact IDs) in this group

### 11.3.26 AsnClientContentGroupList

List of AsnClientContentGroup objects.

AsnClientContentGroupList is an Array of AsnClientContentGroup

AsnClientContentGroup is an Object

Name	Type	Optional	Comment
u8sID	string		Unique ID of this group in the client content.
u8sName	string		Name to display in an UI
u8sOrderBy	string		Sortmechanism to use
iAutorefresh	number		ignore for now, may be removed in the future
iExpanded	number		the client should display this group 'open' (=1,

		items visible) or 'closed' (=0, only group header visible)
isEditable	number	contents of this group can be changed by the user
isPersistent	number	contents of this group will be saved by the server; if not, contents ist mostly automatically generated by the server and will be saved in XML/database
listItems	AsnClientContentItemList	list of items (=contact IDs) in this group

### 11.3.27 AsnAdministrativeMonitorGroup

A group of contact IDs to display as a contact group of a administrative Monitor

This structure describes a group of UCServer users (identified by SIP-Adresses) and the group itself.

AsnAdministrativeMonitorGroup is an Object

Name	Type	Optional	Comment
u8sGroupURI	string		ID of the Group in the usermanagement
u8sGroupName	string		Name of the Group (for display)
listContactIDs	UTF8StringList		List of ContactIDs (SIP-URIs) of the users in the Group
listFunctionKeys	AsnAdministrativeFunctionKeyList	yes	List of administrative defined function keys for every user in the group
optionalParams	AsnOptionalParameters	yes	optionalParams Name "flags" Value number

### 11.3.28 AsnAdministrativeMonitorGroupList

List of AsnAdministrativeMonitorGroup objects.

AsnAdministrativeMonitorGroupList is an Array of AsnAdministrativeMonitorGroup

AsnAdministrativeMonitorGroup is an Object

Name	Type	Optional	Comment
u8sGroupURI	string		ID of the Group in the usermanagement
u8sGroupName	string		Name of the Group (for display)
listContactIDs	UTF8StringList		List of ContactIDs (SIP-URIs) of the

			users in the Group
listFunctionKeys	AsnAdministrativeFunctionKeyList	yes	List of administrative defined function keys for every user in the group
optionalParams	AsnOptionalParameters	yes	optionalParams Name "flags" Value number

### 11.3.29 AsnGetAndSubscribeAdministrativeMonitorContentResult

Results of asnGetAndSubscribeAdministrativeMonitorContent

AsnGetAndSubscribeAdministrativeMonitorContentResult is an Object

Name	Type	Optional	Comment
listAdministrativeMonitorGroups	AsnAdministrativeMonitorGroupList		List of AsnAdministrativeMonitorGroup objects the clients user is configured for on the UCServer.

### 11.3.30 AsnAdministrativeMonitorContentGroupAddedArgument

Argument for event asnAdministrativeMonitorContentGroupAdded

AsnAdministrativeMonitorContentGroupAddedArgument is an Object

Name	Type	Optional	Comment
adminMonitorGroupAdded	AsnAdministrativeMonitorGroup		Group which was added

### 11.3.31 AsnAdministrativeMonitorContentGroupChangedArgument

Argument for event asnAdministrativeMonitorContentGroupChanged

AsnAdministrativeMonitorContentGroupChangedArgument is an Object

Name	Type	Optional	Comment
adminMonitorGroupChanged	AsnAdministrativeMonitorGroup		Groups which was changed

### 11.3.32 AsnAdministrativeMonitorContentGroupRemovedArgument

Argument for event asnAdministrativeMonitorContentGroupRemoved

AsnAdministrativeMonitorContentGroupRemovedArgument is an Object

Name	Type	Optional	Comment
adminMonitorGroupRemoved	AsnAdministrativeMonitorGroup		Groups which was deleted

### 11.3.33 AsnClientContentGroupCluster

AsnClientContentGroupCluster object contains a list of AsnClientContentGroup objects and some meta data for displaying groups in the UI.

GroupCluster structure contains the list of groups so they can be managed/displayed in the UI. The original design needed this, to give the user the ability to arrange their contacts in groups AND in "groups of groups" (= clusters).

In the desktop clients main window the favorites tab is a group cluster with visible groups named "Favorites".

In the Monitor window the user can per default manage only groupclusters with exact one group inside. It is possible to activate the groups in the monitor too, but this feature is very seldom used by users.

GroupClusters contains also an unique id (unique in the client content of the user), a display name and some flags.

AsnClientContentGroupCluster is an Object

Name	Type	Optional	Comment
u8sID	string		Unique ID of the group cluster inside the whole client content.
u8sName	string		Display name of the gorup cluster.
iIsEditable	number		The user may change the contents of this group cluster or not. Used mostly for administrative content, which the user should not manipulate.
iIsPersistent	number		The content of the group cluster will be saved or not. The non persistent content ist also mostly used for administrative content, which is dynamically created by the server and therefore it makes no sense to save it in the database/file.
iIsTabbed	number		ignore for now, may be removed in the future.
u8sNeighbourClusterID	string		ignore for now, may be removed in the future.
listGroups	AsnClientContentGroupList		list of AsnClientContentGroups in

			this cluster.
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### 11.3.34 AsnClientContentGroupClusterList

List of AsnClientContentGroupCluster objects.

AsnClientContentGroupClusterList is an Array of AsnClientContentGroupCluster

AsnClientContentGroupCluster is an Object

Name	Type	Optional	Comment
u8sID	string		Unique ID of the group cluster inside the whole client content.
u8sName	string		Display name of the gorup cluster.
ilsEditable	number		The user may change the contents of this group cluster or not. Used mostly for administrative content, which the user should not manipulate.
ilsPersistent	number		The content of the group cluster will be saved or not. The non persistent content ist also mostly used for administrative content, which is dynamically created by the server and therefore it makes no sense to save it in the database/file.
ilsTabbed	number		ignore for now, may be removed in the future.
u8sNeighbourClusterID	string		ignore for now, may be removed in the future.
listGroups	AsnClientContentGroupList		list of AsnClientContentGroups in this cluster.

### 11.3.35 AsnClientContentStructure

AsnClientContentStructure is the root of the client content structure object.

When calling asnGetClientContent or asnSubscribeClientContent, the result contains an instance of this object.

It is the entry point to the structure of the client content which describes which item is in which and which group is in which groupcluster.

AsnClientContentStructure is an Object

Name	Type	Optional	Comment
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iIsEditable	number		Indication for the client, that changes may be ignored by the server. Normally it is 1 because we want the user to manage his favorites for himself.
u8sVersion	string		Version of Content-Structure API, should be at least 2.
u8sRevision	string		Revision of user's content structure; will be set by the server every time the structure/contacts will be changed.
u8sLastWriter	string		ignore for now, may be removed.
listGroupClusters	AsnClientContentGroupClusterList		list of groupclusters in this structure.

### 11.3.36 AsnGetClientContentResult

Result of asnGetClientContent

AsnGetClientContentResult is an Object

Name	Type	Optional	Comment
u8sContentRevision	string		Actual revision of the client content on the server.
contactList	AsnNetDatabaseContactList		List of the contacts in this client content.
contentstructure	AsnClientContentStructure		Tree structure of the items in this client content; the leave items of the tree are pointing to the contact objects in the contacts-list.
optionalParams	AsnOptionalParameters	yes	If the server cannot open the client content for this user in the optional parameters: <ul style="list-style-type: none"> <li>• key "ClientContentXMLError", value error number 0xfffffff01 - The XML file cannot be read on the server side.</li> <li>• key "FileErrorCode", value is the file access error code</li> </ul>

### 11.3.37 AsnChangeClientContentArgument

Argument for asnChangeClientContent

AsnChangeClientContentArgument is an Object

Name	Type	Optional	Comment
iRevision	number		The revision the changes are based on.
u8sVersion	string		Version of the content structure
iIsEditable	number		Defines if the user may change the contents or not (usually 1 - change is allowed)
addedOrChangedContacts	AsnNetDatabaseContactList	yes	List of contacts (AsnNetDatabaseContact) to add or change. In case of an initial update as a result of asnSubscribeClientContent this list contains all contacts.
removedContacts	AsnNetDatabaseContactIDList	yes	List of contacts, specified by their IDs, to remove from the content.
listContentstructure	AsnClientContentGroupClusterList	yes	New layout of the client content tree.
iFlags	number		If this flag is set to 1 the UCServer should remove all existing data and set the new ones instead. (Linked Type: AsnChangeClientContentFlags)

### 11.3.38 AsnClientContentChangedArgument

Argument for asnClientContentChanged event.

AsnClientContentChangedArgument is an Object

Name	Type	Optional	Comment
iRevision	number		Actual revision of the client content.
addedOrChangedContacts	AsnNetDatabaseContactList	yes	List of added or changed contacts.
removedContacts	AsnNetDatabaseContactIDList	yes	List of contact IDs of removed contacts.

listContentstructure	AsnClientContentGroupClusterList	yes	New layout of the client content tree.
iFlags	number		If 0 replace the transmitted data with the current one in the client. The contacts will change independently, the structure always as a whole. In the future other values will be possible. (Linked Type: AsnClientContentChangedFlags)

## 12 ClientPersistence

Client persistence interface

### Module description

This module defines structures and operations for a CRUD item store and its eventing. With these operations, each client can persist client specific data on the UCServer and can attach to the according change notify interface.

#### 12.1 ClientPersistence Operations

##### 12.1.1 asnClientPersistenceCreate

Adding a new item

A new item is added to the ItemStore.

The client must be subscribed to this ItemStore and pass a unique (for the client session) u8sCrossRefID.

If the client does not provide a StoreID, the server generates a key itself.

Confirmation from the server is via the asnClientPersistenceEvent event with the corresponding u8sCrossRefID.

The configured access permissions are taken into account and acknowledged with an error if necessary.

#### ArgumentType: AsnClientPersistenceCreateArgument

AsnClientPersistenceCreateArgument is an Object

Name	Type	Optional	Comment
u8sCrossRefID	string		Must be unique in a client session and will be generated by the client
u8sItemStore	string		ItemStore of the item
u8sItemStoreID	string	yes	when given, the u8sItemStoreID must not exist in the item store already
data	string		Data of the item

#### ResultType: AsnClientPersistenceCreateResult

AsnClientPersistenceCreateResult is an Object

Name	Type	Optional	Comment

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 12.1.2 asnClientPersistenceRead

Abruf von Elementen eines ItemStore

The client retrieves one or more items from the passed ItemStore.

The client must be subscribed to this ItemStore and pass a unique (for the client session) u8sCrossRefID. If the client does not provide a StoreID, all available items in the ItemStore will be returned. The server's response is via the asnClientPersistenceEvent event with the corresponding u8sCrossRefID. The configured access permissions are taken into account and acknowledged with an error if necessary.

#### ArgumentType: AsnClientPersistenceReadArgument

AsnClientPersistenceReadArgument is an Object

Name	Type	Optional	Comment
u8sCrossRefID	string		The CrossRef ID is generated by the client and must be unique within the ClientSession.
u8sItemStore	string		The ItemStore to read the items from.
u8sItemStoreID	string	yes	Key of the item to read (without specification all available items are returned).
iLastKnownGlobalRevision	number	yes	Without specifying a u8sItemStoreID all items with larger revision will be returned. (i.e. the parameter is only evaluated if no u8sItemStoreID was specified)
iItemKeyWildcardType	number	yes	Key of the item (u8sItemStoreID) is to be treated as wildcard prefix/postfix i.e. all items starting with the u8sItemStoreID prefix/postfix will be returned.  See AsnClientPersistenceReadWildcardTypeEnum for possible values.
bCountAvailableItemsOnly	boolean	yes	False: default/standard behavior - all matching items are returned. True: only the number of currently available/accessible items is returned (in the optional iChangedItemCount parameter) - but not their contents (works only if iItemKeyWildcardType is prefixKey or postfixKey).
iItemLimit	number	yes	Limit the number of (wildcard) items returned. (works only if iItemKeyWildcardType is prefixKey or

		postfixKey)
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### **ResultType: AsnClientPersistenceReadResult**

AsnClientPersistenceReadResult is an Object

Name	Type	Optional	Comment
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### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### **12.1.3 asnClientPersistenceUpdate**

Updating an existing element

The client wants to update an existing item in the passed ItemStore.

The client must be subscribed to this ItemStore and pass a unique (for the client session) u8sCrossRefID. If the client does not provide a StoreID, all available items in the ItemStore will be returned. The server's response is via the asnClientPersistenceEvent event with the corresponding u8sCrossRefID. The configured access permissions are taken into account and acknowledged with an error if necessary.

### **ArgumentType: AsnClientPersistenceUpdateArgument**

AsnClientPersistenceUpdateArgument is an Object

Name	Type	Optional	Comment
u8sCrossRefID	string		Must be unique in a client session and will be generated by the client.
u8sItemStore	string		ItemStore of the item.
u8sItemStoreID	string		Key of the item.
data	string		Data of the item.

### **ResultType: AsnClientPersistenceUpdateResult**

AsnClientPersistenceUpdateResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**12.1.4 asnClientPersistenceDelete**

Delete an existing item.

The client wants to delete an existing item in the passed ItemStore.

The client must be subscribed to this ItemStore and pass a unique (for the client session) u8sCrossRefID. If the client does not provide a StoreID, all available items in the ItemStore will be returned. The server's response is via the asnClientPersistenceEvent event with the corresponding u8sCrossRefID. The configured access permissions are taken into account and acknowledged with an error if necessary.

**ArgumentType: AsnClientPersistenceDeleteArgument**

AsnClientPersistenceDeleteArgument is an Object

Name	Type	Optional	Comment
u8sCrossRefID	string		Must be unique in a client session and will be generated by the client.
u8sItemStore	string		ItemStore of the item.
u8sItemStoreID	string		Key of the item.

**ResultType: AsnClientPersistenceDeleteResult**

AsnClientPersistenceDeleteResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
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iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 12.1.5 asnClientPersistenceSubscribe

Subscribe for changes in the item store.

The client registers for event on changes of items within the passed ItemStore.

Subscribe can be called multiple times and is additive in this case.

The client must pass a unique (for the client session) u8sCrossRefID.

The server's response is via the asnClientPersistenceEvent event with the corresponding u8sCrossRefID.

The configured access permissions are taken into account and acknowledged with an error if necessary.

#### ArgumentType: AsnClientPersistenceSubscribeArgument

AsnClientPersistenceSubscribeArgument is an Object

Name	Type	Optional	Comment
u8sCrossRefID	string		Must be unique in a client session and will be generated by the client.
iSubscribeType	number		Subscribe or Unsubscribe, see AsnClientPersistenceSubscribeTypeEnum.
u8sItemStore	string		ItemStore for which the action is to be performed.

#### ResultType: AsnClientPersistenceSubscribeResult

AsnClientPersistenceSubscribeResult is an Object

Name	Type	Optional	Comment
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#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 12.1.6 asnClientPersistenceGetDatabaseID

Abfrage der Datenbank ID

Returns a unique ID of the database, which clients can use to determine whether the server is using a new database.

This may be the case, for example, if the server database has been deleted.  
This method is the only synchronous method of the client persistence interface.

### **ArgumentType: AsnClientPersistenceGetDatabaseIDArgument**

AsnClientPersistenceGetDatabaseIDArgument is an Object

Name	Type	Optional	Comment
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### **ResultType: AsnClientPersistenceGetDatabaseIDResult**

AsnClientPersistenceGetDatabaseIDResult is an Object

Name	Type	Optional	Comment
u8sDatabaseID	string		Unique ID der aktuellen Server Datenbank

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

## **12.2 ClientPersistence Events**

### **12.2.1 asnClientPersistenceEvent**

Event from the UCServer for signalling changes in an item store.

The server responds via the asnClientPersistenceEvent with the corresponding u8sCrossRefID.

The configured access permissions are taken into account and acknowledged with an error if necessary.  
The server event is also delivered if the unique ID of the server database has changed.  
The client should then discard its (locally cached) data and request new initial data from the server.

### **ArgumentType: AsnClientPersistenceEventArgs**

AsnClientPersistenceEventArgs is an Object

Name	Type	Optional	Comment
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iResult	number		See AsnClientPersistenceResultDetailsEnum for possible values.
u8sCrossRefID	string		If it is not empty, it is a response to a request from the client, otherwise it is a UCServer generated event.
iGlobalRevision	number	yes	The transaction ID managed by the server that led to this event.
changedItems	AsnClientPersistenceItemList	yes	List of changed items (the list may contain items from several ItemStores)
deletedItems	AsnClientPersistenceItemList	yes	List of deleted items (the list may contain items from several ItemStores)
u8sDatabaseID	string	yes	Unique ID of the current server database, sent by the server on request - or automatically if the DB ID has changed.
iAvailableItemCount	number	yes	Is only returned if only the number of elements was requested for asnClientPersistenceRead.

## 12.3 ClientPersistence Types

### 12.3.1 AsnClientPersistenceResultDetailsEnum

ResultDetails

The server always responds asynchronously with a corresponding iResult in the event - in case of an error, the server uses a corresponding ErrorCode from this list here.

AsnClientPersistenceResultDetailsEnum is an Enumeration

Name	Type	Value	Comment
noerror	number	0	No error
itemstoreaccessdenied	number	1	Access to ItemStore not allowed
dataaccessdenied	number	2	Access denied (read/write)
invalidsubscription	number	3	Invalid Subscribe/Unsubscribe
invalidcrossrefid	number	4	Invalid CrossRef ID given
invalidkey	number	5	Invalid key element

invaliddata	number	6	Invalid data element (e.g. too big)
clientpersistenceoverload	number	7	Too many requests (a client should only have 10 requests in parallel on the UCServer)
databasefail	number	8	Database error (read/write)
revisionoutdated	number	9	Client requests with a revision that is too old, i.e. client must discard its data and request again (= get initial data)
clientpersistencedisabled	number	99	ClientPersistence system is not active on the UCServer

### 12.3.2 AsnClientPersistenceReadWildcardTypeEnum

Enumeration for iItemKeyWildcardType in AsnClientPersistenceReadArgument

AsnClientPersistenceReadWildcardTypeEnum is an Enumeration

Name	Type	Value	Comment
noWildcard	number	0	no wildcard read - key has to match exactly (DEFAULT)
prefixKey	number	1	the given key is used as prefix for result key(s) example: given key "apple" will receive elements like "apple" "applesauce" "applejack" but not "pineapple"
postfixKey	number	2	the given key is used as postfix for result key(s) example: given key "apple" will receive elements like "apple" "pineappleapple" "crabapple" but not "applesauce"

### 12.3.3 AsnClientPersistenceSubscribeTypeEnum

Enumeration for iSubscribeType of AsnClientPersistenceSubscribeArgument

AsnClientPersistenceSubscribeTypeEnum is an Enumeration

Name	Type	Value	Comment
subscribe	number	1	
unsubscribe	number	2	

### 12.3.4 AsnClientPersistenceItem

Definition of persistence items

An ItemStore can hold any persistence items. A persistence item always belongs to exactly one ItemStore. The key of a persistence item (u8sItemStoreID) must be unique within the ItemStore. If the client does not specify a u8sItemStoreID when creating an item, the server generates this key itself. The client itself is responsible for managing the payload in an appropriate way.

AsnClientPersistenceItem is an Object

Name	Type	Optional	Comment
u8sItemStore	string		Item store name, e.g. "FAQEntry", "usersettings"
u8sItemStoreID	string		Key of an item, it must be unique in an item store
data	string		Value data of the item
iRevision	number	yes	Revision of the item

### 12.3.5 AsnClientPersistenceCreateArgument

Argument for asnClientPersistenceCreate

AsnClientPersistenceCreateArgument is an Object

Name	Type	Optional	Comment
u8sCrossRefID	string		Must be unique in a client session and will be generated by the client
u8sItemStore	string		ItemStore of the item
u8sItemStoreID	string	yes	when given, the u8sItemStoreID must not exist in the item store already
data	string		Data of the item

### 12.3.6 AsnClientPersistenceCreateResult

Result of asnClientPersistenceCreate

AsnClientPersistenceCreateResult is an Object

Name	Type	Optional	Comment

### 12.3.7 AsnClientPersistenceReadArgument

Argument for asnClientPersistenceRead

AsnClientPersistenceReadArgument is an Object

Name	Type	Optional	Comment
u8sCrossRefID	string		The CrossRef ID is generated by the client and must be unique within the ClientSession.
u8sItemStore	string		The ItemStore to read the items from.
u8sItemStoreID	string	yes	Key of the item to read (without specification all available items are returned).
iLastKnownGlobalRevision	number	yes	Without specifying a u8sItemStoreID all items with larger revision will be returned. (i.e. the parameter is only evaluated if no u8sItemStoreID was specified)
iItemKeyWildcardType	number	yes	Key of the item (u8sItemStoreID) is to be treated as wildcard prefix/postfix i.e. all items starting with the u8sItemStoreID prefix/postfix will be returned.  See AsnClientPersistenceReadWildcardTypeEnum for possible values.
bCountAvailableItemsOnly	boolean	yes	False: default/standard behavior - all matching items are returned. True: only the number of currently available/accessible items is returned (in the optional iChangedItemCount parameter) - but not their contents (works only if iItemKeyWildcardType is prefixKey or postfixKey).
iItemLimit	number	yes	Limit the number of (wildcard) items returned. (works only if iItemKeyWildcardType is prefixKey or postfixKey)

### 12.3.8 AsnClientPersistenceReadResult

Result of asnClientPersistenceRead

AsnClientPersistenceReadResult is an Object

Name	Type	Optional	Comment

### 12.3.9 AsnClientPersistenceUpdateArgument

Argument for asnClientPersistenceUpdate

AsnClientPersistenceUpdateArgument is an Object

Name	Type	Optional	Comment
u8sCrossRefID	string		Must be unique in a client session and will be generated by the client.
u8sItemStore	string		ItemStore of the item.
u8sItemStoreID	string		Key of the item.
data	string		Data of the item.

### 12.3.10AsnClientPersistenceUpdateResult

Result of asnClientPersistenceUpdate

AsnClientPersistenceUpdateResult is an Object

Name	Type	Optional	Comment
------	------	----------	---------

### 12.3.11AsnClientPersistenceDeleteArgument

Argument for asnClientPersistenceDelete

AsnClientPersistenceDeleteArgument is an Object

Name	Type	Optional	Comment
u8sCrossRefID	string		Must be unique in a client session and will be generated by the client.
u8sItemStore	string		ItemStore of the item.
u8sItemStoreID	string		Key of the item.

### 12.3.12AsnClientPersistenceDeleteResult

Result of asnClientPersistenceDelete

AsnClientPersistenceDeleteResult is an Object

Name	Type	Optional	Comment
------	------	----------	---------

### 12.3.13AsnClientPersistenceSubscribeArgument

Argument for asnClientPersistenceSubscribe

AsnClientPersistenceSubscribeArgument is an Object

Name	Type	Optional	Comment
u8sCrossRefID	string		Must be unique in a client session and will be generated by the client.
iSubscribeType	number		Subscribe or Unsubscribe, see AsnClientPersistenceSubscribeTypeEnum.
u8sItemStore	string		ItemStore for which the action is to be performed.

### 12.3.14AsnClientPersistenceSubscribeResult

Result of asnClientPersistenceSubscribe

AsnClientPersistenceSubscribeResult is an Object

Name	Type	Optional	Comment
------	------	----------	---------

### 12.3.15AsnClientPersistenceGetDatabaseIDArgument

Argument for asnClientPersistenceGetDatabaseID

AsnClientPersistenceGetDatabaseIDArgument is an Object

Name	Type	Optional	Comment
------	------	----------	---------

### 12.3.16AsnClientPersistenceGetDatabaseIDResult

Result of asnClientPersistenceGetDatabaseID

AsnClientPersistenceGetDatabaseIDResult is an Object

Name	Type	Optional	Comment
u8sDatabaseID	string		Unique ID der aktuellen Server Datenbank

### 12.3.17AsnClientPersistenceItemList

AsnClientPersistenceItemList is an Array of AsnClientPersistenceItem

AsnClientPersistenceItem is an Object

Name	Type	Optional	Comment
u8sItemStore	string		Item store name, e.g. "FAQEntry", "usersettings"
u8sItemStoreID	string		Key of an item, it must be unique in an item store

data	string		Value data of the item
iRevision	number	yes	Revision of the item

### 12.3.18AsnClientPersistenceEventArgs

Argument for asnClientPersistenceEvent

AsnClientPersistenceEventArgs is an Object

Name	Type	Optional	Comment
iResult	number		See AsnClientPersistenceResultDetailsEnum for possible values.
u8sCrossRefID	string		If it is not empty, it is a response to a request from the client, otherwise it is a UCServer generated event.
iGlobalRevision	number	yes	The transaction ID managed by the server that led to this event.
changedItems	AsnClientPersistenceItemList	yes	List of changed items (the list may contain items from several ItemStores)
deletedItems	AsnClientPersistenceItemList	yes	List of deleted items (the list may contain items from several ItemStores)
u8sDatabaseID	string	yes	Unique ID of the current server database, sent by the server on request - or automatically if the DB ID has changed.
iAvailableItemsCount	number	yes	Is only returned if only the number of elements was requested for asnClientPersistenceRead.

## 13 Common

Common interface definitions

### Module description

This module contains common usable structures for the other interfaces.  
There should not be any function/operation definitions in this module.

#### 13.1 Common Types

##### 13.1.1 AsnSystemTime

Datatype for time values

Contains a double value (format Windows Variant Time) in UTC timezone.

The 1.1.1900 is value 2.0; the first decimal place is part of the day, e.g. 2.5 is the first january 1900, 12:00 noon.

In the JSON encoding (estos) the time will be represented by a string, in ISO 8601 format.

##### 13.1.2 AsnOptionalParamChoice

AsnOptionalParamChoice is a Choice

Name	Type	Comment
stringdata	string	
binarydata	string	
integerdata	number	

##### 13.1.3 AsnStringPair

Key value pair of strings.

AsnStringPair is an Object

Name	Type	Optional	Comment
key	string		
value	string		

##### 13.1.4 AsnIntegerPair

Key value pair of integer

AsnIntegerPair is an Object

Name	Type	Optional	Comment
key	number		
value	number		

### 13.1.5 AsnStringIntegerPair

Key value pair of <string, integer>

AsnStringIntegerPair is an Object

Name	Type	Optional	Comment
u8sStr	string		
iInt	number		

### 13.1.6 AspNetDatabaseContactID

A three tuple to identify contact data.

The three tuple EntryID, EntryIDDB and EntryIDStore identifies contact data including its source database, so that contact data from different data sources can be differentiated from each other. It is an own sequence, so it can be transferred without any concrete contact data to save bandwidth.

The AspNetDatabaseContact does not contain a AspNetDatabaseContactID object, it contains the three members by itself.

AspNetDatabaseContactID is an Object

Name	Type	Optional	Comment
u8sEntryID	string		ID of the contact data in the source database.
u8sEntryIDDB	string		ID of the database (type).
u8sEntryIDStore	string		Additional ID of a store in the database (if needed).

### 13.1.7 AsnOptionalParam

Encapsulated key value pair, including a definition of the value type.

Sequences can change over time of the development of the product. To ensure, that possible breaking changes can be avoided

within the life cycle of a major version, most sequences contain a list of AsnOptionalParam

Because of the generic nature of the this sequence, the documentation of the content is defined in the sections using the AsnOptionalParam

AsnOptionalParam is an Object

Name	Type	Optional	Comment
key	string		
value	AsnOptionalParamChoice		

### 13.1.8 AsnStringPairList

List of key value pairs of strings.

AsnStringPairList is an Array of AsnStringPair

AsnStringPair is an Object

Name	Type	Optional	Comment
key	string		
value	string		

### 13.1.9 AsnJSONWebTokenHeader

Header data for a RFC-7519 JSON Web Token

AsnJSONWebTokenHeader is an Object

Name	Type	Optional	Comment
u8sTYP	string		Defines the type of the token. This is currently by default JWT to specify it as RFC-7519 JSON Web Token
u8sALG	string		Identifies which algorithm is used to generate the signature, HS256 indicates that this token is signed using HMAC-SHA256.
u8sCTY	string	yes	Defines the content type if the typ is not JWT (JSON Web Token)
optionals	AsnStringPairList	yes	

### 13.1.10 AsnJSONWebTokenPayLoad

Payload data for a RFC-7519 JSON Web Token

AsnJSONWebTokenPayLoad is an Object

Name	Type	Optional	Comment

u8sISS	string	yes	Identifies principal that issued the JWT.
u8sSUB	string	yes	Identifies the subject of the JWT.
u8sAUD	string	yes	Identifies the recipients that the JWT is intended for. Each principal intended to process the JWT must identify itself with a value in the audience claim. If the principal processing the claim does not identify itself with a value in the aud claim when this claim is present, then the JWT must be rejected.
utcEXP	string	yes	Identifies the expiration time on and after which the JWT must not be accepted for processing. The value must be a NumericDate[10]: either an integer or decimal, representing seconds past 1970-01-01 00:00:00Z.
utcNBF	string	yes	Identifies the time on which the JWT will start to be accepted for processing. The value must be a NumericDate.
utclAT	string	yes	Identifies the time at which the JWT was issued. The value must be a NumericDate.
u8sJTI	string		Case sensitive unique identifier of the token even among different issuers.
iUserType	number	yes	Defines a user type in the context of using the token. The implementer has to define a enum value list this value belongs to
optionals	AsnStringPairList	yes	

### 13.1.11 AsnOptionalParameters

List of AsnOptionalParam

Sequences can change over time of the development. To ensure, that possible breaking changes can be avoided  
within a major version, most sequences contain a list of AsnOptionalParam

Because of the generic nature of this sequence, the documentation of the content is defined in the sections using the AsnOptionalParameters

AsnOptionalParameters is an Array of AsnOptionalParam

AsnOptionalParam is an Object

Name	Type	Optional	Comment
key	string		
value	AsnOptionalParamChoice		

### 13.1.12 AsnNetDatabaseContact

Sequence/object containing contact data.

All fields in this sequence are optional, because not every field must have content, but the sequence is broadly used, so every field which is not transmitted saves bandwidth.

AsnNetDatabaseContact is an Object

Name	Type	Optional	Comment
u8sFound	string	yes	
u8sDatabaseName	string	yes	
u8sEntryIDDB	string	yes	
u8sEntryIDStore	string	yes	
u8sEntryID	string	yes	
u8sCtiServerUserName	string	yes	
u8sDisplayName	string	yes	
u8sFirstName	string	yes	
u8sLastName	string	yes	
u8sJobTitle	string	yes	
u8sCompany	string	yes	
u8sDepartment	string	yes	
u8sOfficeRoomNumber	string	yes	
u8sCustomerID	string	yes	
u8sBusinessAddressStreet	string	yes	
u8sBusinessAddressPostalCode	string	yes	
u8sBusinessAddressCity	string	yes	
u8sBusinessAddressState	string	yes	
u8sBusinessAddressCountry	string	yes	
u8sPrivateAddressStreet	string	yes	
u8sPrivateAddressPostalCode	string	yes	
u8sPrivateAddressCity	string	yes	
u8sPrivateAddressState	string	yes	

u8sPrivateAddressCountry	string	yes	
u8sOtherAddressStreet	string	yes	
u8sOtherAddressPostalCode	string	yes	
u8sOtherAddressCity	string	yes	
u8sOtherAddressState	string	yes	
u8sOtherAddressCountry	string	yes	
u8sEMail	string	yes	
u8sEMail2	string	yes	
u8sEMail3	string	yes	
u8sSIPAddress	string	yes	
u8sWebPageURL	string	yes	
u8sPhoneBusiness	string	yes	
u8sPhoneBusiness2	string	yes	
u8sCompanyMainTelephoneNumber	string	yes	
u8sAssistantTelephoneNumber	string	yes	
u8sPhoneHome	string	yes	
u8sPhoneHome2	string	yes	
u8sPrimaryTelephoneNumber	string	yes	
u8sPhoneMobile	string	yes	
u8sCarTelephoneNumber	string	yes	
u8sRadioTelephoneNumber	string	yes	
u8sPagerTelephoneNumber	string	yes	
u8sOtherTelephoneNumber	string	yes	
u8sCallbackTelephoneNumber	string	yes	
u8sISDNTelephoneNumber	string	yes	
u8sTTYTTDTelephoneNumber	string	yes	
u8sFaxBusiness	string	yes	
u8sFaxHome	string	yes	
u8sBody	string	yes	thats also called "note"
u8sDirectWebLink	string	yes	

customFields	AsnStringPairList	yes	additional fields, mostly filled with runtime information
bValid	boolean	yes	
iPrivateContact	number	yes	
iCtIServerUser	number	yes	
optionalParams	AsnOptionalParameters	yes	<p>Additionally fields added later in the key-value-field for backward compatibility.</p> <ul style="list-style-type: none"> <li>• key "jpegPhoto", Type byte[], a jpeg photo of the contact; Note: it is planned to not transmit the photo with the contact but a hash code instead in the future.</li> </ul>

### 13.1.13 AsnIntegerPairList

List of key value pairs of integer

AsnIntegerPairList is an Array of AsnIntegerPair

AsnIntegerPair is an Object

Name	Type	Optional	Comment
key	number		
value	number		

### 13.1.14 AsnStringIntegerPairList

List of key value pairs of <string, integer>

AsnStringIntegerPairList is an Array of AsnStringIntegerPair

AsnStringIntegerPair is an Object

Name	Type	Optional	Comment

u8sStr	string		
iInt	number		

### 13.1.15AsnRequestError

Generic error sequence. See the documentation of the operations specific descriptions.

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 13.1.16SEQInteger

List of integers

SEQInteger is an Array of number

### 13.1.17UTF8StringList

List of strings.

UTF8StringList is an Array of string

### 13.1.18AsnNetDatabaseContactList

List of AsnNetDatabaseContact

AsnNetDatabaseContactList is an Array of AsnNetDatabaseContact

AsnNetDatabaseContact is an Object

Name	Type	Optional	Comment
u8sFound	string	yes	
u8sDatabaseName	string	yes	
u8sEntryIDDB	string	yes	
u8sEntryIDStore	string	yes	
u8sEntryID	string	yes	
u8sCtiServerUserName	string	yes	
u8sDisplayName	string	yes	

u8sFirstName	string	yes
u8sLastName	string	yes
u8sJobTitle	string	yes
u8sCompany	string	yes
u8sDepartment	string	yes
u8sOfficeRoomNumber	string	yes
u8sCustomerID	string	yes
u8sBusinessAddressStreet	string	yes
u8sBusinessAddressPostalCode	string	yes
u8sBusinessAddressCity	string	yes
u8sBusinessAddressState	string	yes
u8sBusinessAddressCountry	string	yes
u8sPrivateAddressStreet	string	yes
u8sPrivateAddressPostalCode	string	yes
u8sPrivateAddressCity	string	yes
u8sPrivateAddressState	string	yes
u8sPrivateAddressCountry	string	yes
u8sOtherAddressStreet	string	yes
u8sOtherAddressPostalCode	string	yes
u8sOtherAddressCity	string	yes
u8sOtherAddressState	string	yes
u8sOtherAddressCountry	string	yes
u8sEMail	string	yes
u8sEMail2	string	yes
u8sEMail3	string	yes
u8sSIPAddress	string	yes
u8sWebPageURL	string	yes
u8sPhoneBusiness	string	yes
u8sPhoneBusiness2	string	yes
u8sCompanyMainTelephoneNumber	string	yes

u8sAssistantTelephoneNumber	string	yes	
u8sPhoneHome	string	yes	
u8sPhoneHome2	string	yes	
u8sPrimaryTelephoneNumber	string	yes	
u8sPhoneMobile	string	yes	
u8sCarTelephoneNumber	string	yes	
u8sRadioTelephoneNumber	string	yes	
u8sPagerTelephoneNumber	string	yes	
u8sOtherTelephoneNumber	string	yes	
u8sCallbackTelephoneNumber	string	yes	
u8sISDNTelephoneNumber	string	yes	
u8sTTYTTDTelephoneNumber	string	yes	
u8sFaxBusiness	string	yes	
u8sFaxHome	string	yes	
u8sBody	string	yes	thats also called "note"
u8sDirectWebLink	string	yes	
customFields	AsnStringPairList	yes	additional fields, mostly filled with runtime information
bValid	boolean	yes	
iPrivateContact	number	yes	
iCtiServerUser	number	yes	
optionalParams	AsnOptionalParameters	yes	<p>Additionally fields added later in the key-value-field for backward compatibility.</p> <ul style="list-style-type: none"> <li>• key "jpegPhoto", Type byte[], a jpeg photo of the contact; Note: it is planned to not transmit the photo with the contact but a hash code instead in the</li> </ul>

future.

### 13.1.19 AsnNetDatabaseContactIDList

List of AsnNetDatabaseContactID .

AsnNetDatabaseContactIDList is an Array of AsnNetDatabaseContactID

AsnNetDatabaseContactID is an Object

Name	Type	Optional	Comment
u8sEntryID	string		ID of the contact data in the source database.
u8sEntryIDDB	string		ID of the database (type).
u8sEntryIDStore	string		Additional ID of a store in the database (if needed).

### 13.1.20 AsnUserPropertyBag

Property bag definition for storing runtime defined content for objects (like users, computers, groups etc.).

To make it possible to transport and store runtime defined content in some objects, these object contain a property bag, which is simply a key value store. Which keys (and therefore which data) is available is depending on the object and the business logic, which uses it. So see the according sequence (object) documentation for more details.

AsnUserPropertyBag is an Object

Name	Type	Optional	Comment
asnProperties	AsnStringPairList		

### 13.1.21 AsnJSONWebToken

Data for a RFC-7519 JSON Web Token

AsnJSONWebToken is an Object

Name	Type	Optional	Comment
header	AsnJSONWebTokenHeader		The header content of the JWT
payload	AsnJSONWebTokenPayLoad		The body content of the JWT
signature	string		The signature of the base64 encoded header and payload

### **13.1.22EnumAppointmentState**

Enumeration for the iStatus field values.

Enumeration values for the iStatus field values used in AsnAppointmentEntry

EnumAppointmentState is an Enumeration

Name	Type	Value	Comment
eAPPOINTMENTSTATUSFREE	number	0	
eAPPOINTMENTSTATUSTENTATIVE	number	1	
eAPPOINTMENTSTATUSBUSY	number	2	
eAPPOINTMENTSTATUSOUTOFOFFICE	number	3	

### **13.1.23EnumAppointmentImportance**

Enumeration for the iImportance field values.

Enumeration values for the iImportance field values used in AsnAppointmentEntry

EnumAppointmentImportance is an Enumeration

Name	Type	Value	Comment
eAPPOINTMENTIMPORTANCELESS	number	0	
eAPPOINTMENTIMPORTANCENORMAL	number	1	
eAPPOINTMENTIMPORTANCEURGENT	number	2	

### **13.1.24EnumAppointmentSensitivity**

Enumeration for the iSensitivity field values.

Enumeration values for the iSensitivity field values used in AsnAppointmentEntry

EnumAppointmentSensitivity is an Enumeration

Name	Type	Value	Comment
eAPPOINTMENTSENSITIVITYNORMAL	number	0	

eAPPOINTMENTSENSITIVITYPERSONAL	number	1	
eAPPOINTMENTSENSITIVITYPRIVATE	number	2	
eAPPOINTMENTSENSITIVITYCONFIDENTIAL	number	3	

### 13.1.25 AsnAppointmentEntry

Datatype for transport of Appointment Data to and from the UCServer.

AsnAppointmentEntry is an Object

Name	Type	Optional	Comment
u8sEntryID	string		Unique EntryID of the data source
u8sOwner	string		Owner of the dataset - will be changed by the ucserver with theloggedin user to enforce ownership for security reasons
u8sDataSource	string		Symbolic name of the data source
stStart	string		Start time of the appointment
stEnd	string		End time of the appointment
iDuration	number		Duration of the appointment
u8sSubject	string		Subject of the appointment
u8sText	string		Message body of the appointment
bAllDay	boolean		Indicates, if it is an allday appointment (true) or not (false)
iStatus	number		(Presence) State of the user while the appointment is active, see EnumAppointmentState
u8sCategory	string		Category of the appointment
iImportance	number		Importance of the appointment, see EnumAppointmentImportance
iSensitivity	number		Sensitivity (private or not), see EnumAppointmentSensitivity
bIsValid	boolean		Is it a valid entry (data set), will be set on the ucserver (e.g. TabIndex of the database entry is not 0)
optionalParams	AsnOptionalParameters	yes	optionalParams Name "Location" Value String

### 13.1.26SEQAppointmentList

List of AsnAppointmentEntry

SEQAppointmentList is an Array of AsnAppointmentEntry

AsnAppointmentEntry is an Object

Name	Type	Optional	Comment
u8sEntryID	string		Unique EntryID of the data source
u8sOwner	string		Owner of the dataset - will be changed by the ucserver with the loggedin user to enforce ownership for security reasons
u8sDataSource	string		Symbolic name of the data source
stStart	string		Start time of the appointment
stEnd	string		End time of the appointment
iDuration	number		Duration of the appointment
u8sSubject	string		Subject of the appointment
u8sText	string		Message body of the appointment
bAllDay	boolean		Indicates, if it is an allday appointment (true) or not (false)
iStatus	number		(Presence) State of the user while the appointment is active, see EnumAppointmentState
u8sCategory	string		Category of the appointment
iImportance	number		Importance of the appointment, see EnumAppointmentImportance
iSensitivity	number		Sensitivity (private or not), see EnumAppointmentSensitivity
bIsValid	boolean		Is it a valid entry (data set), will be set on the ucserver (e.g.TabIndex of the database entry is not 0)
optionalParams	AsnOptionalParameters	yes	optionalParams Name "Location" Value String

### 13.1.27AsnUserStaticRights

Bitfield with access rights for the user to use specific services/functions on the UCserver.

The bitfield is configured by the administrator on the UCServer in the usermanagement section, mainly on the services tabs of the user, computer or group editors.

Some of the flags are only set for specific objects or have only an effect for these objects.

Some of the flags can be set for user AND groups, so a user can get the right from his own configuration or from a group she is member of.

For more flags see AsnUserStaticRights2

AsnUserStaticRights is an Enumeration

Name	Type	Value	Comment
eUSERRIGHTSSENDUSERUSER	number	1	0x00000001 - User may use text chat.
eUSERRIGHTSSENDSMS	number	2	0x00000002 - User may use the SMS service.
eUSERRIGHTSEMPTY	number	4	0x00000004 - User may login via WebServices.
eUSERRIGHTSUSEPROCALL	number	8	0x00000008 - User may use the UCClient; should always be set.
eUSERRIGHTSSELFADMIN	number	32	0x00000020 - User may change his account settings with the "Workstation settings" program.
eUSERRIGHTSUSERCTI	number	64	0x00000040 - User may use CTI lines.
eDONOTUSE	number	128	0x00000080 - Reserved.
eUSERRIGHTSOFFLINEMAIL	number	256	0x00000100 - User may get email for calls while he was absent.
eUSERRIGHTSCALLRECORDING	number	512	0x00000200 - User may use call recorder.
eUSERRIGHTSUSEPHONEBOOK	number	1024	0x00000400 - User may use the search in phonebooks.
eUSERRIGHTSUSERPRESENCE	number	2048	0x00000800 - User is a CTI/Presence user (should always be set).

eUSERRIGHTSGROUPALLINMONITOR	number	4096	0x00001000 - Users of the group can see all other users in his monitor (available only for groups).
eUSERRIGHTSGROUPNOCHANGEMONITOR	number	8192	0x00002000 - Users of the group cannot change the content of their monitor (available only for groups).
eUSERRIGHTSGROUPVIEWJOURNAL	number	16384	0x00004000 - Users of the group may see the Journal/History of other group members (available only for groups).
eUSERRIGHTSGROUPVIEWJOURNALLEADER	number	32768	0x00008000 - The group leader may see the Journal/History of all group members (available only for groups).
eUSERRIGHTSGROUPEDITJOURNAL	number	65536	0x00010000 - Users of a group may edit Journal/History of other group members (available only for groups).
eDONOTUSE2	number	131072	0x00020000 - Reserved.
eDONOTUSE3	number	262144	0x00040000 - Reserved.
eUSERRIGHTSUSERVIEWJOURNAL	number	524288	0x00080000 - Journal/History functions are available for the user; if not, acces to the journal database is not available for this user.
eUSERRIGHTSGLOBALDELETEJOURNAL	number	1048576	0x00100000 - Every user of the system may delete Journal/History entries.
eUSERRIGHTSOFFLINESMS	number	2097152	0x00200000 - User may get SMS messages for calls whjile he is absent.
eUSERRIGHTSDESKSHAREACCEPT	number	4194304	0x00400000 - User may accept desktop sharing invitaions but cannot initiate own session.

eUSERRIGHTSDESKSHAREFULL	number	8388608	0x00800000 - User may accept or initiate desktop sharing session.
eDONOTUSE4	number	16777216	0x01000000 - Reserved.
eUSERRIGHTSAVAUDIO	number	33554432	0x02000000 - User may use audio communication features without video.
eUSERRIGHTSAVIDEO	number	67108864	0x04000000 - User may use audio and video communication features.
eUSERRIGHTSFEDDESKSHARE	number	134217728	0x08000000 - User may use desktop sharing over federation connections (experimental!).

### 13.1.28 AsnUserStaticRights2

Bitfield with access rights for the user to use specific services/functions on the UCserver.

The bitfield is configured by the administrator on the UCServer in the usermanagement section, mainly on the services tabs of the user, computer or group editors.

Some of the flags are only set for specific objects or have only an effect for these objects.

Some of the flags can be set for user AND groups, so a user can get the right from his own configuration or from a group she is member of.

For more flags see AsnUserStaticRights

AsnUserStaticRights2 is an Enumeration

Name	Type	Value	Comment
eUSERRIGHTS2ENABLEFORANONYMOUSAPI	number	1	0x00000001 - User is visible for anonymous users (like web site vistors of LiveChat).
eUSERRIGHTS2LOGINOVERINTERNET	number	2	0x00000002 - User may login from outside the company network (e.g. from mobile network GSM).
eUSERRIGHTS2LOGINBYMOBILE	number	4	0x00000004 - User may

				login from a mobile device.
eUSERRIGHTS2ENABLEAGENTMANAGER	number	8		0x00000008 - User is available for the agent managemtn system; see Agent API for more details. Available for users and groups.
eUSERRIGHTS2ISAGENTSUPERVISOR	number	16		0x00000010 - User is agent subervisor and may change state of other agents.
eUSERRIGHTS2GROUPFORPUBLICCHAT	number	32		0x00000020 - Group contains agents who may receive PUBLIC_CHATs and PUBLIC_CALLs.
eUSERRIGHTS2GROUPFORPORTAL	number	64		0x00000040 - Group contains agents who may be visible on the contact protal. (Named "portal groups" in the admin UI).
eUSERRIGHTS2GROUPFORMONITOR	number	128		0x00000080 - Group is available for administrative monitor content.
eUSERRIGHTS2ENABLECONTENTSHARINGFILES	number	512		Content Sharing 0x00000200 - User is allowed to send binary data via the BinaryTransfer interface (default: allowed)
eUSERRIGHTS2ENABLECONTENTSHARINGLOCATION	number	1024		0x00000400 - User is allowed to share his location via the BinaryTransfer interface (default: allowed)
eUSERRIGHTS2ENABLECONTENTSHARINGCONTACTS	number	2048		0x00000800 - User is allowed to share a contact via the BinaryTransfer interface (default: allowed)

eUSERRIGHTS2USECONFERENCING	number	4096	0x00001000 - User may use conferencing functionality - (default: off - needs separate license!)
eUSERRIGHTS2USETEAMS	number	8192	0x00002000 - User may use MS Teams App
eUSERRIGHTS2ALLOWLOGININTERNETDESKTOP	number	16384	0x00004000 - User may use ProCall Client via Internet (vpnless connection)
eUSERRIGHTS2USEWEBAPP	number	32768	0x00008000 - User may use ProCall WebApp (PWA)

### 13.1.29 AsnContactPhoneLineState

Enumeration for the iState field values of AsnContactPhoneLineState

Enumeration values for the iState field values used in AsnContactPhoneLineState

AsnContactPhoneLineState is an Enumeration

Name	Type	Value	Comment
eLINEOFFLINE	number	0	
eLINEONLINE	number	1	

### 13.1.30 AsnAbsentStateEnum

The enum of the state in AsnAbsentState.

AsnAbsentStateEnum is an Enumeration

Name	Type	Value	Comment
eABSENTSTATENOTABSENT	number	0	Available
eABSENTSTATEOUTOFOFFICE	number	1	Out of office
eABSENTSTATEBUSY	number	2	Busy
eABSENTSTATEDONOTDISTURB	number	3	Do not disturb

eABSENTSTATENOTSET	number	4	Absent state is not set
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### 13.1.31AsnReachabilityEnum

The enum of the reachability in AsnAbsentState.

AsnReachabilityEnum is an Enumeration

Name	Type	Value	Comment
eREACHABILITYNORMAL	number	0	Empty (in the office)
eREACHABILITYPAUSE	number	1	Pause
eREACHABILITYBUSINESSTRIP	number	2	Business trip
eREACHABILITYHOMEOFFICE	number	3	Home Office
eREACHABILITYVACATION	number	4	Vacation
eREACHABILITYUNREACHABLE	number	5	Currently not in use

### 13.1.32AsnExternalPresenceType

different types of external presence providers

AsnExternalPresenceType is an Enumeration

Name	Type	Value	Comment
eMSTeams	number	0	

### 13.1.33AsnUserDynamicRights

The authorizations a user has on another user or gets from him.

The "dynamic rights" are the authorizatio a user gives to or receives from another user. These are managed in levels and transported with these structures.

AsnUserDynamicRights is an Object

Name	Type	Optional	Comment
u8sObjectID	string		

iPresenceRights	number		
iPhoneControlRightsPrimary	number		
iPhoneControlRightsSecondary	number		

### 13.1.34 AsnContactCallInformationV2

AsnContactCallInformationV2 is an Object

Name	Type	Optional	Comment
u8sContactChangedId	string		The contact id of the contact this information is related to.
iPresenceState	number		Actual presence state of the contact this information is related to.
u8sConnectionID	string		Unique identifier of the call.
u8sLinePhoneNumber	string		Line identifier (or phone number if URI is not available) of the phone
iCallState	number		Call state in which the call currently is. See EnumCallState for more details.
iDisconnectedReason	number		If a call is disconnected, this could contain a reason for the disconnect. See EnumCallDisconnectedReason for more details. (Linked Type: EnumCallState)
iFeatures	number		This field contains the currently available call features - what can a client do with this call. See EnumCallFeatures for more details. (Linked Type: EnumCallDisconnectedReason)
bOutbound	boolean		true if the call was initiated (dialed) on the attached line; false if the call is incoming from outside. (Linked Type: EnumCallFeatures)
bInternal	boolean		true if the call terminates in the same PBX; false if the other device is not attached to this PBX.
bPrivate	boolean		true if the call is marked as private, false if not.
iCallRecordingState	number		Call recording state of this call. See

			EnumCallRecordingState for more details.
bConferenceCtrlr	boolean		true if this call is used to control a conference.
u8sCurrentNumberSC	string		Phone number of the partner.
u8sTrackerID	string		the call tracker id
u8sLocalCurrentNumberSC	string		The called number in supercanonic notation if called outbound. The called number in supercanonic notation if we received the call.
u8sRedirectingNumber	string	yes	May contain the number of the line on which the call was received first and then redirected.
remoteContact	AsnNetDatabaseContact	yes	If present, this Field contains contact data attached to this call (UCServer intern only)

### 13.1.35 AsnSIPLineDetails

Parameter for a SIP line

AsnSIPLineDetails is an Object

Name	Type	Optional	Comment
iSIPAVMediaMode	number		Available media modes
iSIPAVAUDIOCodecs	SEQInteger		List of supported audio codecs
iMinPort	number		the minimum media port
iMaxPort	number		the maximum media port

### 13.1.36 AsnCustomNote

Structure for handling the user defined note.

AsnCustomNote is an Object

Name	Type	Optional	Comment
u8sContactID	string		Contact ID of the user.
u8sUsername	string		The display name of the user.
u8sNote	string		The text the user has set.

### 13.1.37 AsnContactCallInformationsV2

List of AsnContactCallInformation.

AsnContactCallInformationsV2 is an Array of AsnContactCallInformationV2

AsnContactCallInformationV2 is an Object

Name	Type	Optional	Comment
u8sContactChangedId	string		The contact id of the contact this information is related to.
iPresenceState	number		Actual presence state of the contact this information is related to.
u8sConnectionID	string		Unique identifier of the call.
u8sLinePhoneNumber	string		Line identifier (or phone number if URI is not available) of the phone
iCallState	number		Call state in which the call currently is. See EnumCallState for more details.
iDisconnectedReason	number		If a call is disconnected, this could contain a reason for the disconnect. See EnumCallDisconnectedReason for more details. (Linked Type: EnumCallState)
iFeatures	number		This field contains the currently available call features - what can a client do with this call. See EnumCallFeatures for more details. (Linked Type: EnumCallDisconnectedReason)
bOutbound	boolean		true if the call was initiated (dialed) on the attached line; false if the call is incoming from outside. (Linked Type: EnumCallFeatures)
bInternal	boolean		true if the call terminates in the same PBX; false if the other device is not attached to this PBX.
bPrivate	boolean		true if the call is marked as private, false if not.
iCallRecordingState	number		Call recording state of this call. See EnumCallRecordingState for more details.

bConferenceCtrlr	boolean		true if this call is used to control a conference.
u8sCurrentNumberSC	string		Phone number of the partner.
u8sTrackerID	string		the call tracker id
u8sLocalCurrentNumberSC	string		The called number in supercanonic notation if called outbound. The called number in supercanonic notation if we received the call.
u8sRedirectingNumber	string	yes	May contain the number of the line on which the call was received first and then redirected.
remoteContact	AsnNetDatabaseContact	yes	If present, this Field contains contact data attached to this call (UCServer intern only)

### 13.1.38 AsnContactPhoneLineV2

Phone line object which is used in the presence object model.

Not every client will have full CTI functionality, but has to display some information about the lines and phone states of users. For this AsnContactPhoneLine represents the state of a line in the presence model.

AsnContactPhoneLineV2 is an Object

Name	Type	Optional	Comment
iType	number		Enum for the type of the line. See AsnContactPhoneLineType for details. (Linked Type: AsnContactPhoneLineType)
u8sLinePhoneNumber	string		The identifier of a line. This could be a Phonenum or a phone URI.
u8sDescriptor	string		Description text for a line.
u8sNumber	string		Phone number of the line.
seqCalls	AsnContactCallInformationsV2		Call which are currently on the line.
seqLineForwards	AsnLineForwards		Line forwardings currently set on the line.
iState	AsnContactPhoneLineState		The line state. See AsnContactPhoneLineState for details (eLINEOFFLINE, eLINEONLINE, etc.)

bDoNotDisturb	boolean		Do not disturb flag for this line. TRUE do not disturb is active, FALSE not.
iForwardFeaturesPBX	number		Which sort of call forward is available on this line. See AsnForwardMode for details. (Linked Type: AsnForwardMode)
u8sAddressNames	UTF8StringList		The line addresses on this line
u8sAddressCaps	string		XML with the capabilities of the line
u8sCTIFeatureCodes	string		XML with the feature codes available for this line
bIsPrivateLine	boolean	yes	the line has to be treated as private
bIsVoiceServicesLine	boolean	yes	true if the line is a voiceservices line
sipLineDetails	AsnSIPLineDetails	yes	Details of a SIP line

### 13.1.39 AsnContactPhoneLinesV2

List of AsnContactPhoneLineV2 objects.

AsnContactPhoneLinesV2 is an Array of AsnContactPhoneLineV2

AsnContactPhoneLineV2 is an Object

Name	Type	Optional	Comment
iType	number		Enum for the type of the line. See AsnContactPhoneLineType for details. (Linked Type: AsnContactPhoneLineType)
u8sLinePhoneNumber	string		The identifier of a line. This could be a Phonenumber or a phone URI.
u8sDescriptor	string		Description text for a line.
u8sNumber	string		Phone number of the line.
seqCalls	AsnContactCallInformationsV2		Call which are currently on the line.
seqLineForwards	AsnLineForwards		Line forwardings currently set on the line.
iState	AsnContactPhoneLineState		The line state. See

			AsnContactPhoneLineState for details (eLINEOFFLINE, eLINEONLINE, etc.)
bDoNotDisturb	boolean		Do not disturb flag for this line. TRUE do not disturb is active, FALSE not.
iForwardFeaturesPBX	number		Which sort of call forward is available on this line. See AsnForwardMode for details. (Linked Type: AsnForwardMode)
u8sAddressNames	UTF8StringList		The line addresses on this line
u8sAddressCaps	string		XML with the capabilities of the line
u8sCTIFeatureCodes	string		XML with the feature codes available for this line
bIsPrivateLine	boolean	yes	the line has to be treated as private
bIsVoiceServicesLine	boolean	yes	true if the line is a voiceservices line
sipLineDetails	AsnSIPLineDetails	yes	Details of a SIP line

### 13.1.40 AsnExternalPresenceState

A state of an external presence provider

AsnExternalPresenceState is an Object

Name	Type	Optional	Comment
u8sUserName	string		
iState	number		
eType	AsnExternalPresenceType		

### 13.1.41 AsnExternalPresenceStates

AsnExternalPresenceStates is an Array of AsnExternalPresenceState

AsnExternalPresenceState is an Object

Name	Type	Optional	Comment
u8sUserName	string		

iState	number		
eType	AsnExternalPresenceType		

### 13.1.42 AsnAbsentStateV2

The absent state of a user/contact in the ucserver.

AsnAbsentState is used to describe the manual presence of a User.

The manual presence is used to override the system calculated presence state of the user until a new system state is calculated or the system calculated one is back to "available" again.

So the manual presence overrides the actual presence at the moment it is set, but it will be overridden by new system events other than "available".

AsnAbsentStateV2 is an Object

Name	Type	Optional	Comment
u8sContactId	string		The Contact ID of the user.
eAbsentState	AsnAbsentStateEnum		
iPresenceState	number	yes	The serverside calculated presence state of the contact. This is a 32 Bit field assembled with values from AsnPresenceStateEnum and bits of AsnPresenceStateFlags. (Linked Type: AsnPresenceStateFlags)
stTimeFrom	string	yes	Timestamp from which the state is valid.
stTimeTo	string	yes	Timestamp the state state is valid to.
eReachability	AsnReachabilityEnum	yes	The reachability of the user
externalPresenceStates	AsnExternalPresenceStates	yes	external presence state providers that influence the presence

### 13.1.43 AsnContactV2

The interface representation of an ActiveContact (or short "contact") of the UCServer with static contact and dynamic presence data.

The UCServer uses a technology called "ActiveContacts", which are representing contacts with all its static contact information and all its dynamic/calculated presence information from the different services used by this contact (phone lines, calendar, federation etc.)

All the data is filtered by the UCServer depending on the permissions of the calling client/user. So not every client will get all the information.

AsnContactV2 is an Object

Name	Type	Optional	Comment
u8sContactId	string		<p>The ID of the contact, which is used to get the presence information and updates from the server. Note: This ID is only unique for the presence information.</p> <p>The contact data behind this is depending on the data source, where the data is copied from while adding the contact to the active user management.</p> <p>This means, a contact may have the same contact ID but different contact data if it is read from another database. To distinguish the different contact informations of the same contact see the fields u8sEntryIDDB, u8sEntryIDStore and u8sEntryID of AsnNetDatabaseContact.</p>
iContactFeatureSet	number		<p>FeatureSet of the contact on the UCServer. See AsnContactFeatureSetEnum for more details. (Linked Type: AsnContactFeatureSetEnum)</p>
iPresenceState	number		<p>The presence state of the contact. This is a 32 Bit field assembled with values from AsnPresenceStateEnum and bits of AsnPresenceStateFlags. (Linked Type: AsnPresenceStateEnum)</p>
iStaticRights	number		<p>The active contact may use services and features of the UCServer. The iStaticRights are corresponding rights the admin granted. See AsnUserStaticRights for more details. (Linked Type: AsnUserStaticRights)</p>
iStaticRights2	number		
iMonitorAccessRights	number		<p>These are the rights, the active contact has on the additional lines the administrator configured for him in the user manager.</p>
asnRemoteContact	AsnNetDatabaseContact		<p>The static contact data of this contact.</p>
seqPhoneLines	AsnContactPhoneLinesV2		<p>The actual line/call state of the contact. Each line may contain the</p>

			actual calls a contact currently has.
asnAbsentState	AsnAbsentStateV2		The actual absent state of the contact. The absent state is the presence state of the user he set manually. This may be overwritten by changes on the different services, the presence of the contact is calculated from (phone, appointment etc.)
asnCustomNote	AsnCustomNote		The contact can set a short note for other users.
seqActualAppointments	SEQAppointmentList		List of the currently active appointments of the contact.
asnNextAppointment	AsnAppointmentEntry		The next appointment the contact will have. (Helps to display an information like "free for the next x hours") Der nächste Termin der aktiv wird
asnUserPropertyBag	AsnUserPropertyBag		Additional information for this contact added for special use cases.

### 13.1.44 AsnUserDynamicRightsList

List of AsnUserDynamicRights

AsnUserDynamicRightsList is an Array of AsnUserDynamicRights

AsnUserDynamicRights is an Object

Name	Type	Optional	Comment
u8sObjectID	string		
iPresenceRights	number		
iPhoneControlRightsPrimary	number		
iPhoneControlRightsSecondary	number		

### 13.1.45 AsnContactsV2

List of AsnContactV2 objects.

AsnContactsV2 is an Array of AsnContactV2

AsnContactV2 is an Object

Name	Type	Optional	Comment
u8sContactId	string		<p>The ID of the contact, which is used to get the presence information and updates from the server. Note: This ID is only unique for the presence information.</p> <p>The contact data behind this is depending on the data source, where the data is copied from while adding the contact to the active user management.</p> <p>This means, a contact may have the same contact ID but different contact data if it is read from another database. To distinguish the different contact informations of the same contact see the fields u8sEntryIDDB, u8sEntryIDStore and u8sEntryID of AsnNetDatabaseContact.</p>
iContactFeatureSet	number		<p>FeatureSet of the contact on the UCServer. See AsnContactFeatureSetEnum for more details. (Linked Type: AsnContactFeatureSetEnum)</p>
iPresenceState	number		<p>The presence state of the contact. This is a 32 Bit field assembled with values from AsnPresenceStateEnum and bits of AsnPresenceStateFlags. (Linked Type: AsnPresenceStateEnum)</p>
iStaticRights	number		<p>The active contact may use services and features of the UCServer. The iStaticRights are corresponding rights the admin granted. See AsnUserStaticRights for more details. (Linked Type: AsnUserStaticRights)</p>
iStaticRights2	number		
iMonitorAccessRights	number		<p>These are the rights, the active contact has on the additional lines the administrator configured for him in the user manager.</p>
asnRemoteContact	AsnNetDatabaseContact		<p>The static contact data of this contact.</p>
seqPhoneLines	AsnContactPhoneLinesV2		<p>The actual line/call state of the contact. Each line may contain the actual calls a contact currently has.</p>

asnAbsentState	AsnAbsentStateV2		The actual absent state of the contact. The absent state is the presence state of the user he set manually. This may be overwritten by changes on the different services, the presence of the contact is calculated from (phone, appointment etc.)
asnCustomNote	AsnCustomNote		The contact can set a short note for other users.
seqActualAppointments	SEQAppointmentList		List of the currently active appointments of the contact.
asnNextAppointment	AsnAppointmentEntry		The next appointment the contact will have. (Helps to display an information like "free for the next x hours") Der nächste Termin der aktiv wird
asnUserPropertyBag	AsnUserPropertyBag		Additional information for this contact added for special use cases.

### 13.1.46 AsnLoginV2SupportedAuthMethod

Authentication method negotiation The supported auth methods

AsnLoginV2SupportedAuthMethod is an Enumeration

Name	Type	Value	Comment
noneOrUnknown	number	0	do not use! Only exists to indicate an unknown type from conversion
basic	number	1	Server supports basic
digest	number	2	Server supports digest
ntlm	number	3	Server supports ntlm
kerberos	number	4	Server supports kerberos
bearer	number	5	Server supports bearer (JWT)
openidc	number	6	Server supports openIDC

### 13.1.47 AsnAuthBasicCredential

AsnAuthBasicCredential is an Object

Name	Type	Optional	Comment
credential	string		base64(username+":"+password) username and password in utf8!

### 13.1.48AsnAuthNTLMCredential

AsnAuthNTLMCredential is an Object

Name	Type	Optional	Comment
authdata	string		Request payload for the NTLM authentication. Containing NTLM Type 1 oder Type 3 message

### 13.1.49AsnAuthKerberosCredential

AsnAuthKerberosCredential is an Object

Name	Type	Optional	Comment
authdata	string		Request payload for the AsnAuthKerberosCredential

### 13.1.50AsnAuthBearer

The information for a bearer auth request

AsnAuthBearer is an Object

Name	Type	Optional	Comment
u8sJWT	string		The JWT payload

### 13.1.51AsnAuthOpenIDC

The information for an openidc auth request

AsnAuthOpenIDC is an Object

Name	Type	Optional	Comment
u8sScope	string	yes	This is send when we want to get a redirect link
u8sIDToken	string	yes	This is send when we got a token from the redirect

### 13.1.52AsnAuthDigestParams

Authentication method negotiation - parameters/challenge for digest authentication

AsnAuthDigestParams is an Object

Name	Type	Optional	Comment
nonce	string		
opaque	string		base64 or hex
qop	string		
algorithm	string	yes	
realm	string	yes	

### 13.1.53AsnLoginV2Token

This type is used as result for the asn\*Login methods

AsnLoginV2Token is a Choice

Name	Type	Comment
u8sJwt	string	A jwt issued by the server
u8sToken	string	An arbitrary token used to authenticate

### 13.1.54AsnLoginV2ResultServerRedirect

Return value when redirecting to another Server (i.e. another UCServer is responsible for these credentials)

AsnLoginV2ResultServerRedirect is an Object

Name	Type	Optional	Comment
u8sRedirectTo	string		the new target server to connect to

### 13.1.55AsnLoginV2ResultServerBusy

Return value when the UCServer currently does not process login requests on this connection

AsnLoginV2ResultServerBusy is an Object

Name	Type	Optional	Comment
iRetryInSeconds	number		

### 13.1.56AsnLoginV2ResultRenegotiateNTLM

AsnLoginV2ResultRenegotiateNTLM is an Object

Name	Type	Optional	Comment
authdata	string		Response payload for the NTLM authentication. Contains NTLM Type 2 message

### 13.1.57AsnLoginV2ChoiceArgument

AsnLoginV2ChoiceArgument is a Choice

Name	Type	Comment
authBasic	AsnAuthBasicCredential	Authenticate basic
authNTLM	AsnAuthNTLMCredential	Authenticate digest authDigest [1] AsnAuthDigestCredential, Authenticate ntlm
authKerberos	AsnAuthKerberosCredential	Authenticate kerberos
authBearer	AsnAuthBearer	Authenticate bearer (JWT)
authOpenIDC	AsnAuthOpenIDC	Authenticate openIDC

### 13.1.58AsnLoginV2SupportedAuthMethods

Authentication method negotiation - An ordered list of supported auth mechanisms

AsnLoginV2SupportedAuthMethods is an Array of AsnLoginV2SupportedAuthMethod

AsnLoginV2SupportedAuthMethod is an Enumeration

Name	Type	Value	Comment
noneOrUnknown	number	0	do not use! Only exists to indicate an unknown type from conversion
basic	number	1	Server supports basic
digest	number	2	Server supports digest
ntlm	number	3	Server supports ntlm

kerberos	number	4	Server supports kerberos
bearer	number	5	Server supports bearer (JWT)
openidc	number	6	Server supports openIDC

### 13.1.59 AsnLoginV2ResultSupportedAuthMethods

Authentication method negotiation - ordered list of available auth methods and parameters to these auth methods

AsnLoginV2ResultSupportedAuthMethods is an Object

Name	Type	Optional	Comment
authMethodsOrdered	AsnLoginV2SupportedAuthMethods		ordered list, defines the order in which the client shall use the auth methods
authDigest	AsnAuthDigestParams	yes	Server supports digest (object contains digest parameters)

### 13.1.60 AsnLoginV2ResultSuccess

Return value for a successful login

AsnLoginV2ResultSuccess is an Object

Name	Type	Optional	Comment
u8sLoggedInUser	string	yes	
token	AsnLoginV2Token	yes	

### 13.1.61 AsnLoginV2Argument

This type is used as parameter for the asn\*Login methods

AsnLoginV2Argument is an Object

Name	Type	Optional	Comment
auth	AsnLoginV2ChoiceArgument	yes	wenn nicht vorhanden,, schickt der server eine Antwort mit den untersttzen Methoden wenn vorhanden, wird die entsprechende Authentisierung durchgefrt

### 13.1.62 AsnLoginV2Result

This type is used as result for the asn\*Login methods

AsnLoginV2Result is a Choice

Name	Type	Comment
supportedAuthMethods	AsnLoginV2ResultSupportedAuthMethods	Supported auth mechanisms
succceeded	AsnLoginV2ResultSuccess	Login succeeded
serverRedirect	AsnLoginV2ResultServerRedirect	Redirect to another server
serverBusy	AsnLoginV2ResultServerBusy	The server is currently busy and asks us to retry later
ntlmRenegotiate	AsnLoginV2ResultRenegotiateNTLM	Authentication requires another step (auth continue)

## 14 CommonSIPCTI

Common interface definitions for SIP and CTI functionality

### Module description

This module contains common usable structures for the sip and cti interfaces.

THERE SHOULD NOT BE ANY FUNCTION/OPERATION DEFINITIONS IN THIS MODULE.

#### 14.1 CommonSIPCTI Types

##### 14.1.1 EnumProjectType

Enumeration for the iProjectType field values of AsnProjectPinRule

Enumeration values for the iProjectType field values used in AsnProjectPinRule

EnumProjectType is an Enumeration

Name	Type	Value	Comment
ePROJECTTYPEUNKNOWN	number	0	
ePROJECTTYPEPBX	number	1	
ePROJECTTYPEJOURNAL	number	2	
ePROJECTTYPEJOURNALPBX	number	3	
ePROJECTTYPEPBXPRIVATE	number	4	

##### 14.1.2 EAsnJournalCallType

The different journal call types

EAsnJournalCallType is an Enumeration

Name	Type	Value	Comment
eCTICall	number	0	A CTI call
eVideoChat	number	1	Audio Chat (WebRTC based) (only video, no audio)
eAudioChat	number	2	Video Chat (WebRTC based) (only audio, no

				video)
eAudioVideoChat	number	3		Video Chat (WebRTC based) (audio & video)
elm	number	4		an instant message
eBluetoothMobile	number	5		Bluetooth coupled device phone call
eBluetoothMobileUnknownDuration	number	6		Bluetooth coupled device phone call - due to limitations the duration is unknown (1 second in journal)
eSipAVCall	number	7		A SIP call
eSMS	number	8		an sms
eScreenSharing	number	9		Screen/Desktop Sharing (WebRTC based)
eRequestedScreenSharing	number	10		A requested Screen/Desktop Sharing (WebRTC based)

#### 14.1.3 EAsnCallState

The internal call states

EAsnCallState is an Enumeration

Name	Type	Value	Comment
unknown	number	0	unknown
destroyed	number	1	the call was destroyed, we did finally hang up
offering	number	2	inbound ringing
dialing	number	4	dialtone outbound
ringback	number	8	outbound, the destination is ringing, the number is complete
busy	number	16	outbound, destination is busy
connected	number	32	we are connected (inbound and outbound)
conferenced	number	64	call is party in a conference (we hold the conference)

hold	number	128	call is hold
disconnected	number	256	the destination did hangup, we hear the beep beep as the call has been terminated on the other side
preparecall	number	512	the call is in preparation, no phone action has been executed so far

#### 14.1.4 AsnContactPhoneLineType

Enumeration for the iType field values of AsnContactPhoneLine.

Enumeration values for the iType field values used in AsnContactPhoneLine.

AsnContactPhoneLineType is an Enumeration

Name	Type	Value	Comment
iPHONENUMBERTYPEALL	number	-1	
iPHONENUMBERTYPEUNKNOWN	number	0	
iPHONENUMBERTYPEPRIMARY	number	1	
iPHONENUMBERTYPESECONDARY	number	2	
iPHONENUMBERTYPEOTHEROWNNUMBER	number	3	

#### 14.1.5 EnumSTUNandTURNType

Enumeration values for iType in AsnConfigSTUNandTURN

EnumSTUNandTURNType is an Enumeration

Name	Type	Value	Comment
eSTUN	number	1	
eTURN	number	2	

#### 14.1.6 AsnProjectPinRule

Description of a project or pin used in the PBX.

Some PBX support the use of special numbers as prefix/postfix to dialing numbers to implement project features. This sequence/object contains the necessary information to complete or format phone numbers according these rules.

AsnProjectPinRule is an Object

Name	Type	Optional	Comment
u8sProjectName	string		
u8sProjectPin	string		
iProjectType	number		
bAssociatedCallIsPrivateCall	boolean		
u8sLocationID	string		
u8sUserEnteredPin	string		
u8sUserEnteredUserID	string		

#### 14.1.7 AsnConfigSTUNandTURN

Sequence describes credentials and/or addresses of STUN/TURN Servers.

See <http://tools.ietf.org/html/draft-uberti-behave-turn-rest-00>, mainly section 2.2 Response.  
This sequence is used for both, STUN and TURN configurations.

AsnConfigSTUNandTURN is an Object

Name	Type	Optional	Comment
iType	number		STUN or TURN Config; see EnumSTUNandTURNType.
u8sUsername	string		TURN username to use (STUN dont need this)
u8sPassword	string		TURN password to use (STUN dont need this)
stValidTo	string		valid to timestamp in UTC
listURIs	UTF8StringList		URIs of STUN/TURN services
iTTL	number		Time To Live in seconds

#### 14.1.8 AsnLineForward

Line forward information object

AsnLineForward is an Object

Name	Type	Optional	Comment

iInternalID	number		Internal ID of this entry
iForwardController	number		Defines where the forwarding is taking place (Linked Type: EnumForwardController)
iForwardMode	number		Defines the forward mode (Linked Type: EnumForwardModes)
iBackEndSpecific	number		In case of iForwardMode == eBACKENDSPECIFIC this contains the backend specific forward mode (e.g. TAPI LINEFORWARDMODE_ constants)
iNoAnswerTime	number		Time in seconds for a forward in case of no answer. 0 if the default time is used.
u8sDestination	string		Destination number
u8sCallerIDList	UTF8StringList		List of caller ids (supercanonic) if the forward is based on caller ids

#### 14.1.9 AsnProjectPinRuleList

List of AsnProjectPinRule

AsnProjectPinRuleList is an Array of AsnProjectPinRule

AsnProjectPinRule is an Object

Name	Type	Optional	Comment
u8sProjectName	string		
u8sProjectPin	string		
iProjectType	number		
bAssociatedCallIsPrivateCall	boolean		
u8sLocationID	string		
u8sUserEnteredPin	string		
u8sUserEnteredUserID	string		

#### 14.1.10 AsnCtiNewCallParams

Additional information about a call, especial for initiate a call.

It is possible to give data of a project or pin to use to dial the number, hide the own callerid, attach contact data to the call a.s.o.

AsnCtiNewCallParams is an Object

Name	Type	Optional	Comment
projectPinRule	AsnProjectPinRule		Projekt informationen
bHideMyCallerID	boolean		Rufnummer unterdrücken (true) oder übertragen (false/DEFAULT)
asnRemoteContact	AsnNetDatabaseContact	yes	Optional NetDatabaseContact, wenn der Client gleich einen mitübergeben will
optionalParams	AsnOptionalParameters	yes	<p>Additionally fields added later in the key-value-field for backward compatibility.</p> <p>Additionally fields added later in the key-value-field for backward compatibility.</p> <ul style="list-style-type: none"> <li>• key "Address", Type DWORD, TAPI Adresse auf der gewählt werden soll</li> <li>• key "FeatureCodeDialing", Type bool, Diese Wahl ist für einen FeatureCode, die Wahl soll nicht sichtbar sein</li> <li>• key "FindAndValidateProject", Type UTF8String, Projekt anhand des übergebenen Namens suchen</li> <li>• key "ProjectErrorHandler", Type Integer, Fehlerbehandlung wenn der übergebene Projektnname nicht gefunden wird</li> <li>• key "DialRemoteOffice", Type Integer, Diese Wahl soll als Remote Office Wahl durchgeführt werden (assoziierte Wahl, RemoteOffice Nummer, Vermitteln auf Zielrufnummer)</li> <li>• key "RemoteOfficeNumber", Type UTF8String, RemoteOffice Rufnummer die für die RemoteOffice Wahl verwendet werden soll</li> </ul>

#### 14.1.11 AsnConfigSTUNandTURNList

List of AsnConfigSTUNandTURN sequences.

AsnConfigSTUNandTURNList is an Array of AsnConfigSTUNandTURN

AsnConfigSTUNandTURN is an Object

Name	Type	Optional	Comment
------	------	----------	---------

iType	number		STUN or TURN Config; see EnumSTUNandTURNType.
u8sUsername	string		TURN username to use (STUN dont need this)
u8sPassword	string		TURN password to use (STUN dont need this)
stValidTo	string		valid to timestamp in UTC
listURIs	UTF8StringList		URIs of STUN/TURN services
iTTL	number		Time To Live in seconds

#### 14.1.12 AsnLineForwards

List of AsnLineForward

AsnLineForwards is an Array of AsnLineForward

AsnLineForward is an Object

Name	Type	Optional	Comment
iInternalID	number		Internal ID of this entry
iForwardController	number		Defines where the forwarding is taking place (Linked Type: EnumForwardController)
iForwardMode	number		Defines the forward mode (Linked Type: EnumForwardModes)
iBackEndSpecific	number		In case of iForwardMode == eBACKENDSPECIFIC this contains the backend specific forward mode (e.g. TAPI LINEFORWARDMODE_ constants)
iNoAnswerTime	number		Time in seconds for a forward in case of no answer. 0 if the default time is used.
u8sDestination	string		Destination number
u8sCallerIDList	UTF8StringList		List of caller ids (supercanonic) if the forward is based on caller ids

## 15 CTI

CTI interface

### CTI Modul

#### Module description

This module contains structures and operations for CTI (remote call control) on TAPI or Bluetooth phone lines in the server.

A client program has access to all lines owned by the logged in user and to additional lines it has dedicated access.

It is possible to monitor all actions on these lines and to call operations to initiate new calls, set forwards, change states and so on.

#### Prerequisites

In order to use the operations described in this document you have to make sure:

- The server has lines configured and activated. (Install an appropriate TAPI-driver for your PBX system.)
- There is at least one user activated on the server, who has lines configured to use.
- The client program is connected to the server via UCServer Web Services using a websocket or directly to the server on the client port (default port 7222).
- The client program encodes the data structures as estos JSON or ASN.1 BER.
- The client program is logged in to the server with a user who has access to lines.

Additional prerequisites for a operation on the PBX and or the TAPI driver may be necessary.

#### Description of the Line-Call-Model

The remote call control and monitoring of the server is based on a line-call-model. This means, that users, lines and calls are organized in a tree like hierarchy.

Each node in this tree contains configuration data and dynamic data, which can be accessed and observed.

The Nodes are:

- The user. This a more a kind of "meta" node, it just holds the list of lines, a client has access to if it is logged in as this user.
- The line(s). Defined with the logged in user, a client can retrieve a list of lines, the user has access to. With these lines, the client can (one time) pull information or can attach itself on to get initial data and events if these data changes over time (get-and-subscribe mechanism).  
The line information contains configuration information and dynamic data about the lines status, including current calls.  
*Note:* A line is identified by its URI tel:number@pbxsystem. The parameter is often named as "u8sLineNumber".  
The "u8sPhoneNumber" is the phone number of a line, but for technical reasons that is not a distinct property of a line. It is possible to have multiple lines with the same phone number!
- The call(s). A line has a list of current calls, which are currently "on" the line. If the client is attached to a line for events, new calls will be announced via events. Changes to these calls are also

announced via events.

There is no need to attach to calls explicitly, this is already done by attaching to the line. Call changing events are then sent to the client too.

Note: A call is identified by its connection identifier often named as "ConnectionID".

## Remarks

Some operations return an empty result object if they are executed successfully. So in this cases, the business logic should wait for result/error before do additional actions.

Phone numbers are normally used and provided in a so called supercanonic notation containing a full qualified number including country, city, main and extension number: +49815136856177

For operations affecting multiple calls be sure to check that all calls affected have the corresponding feature set. To merge two calls both calls have to have the feature eCFEATUREMERGEALLS set.

## Example: Monitoring lines

1. Get the lines the client has access to with `asnCtiEnumPhoneLines`. If you wish to get events if the line list changes afterwards, set the parameter "attachChangeNotify" to 1.
2. Use the lines URI to start monitoring for initial data and events on it. `asnCtiLineMonitorStart` will result in a monitor cross reference id to distinguish between events for different line monitors easier.  
This is useful, if the client has the requirement to monitor the same line multiple times for different use cases.
3. With the line URI you can call functions e.g. `asnCtiMakeCall`, `asnCtiAnswerCall` a.s.o. With the line monitoring on, you will get the according changes on the line and its calls as events back.
4. To stop monitoring a line, call `asnCtiLineMonitorStop` with the corresponding monitor cross reference id.

## Example: Call data transfer

### Phone number formats

The whole system tries to use supercanonic numbers (+country city main and extension number / +49815136856177) wherever possible.

As long as the number is used in supercanonic notation all components can format the number as required (for dialing, for display, etc.)

You likely won't need to format numbers as the system always provides supercanonic numbers.

## 15.1 CTI Operations

### 15.1.1 `asnCtiEnumPhoneLines`

Retrieve line information from the server.

To get information about the lines a user has access to on the server.

There are four possible line types, which can be requested:

- `userOwnLines`: Own lines which the logged in user is owner of.
- `userMonitorLines`: Own lines plus the lines, the user has special access rights for.
- `systemLocalLines`: All lines that are local on the system.
- `systemGlobalLines`: All local lines plus all global known lines; for future use, current its the same as `systemLocalLines`.

If attachChangeNotify is set to 1, the server will send asnCtiNotifyLineAddRemove events, if lines were added or removed for the given scope (or line type).

The monitoring of the line lists can only be stopped by disconnecting from the server.

### **ArgumentType: AsnCtiEnumPhoneLinesArgument**

AsnCtiEnumPhoneLinesArgument is an Object

Name	Type	Optional	Comment
typeofLines	AsnCtiEnumPhoneLinesArgumentEnum		Which lines shall be listed for the user (own, additional lines, all).
attachChangeNotify	number		Request events for line add/remove changes (1) or not (0).

### **ResultType: AsnCtiEnumPhoneLinesResult**

AsnCtiEnumPhoneLinesResult is an Object

Name	Type	Optional	Comment
seqLines	AsnCtiLineInfoList		The list with line information requested.
u8sLineMonitorCrossRefID	string	yes	LineMonitorCrossrefID for add/remove event from the server.

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### **15.1.2 asnCtiSnapshotPhoneLine**

Call this function to get the current status of a line.

With asnCtiSnapshotPhoneLine a client can retrieve the current status of a line inclusive calls, forwardings, DnD and remote office states.

Attention: Do not poll with this function get changes of the line state. Use asnCtiLineMonitorStart instead, to be notified if something on the is changing.

asnCtiEnumPhoneLines is not necessary be called before asnCtiLineMonitorStart

**ArgumentType: AsnCtiSnapshotPhoneLineArgument**

AsnCtiSnapshotPhoneLineArgument is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		Identifier of the line

**ResultType: AsnCtiSnapshotPhoneLineResult**

AsnCtiSnapshotPhoneLineResult is an Object

Name	Type	Optional	Comment
lineInfo	AsnCtiLineInfo		Current line information
seqCalls	AsnCtiCallInformationList		Current calls on the line
iDoNotDisturb	number		Do Not disturb is set (1) oder not (0)
seqLineForwards	AsnLineForwards		Current list of forwardings set on the line
remoteOfficeState	AsnRemoteOfficeState		Current state of remote office feature
optionalParams	AsnOptionalParameters	yes	Optionals <ul style="list-style-type: none"> <li>• Key "InvalidPasswordState" Value AsnInt (1) oder (0)</li> <li>• Key "InvalidPasswordUser" Value String</li> <li>• Key "BusyOnBusy" Value AsnInt (1) oder (0)</li> </ul>

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**15.1.3 asnCtiLineMonitorStart**

Gets the current state of a line and attach for call and change notifies on this line.

In order receive events about calls and line state changes a client can call asnCtiLineMonitorStart. The result will contain a current snapshot of the line, the calls and additional information.

To stop these events call asnCtiLineMonitorStop

Attention: To get this information just once without further events, call `asnCtiSnapshotPhoneLine` instead.

### **ArgumentType: AsnCtiLineMonitorStartArgument**

`AsnCtiLineMonitorStartArgument` is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		Identifier of the line

### **ResultType: AsnCtiLineMonitorStartResult**

`AsnCtiLineMonitorStartResult` is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID to identify the corresponding events after calling <code>asnCtiLineMonitorStart</code> .
lineInfo	AsnCtiLineInfo		Current line state.
seqCalls	AsnCtiCallInformationList		Current calls on the line.
iDoNotDisturb	number		Current state of DoNotDisturb is set (1) or not (0).
seqLineForwards	AsnLineForwards		Current list of forwarding settings on the line.
remoteOfficeState	AsnRemoteOfficeState		Current state of remote office feature.
optionalParams	AsnOptionalParameters	yes	Optionals <ul style="list-style-type: none"> <li>• Key "InvalidPasswordState" Value AsnInt (1) oder (0)</li> <li>• Key "InvalidPasswordUser" Value String</li> <li>• Key "BusyOnBusy" Value AsnInt (1) oder (0)</li> </ul>

### **ErrorType: AsnRequestError**

`AsnRequestError` is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### 15.1.4 asnCtiLineMonitorStop

Stops the call and state change events on a line.

A client can stop events for state changes and calls on a line with a call to asnCtiLineMonitorStop with the corresponding monitor cross reference ID.

#### ArgumentType: AsnCtiLineMonitorStopArgument

AsnCtiLineMonitorStopArgument is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossRefID the client got from the corresponding asnCtiLineMonitorStart.

#### ResultType: AsnCtiLineMonitorStopResult

AsnCtiLineMonitorStopResult is an Object

Name	Type	Optional	Comment
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#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### 15.1.5 asnCtiLineSetDoNotDisturb

Set or remove "Do not Disturb" feature on the a line.

Most PBX support "Do not Disturb" (DnD) on phone lines, so the user can prevent being disturbed by phone calls by setting this feature on his phone line.

A Client can call this function to set or remove this feature from the line. See AsnCtiLineSetDoNotDisturbArgument for the arguments needed.

#### ArgumentType: AsnCtiLineSetDoNotDisturbArgument

AsnCtiLineSetDoNotDisturbArgument is an Object

Name	Type	Optional	Comment
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u8sLinePhoneNumber	string		Identifier of the line
bDoNotDisturb	boolean		Set DnD (1, true) or remove it (0, false)

**ResultType: AsnCtiLineSetDoNotDisturbResult**

AsnCtiLineSetDoNotDisturbResult is an Object

Name	Type	Optional	Comment
------	------	----------	---------

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**15.1.6 asnCtiLineSetRemoteOffice**

Changes the state of the "Remote Office" feature on a line.

"Remote office" is a feature, where a user can virtually attach his mobile phone to his line on the PBX. So every incoming call to the line on the PBX will be automatically forwarded to the mobile phone. Additionally the outgoing calls will be forwarded to the mobile too, if either the PBX itself supports this feature or the UCServer can emulate it.

**ArgumentType: AsnCtiLineSetRemoteOfficeArgument**

AsnCtiLineSetRemoteOfficeArgument is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		Identifier of the line
remoteOfficeState	AsnRemoteOfficeState		The state to set. See AsnRemoteOfficeState for more details.

**ResultType: AsnCtiLineSetRemoteOfficeResult**

AsnCtiLineSetRemoteOfficeResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 15.1.7 asnCtiMakeCall

Initiates a new call on a line.

In most cases the operation is simple. Just provide the line number (e.g. '+49815136856177') to dial from and the number to dial to, let the server format the dialing number.

This is it.

It will get a bit more complex, if you want to use additional features like project/pin rules, hide caller id, provide the contact data and so on.

In this cases you have to add AsnCtiNewCallParams to your arguments. See AsnCtiNewCallParams for more details.

Remark: The result of this operation does not necessarily reflect, that a call has been dialed successfully. It just confirms the successful execution of the operation.

The corresponding result of the dial command itself (to the PBX for example) will be sent as an asnCtiNotifyMakeCallResult event.

#### ArgumentType: AsnCtiMakeCallArgument

AsnCtiMakeCallArgument is an Object

Name	Type	Optional	Comment
u8sPhoneNumberFrom	string		Phone number (supercanonic notation, starts with '+', e.g. '+49815136856177') or line URL of the line where the call will be initiated.
u8sPhoneNumberTo	string		Number to dial.
iNumberFormat	number		<p>The u8sPhoneNumberTo is the number to dial and normally the server would reformat the number into a dialable form. This behavior can be altered:</p> <ul style="list-style-type: none"> <li>• 0: Server should not format the number for dialing, it shall use it like it is.</li> <li>• Other values: Server should format the number before dialing (set prefix and area code etc.).</li> </ul> <p>Hint: If you are not sure, the number should always be</p>

			formatted (-> use '1')  (Linked Type: AsnETAPIDialNumberFormat)
newCallParams	AsnCtiNewCallParams	yes	Allows to set additional information (Project/Pin rules, hide caller id, set remote contact details etc.). These information are completely optional and in the most cases you can omit this parameter.

**ResultType: AsnCtiMakeCallResult**

AsnCtiMakeCallResult is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection identifier of the call
optionalParams	AsnOptionalParameters	yes	<p>Additional parameters for asnCtiSetCallData added here for backward compatibility.</p> <ul style="list-style-type: none"> <li>Key "WasProjectFound", Value bool, optional. Only initiate the call if the project (parameter in newCallParams of AsnCtiMakeCallArgument) was found.</li> </ul>

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**15.1.8 asnCtiDropCall**

Drop a call identified by its connection identifier.

A call can be dropped by its connection identifier if it is necessary to identify the exact call, e.g. in a conference or one of the held calls on a line.

If you just want to drop the active call on a line you can call asnCtiLineDropCall instead.

**ArgumentType: AsnCtiDropCallArgument**

AsnCtiDropCallArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		The connection identifier of the call to drop.

**ResultType: AsnCtiDropCallResult**

AsnCtiDropCallResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the call was dropped, false/0 otherwise.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**15.1.9 asnCtiLineDropCall**

Drop the active call on a line.

To simply drop the active call on a line, call this operation.

If there are more than one call on the line, it is recommended to call asnCtiDropCall and specify the exact call to drop by its connection identifier.

**ArgumentType: AsnCtiLineDropCallArgument**

AsnCtiLineDropCallArgument is an Object

Name	Type	Optional	Comment
u8sLineDescriptor	string		The line number (e.g. +498151368562177) or the line URI of the line.

**ResultType: AsnCtiLineDropCallResult**

AsnCtiLineDropCallResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the call was dropped, false/0 otherwise.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**15.1.10asnCtiAnswerCall**

Accept a call on a line.

If a call is in state OFFERING (see EnumCallState, incoming call ringing) the call can be accepted with this operation.

**ArgumentType: AsnCtiAnswerCallArgument**

AsnCtiAnswerCallArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Call identifier of the call to accept.

**ResultType: AsnCtiAnswerCallResult**

AsnCtiAnswerCallResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the call was accepted, false/0 otherwise.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**15.1.11asnCtiRedirectCall**

Redirect an incoming call to another line.

To redirect an incoming, ringing call (call state OFFERING) to another line, execute this operation. This operation works also for lines, where the user has corresponding access rights to.

Additionally this operation can be executed on a contact of the favorite list where the caller has the access rights to control the lines of the contact.

Remark: If you want to pickup a call (picking an offering call to an own line), use asnCtiPickupCall

### **ArgumentType: AsnCtiRedirectCallArgument**

AsnCtiRedirectCallArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID of the contact to redirect a call from his line. Leave it empty if you just want to redirect a call by its identifier.
u8sConnectionID	string		Connection identifier of the call to redirect.
u8sPhoneNumber	string		The line number to redirect to. This number can be in short or long format if you set iNumberFormat to 1.
iNumberFormat	number		<p>The u8sPhoneNumber is the number to redirect to and normally the server would reformat the number into a dialable form. This behavior can be altered:</p> <ul style="list-style-type: none"> <li>• 0: Server should not format the number for redirecting, it shall use it like it is.</li> <li>• Other values: Server should format the number (set prefix and area code etc.). Hint: If you are not sure, the number should always be formatted (-&gt; use '1')</li> </ul> <p>(Linked Type: AsnETAPIDialNumberFormat)</p>

### **ResultType: AsnCtiRedirectCallResult**

AsnCtiRedirectCallResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the call was redirected, false/0 otherwise.

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error

u8sErrorString	string		A string representing the error
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### 15.1.12asnCtiPickupCall

Pickup a ringing call from another line on an own line.

Getting an ringing call from another line to an own line execute this operation.

Picking up calls requires an appropriate configuration (rights) on the PBX.

Thus it is recommended to use asnCtiRedirectCall if you are not aware if the configuration has been set properly.

Picking a call leads to a connected call on the extension picking the call while redirecting leads to an offering call on the new extension.

#### ArgumentType: AsnCtiPickupCallArgument

AsnCtiPickupCallArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID of the contact to pickup a call from his line. Leave it empty if you just want to pickup a call by its identifier.
u8sConnectionID	string		Connection identifier of the call to redirect.
u8sPhoneNumber	string		The line number to pickup to. This number can be in short or long format if you set iNumberFormat to 1.
iNumberFormat	number		<p>The u8sPhoneNumber is the number to pickup to and normally the server would reformat the number into a dialable form. This behavior can be altered:</p> <ul style="list-style-type: none"> <li>• 0: Server should not format the number for pickup, it shall use it like it is.</li> <li>• Other values: Server should format the number (set prefix and area code etc.). Hint: If you are not sure, the number should always be formatted (-&gt; use '1')</li> </ul> <p>(Linked Type: AsnETAPIDialNumberFormat)</p>

#### ResultType: AsnCtiPickupCallResult

AsnCtiPickupCallResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the call was picked, false/0 otherwise.
optionalParams	AsnOptionalParameters	yes	optionalParams Name "RemoteInvokeID" Value String - Some dirty internal UCServer

			logic Simon added and should get reworked, the interface does NOT need this property here
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### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 15.1.13 asnCtiStartCallRecording

Start recording of a call.

If the call recorder is configured on the server, calls can be recorded if the feature eFEATURESTARTCALLRECORD is set on the call.

If executed successfully, the server will create a conference with the connected party and the call recorder. If the caller or called party disconnects, the conference will be terminated and the server will dispatch the recording (wav or mp3 file) to the initiator of the recording.

### ArgumentType: AsnCtiStartCallRecordingArgument

AsnCtiStartCallRecordingArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection identifier of the call to record.

### ResultType: AsnCtiStartCallRecordingResult

AsnCtiStartCallRecordingResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the record starts successful, false/0 otherwise.

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error

u8sErrorString	string		A string representing the error
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### 15.1.14asnCtiStopCallRecording

Stop recording of a call.

To stop recording a call without destroying the connection this operation is executed.  
This will terminate the conference with the call recorder line without disconnecting the other calls.  
To execute this operation successfully, the feature eCFEATURESTOPCALLRECORD must be set on the call.

The record will be sent to the initiator of the recording.

#### ArgumentType: AsnCtiStopCallRecordingArgument

AsnCtiStopCallRecordingArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection identifier of the call to stop recording on.

#### ResultType: AsnCtiStopCallRecordingResult

AsnCtiStopCallRecordingResult is an Object

Name	Type	Optional	Comment

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 15.1.15asnCtiSetCallData

Add some data to the call which will be transferred to other clients.

For some use cases it will be necessary to transfer business data attached to a call to other clients with the call, e.g. while transferring it.

With this operation this data can be added to the call information of a call without setting the whole information structure again.

This operation only executes successfully if the user is the line owner.

[TODO: MORE DETAILS NEEDED! Especial for CallDataAnnouncement (ConnectionID unknown)]

**ArgumentType: AsnCtiSetCallDataArgument**

AsnCtiSetCallDataArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection identifier of the call to set data for. If this is unknown (empty), the additional parameters in optionalParams are needed.
callDataList	AsnCtiCallDataList		Call data key value map
optionalParams	AsnOptionalParameters	yes	<p>Additional parameters for asnCtiSetCallData added here for backward compatibility. These parameters are only needed, if the connection identifier is unknown.</p> <ul style="list-style-type: none"> <li>• Key "calledNumber", Value String</li> <li>• Key "transferringNumber", Value String</li> <li>• Key "callStateMask", Value double</li> <li>• Key "hostCallID", Value double</li> </ul>

**ResultType: AsnCtiSetCallDataResult**

AsnCtiSetCallDataResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		Data was accepted true/1 if successful set, false/0 otherwise

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**15.1.16asnCtiMergeCalls**

Merge two calls on a line together.

It is possible to connect two parties with each other. It does not result in a conference, the line is not member of that call any longer after executing the function.

To execute this successfully, the connection identifier of the calls must be known and the calls must be in the

call list of the same line (e.g. one active, one on hold).  
 Both calls must have the call feature eCFEATUREMERGECALLS set.

### **ArgumentType: AsnCtiMergeCallsArgument**

AsnCtiMergeCallsArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID1	string		Connection identifier of the first call to merge.
u8sConnectionID2	string		Connection identifier of the second call to merge.

### **ResultType: AsnCtiMergeCallsResult**

AsnCtiMergeCallsResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the merge was successful, false/0 otherwise.

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## **15.1.17asnCtiSwapHold**

Swap puts the active call on hold and retrieves the hold call

You can swap between a held call and an active call with this function.

This operation needs two calls on the same line (one active, one held) to execute successfully.  
 Both calls must have the call feature eCFEATURESWAPHOLD set.

### **ArgumentType: AsnCtiSwapHoldArgument**

AsnCtiSwapHoldArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection identifier of the held call.

**ResultType: AsnCtiSwapHoldResult**

AsnCtiSwapHoldResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if swap was successful, false/0 otherwise.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**15.1.18asnCtiHold**

Set the call on hold, so another another call in the same line will be possible to make.

For some reasons it is possible to set a call on hold. This can be used to a call back to another line, setup a conference, set a transfer etc.

A call on hold isn't disconnect, but the call partner cannot hear what is spoken while on hold and is waiting for further actions.

**ArgumentType: AsnCtiHoldArgument**

AsnCtiHoldArgument is an Object

Name	Type	Optional	Comment
bHold	boolean		true/1 if the call shall be set on hold, false/0 otherwise.
u8sConnectionID	string		Connection identifier of the call to change hold state.

**ResultType: AsnCtiHoldResult**

AsnCtiHoldResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if execution was successful, false/0 otherwise. If an error occurred, AsnRequestError will be set.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 15.1.19 asnCtiSetForward

Set simple call forwards.

Set a call forward on a line (optionally with conditions). Default is a unconditional forward from one line to another.

To set multiple forwards on a line (if it is supported by the PBX system), call this function again on the same line.

#### ArgumentType: AsnCtiSetForwardArgument

AsnCtiSetForwardArgument is an Object

Name	Type	Optional	Comment
u8sPhoneNumberFrom	string		Number of the line to forward from. Format should be like '+49815136856177' or it can be a line URI.
u8sPhoneNumberTo	string		Number of the line to forward to. Format must be long format, like '+49815136856177'.
optionalParams	AsnOptionalParameters	yes	<p>Additional parameter added for backward compatibility here.</p> <ul style="list-style-type: none"> <li>Key "ForwardMode", Type AsnInt, optional. Specifies the condition for the forward. If left out, the forward will be unconditional (all calls get forwarded).</li> </ul> <p>(Linked Type: AsnForwardMode)</p>

#### ResultType: AsnCtiSetForwardResult

AsnCtiSetForwardResult is an Object

Name	Type	Optional	Comment
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bSuccess	boolean		true/1 if the forward is set, false/0 otherwise.
bExistingForwardingChanged	boolean		true/1 if this is the very first forward or if your PBX does not support multiple forwards. A preexisting forward was replaced in this case. false/0 if your forward is added to the list of forwards.
optionalParams	AsnOptionalParameters	yes	optionalParams Name "RemoteInvokeID" Value String - Some dirty internal UCServer logic Simon added and should get reworked, the interface does NOT need this property here

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**15.1.20asnCtiRemoveForward**

Remove a forward from a line.

This operation removes all forwards from a line

To remove one forward form the list of forwards on the line, the optional parameters "ForwardMode" and "ForwardDestination" must be set to match exactly in the list.

This information can be read from the current line information sent to the client by the event "asnCtiNotifyLineInfoChanged" or by calling asnCtiSnapshotPhoneLine

**ArgumentType: AsnCtiRemoveForwardArgument**

AsnCtiRemoveForwardArgument is an Object

Name	Type	Optional	Comment
u8sPhoneNumberFrom	string		Number of the line to remove the forward from. Format should be like '+49815136856177' or it can be a line URI.
optionalParams	AsnOptionalParameters	yes	Additional parameters added for

			<p>backward compatibility here. To remove exact one forward from the forward list of the line, these optional parameters must be set accordingly.</p> <ul style="list-style-type: none"> <li>• Key "ForwardMode", Type AsnInt, optional.</li> <li>• Key "ForwardDestination", Type AsnString, optional.</li> </ul> <p>(Linked Type: AsnForwardMode)</p>
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### **ResultType: AsnCtiRemoveForwardResult**

AsnCtiRemoveForwardResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the forward(s) has been removed, false/0 otherwise. If an error occurred AsnRequestError will be set.
optionalParams	AsnOptionalParameters	yes	optionalParams Name "RemoteInvokeID" Value String - Some dirty internal UCServer logic Simon added and should get reworked, the interface does NOT need this property here

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### **15.1.21asnCtiDialDigits**

Dial DTMF tones on an active call.

For call menus or other use cases it is possible to generate dial tones on an active call.

There are different digit modes possible: LINEDIgitMode\_DTMF, LINEDIgitMode\_DTMFEND and LINEDIgitMode\_PULSE

### **ArgumentType: AsnCtiDialDigitsArgument**

AsnCtiDialDigitsArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		
iDigitMode	number		Dialing mode for the digits. (Linked Type: EnumCtiDigitMode)
iDigitDuration	number		Both the duration in milliseconds of DTMF digits and pulse and DTMF inter-digit spacing. A value of 0 uses a default value.
u8sDigitsToDial	string		The digits to dial. See EnumCtiDigitMode for valid characters.

### ResultType: AsnCtiDialDigitsResult

AsnCtiDialDigitsResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if operation was successful, false/0 otherwise. If an error occurred AsnRequestError will be set.

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### 15.1.22asnCtiCompleteCall

Set a automatic call back if the call was not accepted or busy.

If a call was unsuccessful because the remote party was busy or the call was not answered, this operation sets the the complete call function of the PBX system to call back the caller automatically if the called party / line is free / back again.

### ArgumentType: AsnCtiCompleteCallArgument

AsnCtiCompleteCallArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection identifier of the call to be completed automatically.

### ResultType: AsnCtiCompleteCallResult

AsnCtiCompleteCallResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the call completion was set successful, false/0 otherwise.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**15.1.23asnCtiConference**

Initiate a conference call with two already existing calls of a line.

To initiate a conference, setup two calls via a call back (asnCtiMakeCall => get this call establish => asnCtiMakeCall),  
so you have one call on hold and one active. Now execute this operation with the two connection identifiers.  
As result, you should now have a conference with 3 attendants (you and the other two call parties).

**ArgumentType: AsnCtiConferenceArgument**

AsnCtiConferenceArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID1	string		Connection identifier of the active call.
u8sConnectionID2	string		Connection identifier of the held call.

**ResultType: AsnCtiConferenceResult**

AsnCtiConferenceResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the conference was initiated successful, false/0 otherwise.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment

iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 15.2 CTI Events

### 15.2.1 asnCtiNotifyLineInfoChanged

Event from the server if a line changed its status or has been added or removed.

In order to get these events the line must be monitored with asnCtiLineMonitorStart

#### ArgumentType: AsnCtiNotifyLineInfoChangedArgument

AsnCtiNotifyLineInfoChangedArgument is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
lineInfo	AsnCtiLineInfo		The new line information.

### 15.2.2 asnCtiNotifyLineDoNotDisturbChanged

Event from the server if a line changed its DnD status.

In order to get these events the line must be monitored with asnCtiLineMonitorStart

#### ArgumentType: AsnCtiNotifyLineDoNotDisturbChangedArgument

AsnCtiNotifyLineDoNotDisturbChangedArgument is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
iDoNotDisturb	number		Current status of DnD - (1) set, (0) not set.
optionalParams	AsnOptionalParameters	yes	<ul style="list-style-type: none"> <li>• Key "BusyOnBusy" Value AsnInt (1) oder (0)</li> </ul>

### 15.2.3 asnCtiNotifyLineRemoteOfficeChanged

Event from the server if a line changed its remote office state.

In order to get these events the line must be monitored with asnCtiLineMonitorStart

#### ArgumentType: AsnCtiNotifyLineRemoteOfficeChangedEventArgs

AsnCtiNotifyLineRemoteOfficeChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
remoteOfficeState	AsnRemoteOfficeState		The new remote office state of the line.

### 15.2.4 asnCtiNotifyMonitorStopped

Event from the server that a monitoring point was closed due to a configuration change

In order to get these events the line must be monitored with asnCtiLineMonitorStart

This event is send to the client if a monitor was closed due to a configuration change on the server

The client shall remove the monitor point with u8sMonitorCrossRefID on the client side.

#### ArgumentType: AsnCtiNotifyMonitorStoppedArgument

AsnCtiNotifyMonitorStoppedArgument is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.

### 15.2.5 asnCtiNotifyLineSortOrderChanged

Event from the server that a monitoring point has changed position from the configurative view

In order to get these events the line must be monitored with asnCtiLineMonitorStart

This event is send to the client if the sort order of the lines has changed (line added, config lines have swapped positions, (no event is dispatched if a line was removed))

This event is only dispatched for the userOwnLines (see AsnCtiEnumPhoneLinesArgument)

#### ArgumentType: AsnCtiNotifyLineSortOrderChangedEventArgs

AsnCtiNotifyLineSortOrderChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.

u8sLineURISortOrder	UTF8StringList		Line sort order based on the user configuration, CTI/SIP LineURIs, AV LineURI, additional lines (not server configured line uris like mobile lines)
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### 15.2.6 asnCtiNotifyLineForwardingChanged

Event from the server if a line changed its forwardings.

In order to get these events the line must be monitored with `asnCtiLineMonitorStart`

#### ArgumentType: AsnCtiNotifyLineForwardingChangedEventArgs

`AsnCtiNotifyLineForwardingChangedEventArgs` is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding <code>asnCtiLineMonitorStart</code> .
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
seqLineForwards	AsnLineForwards		New forwarding settings on the line.

### 15.2.7 asnCtiNotifyLineCallInformationChanged

Event from the server if a call changed its state.

In order to get this event the line must be monitored with `asnCtiLineMonitorStart`

Calls are changing their state and additional information during their live time. This event reflects the new status

#### ArgumentType: AsnCtiNotifyLineCallInformationChangedEventArgs

`AsnCtiNotifyLineCallInformationChangedEventArgs` is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding <code>asnCtiLineMonitorStart</code> .
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
reason	number		Reason for the event. See <code>AsnCtiCallInfoChangedReason</code> fro details. (Linked Type: <code>AsnCtiCallInfoChangedReason</code> )
callinformation	AsnCtiCallInformation		(Possible) reduced version a call information according to the reason.

### 15.2.8 asnCtiNotifyLineAddRemove

Event from the server if asnCtiEnumPhoneLines was called to monitor the lines of the user.  
In order to get this event the line must be monitored via asnCtiEnumPhoneLines

With asnCtiEnumPhoneLines the client defined, which sort of lines it wants to monitor.  
If there are changes to the corresponding line list, this event will reflect the changes to the client.

#### ArgumentType: AsnCtiNotifyLineAddRemoveArgument

AsnCtiNotifyLineAddRemoveArgument is an Object

Name	Type	Optional	Comment
u8sLineMonitorCrossRefID	string		CrossRefID the client got from the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
addremove	AsnCtiNotifyLineAddRemoveArgumentEnum		Line was added (0) or removed (1).
lineInfo	AsnCtiLineInfo		The current line information set.

### 15.2.9 asnCtiNotifyMakeCallResult

Event from the server with the result of an asynchronous make call operation on the server.  
In order to get this event the client must have called asnCtiMakeCall first.

Make call is a asynchronous process in the UCServer. So the final result will be send as an event from the server.

This event contains the result the PBX provided.

#### ArgumentType: AsnCtiNotifyMakeCallResultArgument

AsnCtiNotifyMakeCallResultArgument is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		Line identifier on which the make call was performed.
u8sConnectionID	string		Unique identifier of the call (ConnectionID).
success	number		If make call was successfully executed on TAPI, this is (1), (0) otherwise.

### 15.2.10asnCtiNotifyConferenceCreated

Event from the server if there is a conference established on a line.

In order to get these events the line must be monitored via asnCtiLineMonitorStart

This event will inform the client, if a conference was established and with whom.

In this way, the client gets detailed information about the participants and the conference controller.

#### ArgumentType: AsnCtiNotifyConferenceCreatedArgument

AsnCtiNotifyConferenceCreatedArgument is an Object

Name	Type	Optional	Comment
u8sLineMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
conferenceControllerCallInfo	AsnCtiCallInformation		Information about the conference controller call. See AsnCtiCallInformation for details.
conferenceMemberCallInfoList	AsnCtiCallInformationList		Information about the current participating calls in this conference.

### 15.2.11asnCtiNotifyConferenceDestroyed

Event from the server if a conference is closed/destroyed.

In order to get these events the line must be monitored via asnCtiLineMonitorStart

#### ArgumentType: AsnCtiNotifyConferenceDestroyedArgument

AsnCtiNotifyConferenceDestroyedArgument is an Object

Name	Type	Optional	Comment
u8sLineMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
conferenceControllerCallInfo	AsnCtiCallInformation		The call information of the conference controller.
conferenceMemberCallInfoList	AsnCtiCallInformationList		The call information of the

			other participants.
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### 15.2.12 asnCtiNotifyConferencePartyAdded

Event from the server when a new participant was added to a conference.  
In order to get these events the line must be monitored via asnCtiLineMonitorStart

#### ArgumentType: AsnCtiNotifyConferencePartyAddedArgument

AsnCtiNotifyConferencePartyAddedArgument is an Object

Name	Type	Optional	Comment
u8sLineMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
conferenceControllerCallInfo	AsnCtiCallInformation		Call information of the conference controller.
conferenceMemberCallInfo	AsnCtiCallInformation		Call information of the added new conference participant.

### 15.2.13 asnCtiNotifyConferencePartyRemoved

Event from the server when a conference participant was removed.  
In order to get these events the line must be monitored via asnCtiLineMonitorStart

#### ArgumentType: AsnCtiNotifyConferencePartyRemovedArgument

AsnCtiNotifyConferencePartyRemovedArgument is an Object

Name	Type	Optional	Comment
u8sLineMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
conferenceControllerCallInfo	AsnCtiCallInformation		Call information of the conference controller.
conferenceMemberCallInfo	AsnCtiCallInformation		Call information of the removed conference participant.

### **15.2.14asnCtiNotifyLineCallFeaturesChanged**

Event from the server when call features have changed.

In order to get these events the line must be monitored via asnCtiLineMonitorStart

If the state of a call changes or other events on a call happened its features are most likely change too. Some changes does not change the call state itself, so there will be no call information change event for that call.

In this case asnCtiNotifyLineCallFeaturesChanged will be sent if only the call features have changed.

#### **ArgumentType: AsnCtiNotifyLineCallFeaturesChangedEventArgs**

AsnCtiNotifyLineCallFeaturesChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sLineMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
callFeaturesList	AsnCtiCallFeaturesList		List of call with their current features which have changed.

### **15.2.15asnCtiNotifyLineProjectSettingsChanged**

Event from the server when the project settings or the location of a line has changed.

In order to get these events the line must be monitored via asnCtiLineMonitorStart

The project settings are part of the location settings of a line. If the location settings were changed, this event will be sent.

#### **ArgumentType: AsnCtiNotifyLineProjectSettingsChangedEventArgs**

AsnCtiNotifyLineProjectSettingsChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossRefID the client got from the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
u8sLocationID	string		The identifier for the current line location settings.
projectList	AsnProjectPinRuleList		The current list of project settings of the line.

## 15.3 CTI Types

### 15.3.1 AsnCtiNotifyLineAddRemoveArgumentEnum

Line was added (0) or removed (1).

AsnCtiNotifyLineAddRemoveArgumentEnum is an Enumeration

Name	Type	Value	Comment
added	number	0	Line was added.
removed	number	1	Line was removed.

### 15.3.2 AsnCtiEnumPhoneLinesArgumentEnum

Which lines shall be listed for the user (own, additional lines, all).

AsnCtiEnumPhoneLinesArgumentEnum is an Enumeration

Name	Type	Value	Comment
userOwnLines	number	0	Own lines which the logged in user is owner of.
userMonitorLines	number	1	Own lines plus the lines, the user has special access rights for.
systemLocalLines	number	2	All lines that are local on the system.
systemGlobalLines	number	3	All local lines plus all global known lines; for future use, current its the same as systemLocalLines.

### 15.3.3 AsnCtiLineOpenStatus

Line Open State (identical to ECTILineStatusEnum)

In order to get line and call states or to use remote call control you have to "open" a line with asnCtiLineMonitorStart

AsnCtiLineOpenStatus is an Enumeration

Name	Type	Value	Comment
lineStatusDisconnected	number	0	line ready
lineStatusClosed	number	1	line is closed

lineStatusOpen	number	2	line is opened and ready for usage
lineStatusOpenNoPhoneConnected	number	3	line is opened but out of service; e.g. no phone connected
lineStatusOpenNoPBXConnection	number	4	line is opened but the connection to the PBX is broken
lineStatusOpenPBXLoginFailed	number	5	line is opened but the login on the PBX has failed
lineStatusOpenPBXNoLicense	number	6	line is opened but there is a license missing on the PBX
lineStatusOpenPBXSessionCountExceeded	number	7	line is opened but the CSTA session counter on the PBX exceeded
lineStatusFailedNoLicense	number	8	line cannot be opened because of missing license on the UCServer
lineStatusFailedNoECSTALicense	number	9	line cannot be opened because of missing license on the ECSTA driver

#### 15.3.4 EnumCallFeatures

Bitfield of features/functions which can be executed on a call.

These bit flags describe the features/functions which can be executed on a line/call. These flags are set by the UCServer.

EnumCallFeatures is an Enumeration

Name	Type	Value	Comment
eCFEATURENONE	number	0	no features/function possible
eCFEATUREANSWER	number	1	Answer a call (state eCALLSTATEOFFERING)
eCFEATUREMAKECALL	number	2	Make call is allowed. You can call MakeCall also while having a call to setup a consultation.
eCFEATURECOMPLETECALL	number	4	Complete a busy or an unanswered call for automated callback (if supported by

			PBX system)
eCFEATUREMERGECALLS	number	16	Merge the active call (state eCALLSTATECONNECTED) with an on hold call (state eCALLSTATEHOLD). This will disconnect the executing client from the call.
eCFEATUREHANGUP	number	32	Terminate an active call (state eCALLSTATECONNECTED) or reject an incoming offering call (state eCALLSTATEOFFERING).
eCFEATUREBLINDTRANSFER	number	256	Blind transfer an active call (state eCALLSTATECONNECTED) to another extension.
eFEATUREREDIRECT	number	512	Redirect an incoming offering call (state eCALLSTATEOFFERING) to another extension.
eFEATUREMAYBEPICKUPED	number	1024	The call may be picked by another line (state eCALLSTATEOFFERING).
eFEATURESWAPHOLD	number	4096	The active call will be swapped with a call on hold on the same line. Both calls must have set this feature in order to be able to swaphold.
eFEATUREHOLD	number	8192	Put the active call (state eCALLSTATECONNECTED) on hold (state eCALLSTATEHOLD).
eFEATUREUNHOLD	number	16384	Retrieve the call currently on hold (state eCALLSTATEHOLD).
eFEATURECONFERENCESTARTEU	number	65536	Start a conference (european model; you have an active call (state eCALLSTATECONNECTED) and a hold call (state eCALLSTATEHOLD)).
eFEATURECONFERENCEADDPARTY	number	131072	Call can be added to an existing conference.
eFEATURECONFERENCESTARTUSA	number	262144	Start a conference (american model; you have an active call and you decide you

			want to setup a conference)
eCFEATUREGENERATETONE	number	1048576	A way of generating tones on the call (currently not supported by UCServer)
eCFEATUREDIALDIGITS	number	2097152	Dial DTMF tones is possible
eFEATURESTARTCALLRECORD	number	16777216	Start call recording (see UCServer Administration for details how the UCServer is supporting call recording).
eFEATURESTOPCALLRECORD	number	33554432	Stop call recording (see UCServer Administration for details how the UCServer is supporting call recording).

### 15.3.5 EnumLineFeatures

Bitfield describing which features/function can be executed on a line

Some of these bit flags indicate that certain functions may be called on the line. For example, if eCTILINEFEATUREMAKECALL is set, the client may call "MakeCall".

Other bits are indicators of a status, like eCTILINEFEATUREINVALIDPASSWORD, for example, tells the client, that the line will not work as expected, because the password validation on the PBX failed.

EnumLineFeatures is an Enumeration

Name	Type	Value	Comment
eCTILINEFEATURENONE	number	0	No actions are available. The client can only show the call states, but no other actions will be completed successfully.
eCTILINEFEATUREMAKECALL	number	1	Call can be initiated.
eCTILINEFEATUREDONOTDISTURB	number	2	"Do not disturb" can be set/modified.
eCTILINEFEATUREPICKUP	number	4	Calls from this line can be picked to other lines.
eCTILINEFEATUREBLOCKID	number	8	While "MakeCall" the CALLERID may be suppressed.
eCTILINEFEATURENOIMMEDIATEINQUIRY	number	16	This flag is set, if it is not possible to execute "MakeCall" while another

				call is already in active state (no automatic "put on hold" available).
eCTILINEFEATUREREMOTEOFFICE	number	32		Remote Office - Nomadic Mode - is possible
eCTILINEFEATUREINVALIDPASSWORD	number	64		Invalid Password (currently only for BroadWorks lines)
eCTILINEFEATUREREMOTEOFFICEEMULATION	number	128		This flag can be set additionally with ECTILINEFEATURE_REMOTEOFFICE, if the remote office feature will be emulated by the UCServer (call association).

### 15.3.6 EnumForwardModes

Different forward modes the API supports

These are the different forward modes the UCServer supports for forwarding.

The highest value is eFORWARDBACKENDSPECIFIC (2147483648; 0x80000000) - A backend specific forwarding entry

EnumForwardModes is an Enumeration

Name	Type	Value	Comment
eFORWARDMODEUNKNOWN	number	0	0x0000_0000 Forward unknown
eFORWARDMODEIMMEDIATE	number	1	0x0000_0001 Forward Immediate
eFORWARDMODEBUSY	number	2	0x0000_0002 Forward on Busy
eFORWARDMODENOANSW	number	4	0x0000_0004 Forward on No Answer
eFORWARDMODEBUSYINT	number	8	0x0000_0008 Forward on Busy for internal callers
eFORWARDMODEBUSYEXT	number	16	0x0000_0010 Forward on Busy for external callers
eFORWARDMODENOANSINT	number	32	0x0000_0020 Forward on No answer for internal callers
eFORWARDMODENOANSEXT	number	64	0x0000_0040 Forward on No answer for external callers
eFORWARDMODEIMMINT	number	128	0x0000_0080 Forward immediate for internal callers

eFORWARDMODEIMMEXT	number	256	0x0000_0100 Forward immediate for external callers
eFORWARDDISC	number	512	
eFORWARDDISCINT	number	1024	0x0000_0200 Forward on No client connected for internal callers (SIP)
eFORWARDDISCEXT	number	2048	0x0000_0400 Forward on No client connected for external callers (SIP)
eFORWARDADMINDISC	number	4096	0x0000_0800 Admin Forward on No client connected (SIP)
eFORWARDADMINDISCINT	number	8192	0x0000_1000 Admin Forward on No client connected for internal callers (SIP)
eFORWARDADMINDISCEXT	number	16384	0x0000_2000 Admin Forward on No client connected for external callers (SIP)
eFORWARDALLMODESMASK	number	32767	0x0000_4000 Backend specific forwarding entry

### 15.3.7 EnumForwardController

Different forward controllers the API supports

These are the different forward controllers the UCServer supports for forwarding

EnumForwardController is an Enumeration

Name	Type	Value	Comment
eFORWARDCONTROLLERPBX	number	1	Forwardings take place in the PBX
eFORWARDCONTROLLERTAPISERVERADMIN	number	2	Forwardings take place in the UCServer on an administrative basis
eFORWARDCONTROLLERTAPISERVERUSER	number	4	Forwardings take place in the UCServer on an user basis

### 15.3.8 AsnCtiEnumPhoneLinesErrorEnum

Error codes in case AsnRequestError is returned.

AsnCtiEnumPhoneLinesErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	There was no error; for completeness only. If the call was successful, AsnCtiEnumPhoneLinesResult will be returned.
generalerror	number	1	The monitor point for getting events couldn't be set.
accessdenied	number	2	The logged in user has no access rights to enumerate the lines requested.

### 15.3.9 AsnCtiSnapshotPhoneLineErrorEnum

Error codes in case AsnRequestError is returned by asnCtiSnapshotPhoneLine

AsnCtiSnapshotPhoneLineErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	There was no error; for completeness only. If the call was successful, AsnCtiEnumPhoneLinesResult will be returned.
generalerror	number	1	General error; not used in this case.
accessdenied	number	2	The user has no access rights to perform asnCtiSnapshotPhoneLine.
invalidline	number	3	The line given in the argument is not known.

### 15.3.10 AsnCtiLineMonitorStartErrorEnum

Error codes in case AsnRequestError is returned by asnCtiLineMonitorStart

AsnCtiLineMonitorStartErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	There was no error; for completeness only. If the call was successful, AsnCtiLineMonitorStartResult will be returned.
generalerror	number	1	General error; not used in this case.
accessdenied	number	2	The user has no access rights to perform asnCtiLineMonitorStart.
invalidline	number	3	The line given in the argument is not known.

### 15.3.11AsnCtiLineMonitorStopErrorEnum

Error codes in case AsnRequestError is returned by asnCtiLineMonitorStop

AsnCtiLineMonitorStopErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	There was no error; for completeness only. If the call was successful, AsnCtiLineMonitorStopResult will be returned.
generalerror	number	1	General error; not used in this case.
accessdenied	number	2	The user has no access rights to perform asnCtiLineMonitorStop.
invalidline	number	3	The line given in the argument is not known.

### 15.3.12AsnCtiLineSetDoNotDisturbErrorEnum

Error codes in case AsnRequestError is returned by asnCtiLineSetDoNotDisturb

AsnCtiLineSetDoNotDisturbErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	There was no error; for completeness only. If the call was successful, AsnCtiLineSetDoNotDisturbResult will be returned.
generalerror	number	1	General error; not used in this case.
accessdenied	number	2	The user has no access rights to perform asnCtiLineSetDoNotDisturb.
invalidline	number	3	The line given in the argument is not known.

### 15.3.13AsnCtiLineSetRemoteOfficeErrorEnum

Error codes in case AsnRequestError is returned by asnCtiLineSetRemoteOffice

AsnCtiLineSetRemoteOfficeErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	There was no error; for completeness only. If the call was successful, AsnCtiLineSetRemoteOfficeResult will be returned.

generalerror	number	1	General error; not used in this case.
accessdenied	number	2	The user has no access rights to perform asnCtiLineSetRemoteOffice.
invalidline	number	3	The line given in the argument is not known.

### 15.3.14 AsnCtiCallInfoChangedReason

Possible reasons for a call information changed event.

AsnCtiCallInfoChangedReason is an Enumeration

Name	Type	Value	Comment
reasonCallOffering	number	0	New incoming call.
reasonCallDialing	number	1	New outgoing call, dialing.
reasonCallRingback	number	2	Outgoing call is now ringing.
reasonCallConnected	number	3	Call is now connected.
reasonCallConferenced	number	4	Call is now member of a conference.
reasonCallHold	number	5	Call is now on hold.
reasonRemotePartyChanged	number	6	The call's remote party has changed.
reasonRemoteContactChanged	number	7	The call's remote party contact data has changed.
reasonProjectOrPrivateChanged	number	8	The call's project settings or private state has changed.
reasonCallMemoChanged	number	9	The call's note has changed.
reasonCallBusy	number	10	The remote party of an outgoing call is busy.
reasonCallDisconnect	number	11	The call has been disconnected on the other side.
reasonCallDestroyed	number	12	The call has been destroyed - local line is now idle.

reasonHoldContactChanged	number	13	The call's hold contact data has been changed.
reasonOther	number	14	Other reasons, not specified.
reasonCallDataChanged	number	15	The call information has been updated as a whole. No specified reason.
reasonConnectionToPhoneDestroyed	number	16	The connection to the phone has been destroyed, therefore the active call has been updated. (Bluetooth disconnected)

### 15.3.15AsnCtiMakeCallErrorEnum

Error codes in case AsnRequestError is returned by asnCtiMakeCall

AsnCtiMakeCallErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	There was no error; for completeness only. If the call was successful, AsnCtiLineSetRemoteOfficeResult will be returned.
generalerror	number	1	General error; this error code will be sent if the call cannot be made on the line or the project settings in newCallParams are wrong (if given).
accessdenied	number	2	The user has no access rights to perform asnCtiLineSetRemoteOffice.
invalidline	number	3	The line given in the argument is not known.

### 15.3.16EnumCtiDigitMode

Line dial digit modes for asnCtiDialDigits

EnumCtiDigitMode is an Enumeration

Name	Type	Value	Comment
eLINEDIGITMODESERVERDECIDE	number	0	Server decides which dialing mode is used.
eLINEDIGITMODEPULSE	number	1	Uses rotary pulse sequences to signal digits. Valid digits are 0 through 9.
eLINEDIGITMODEDTMF	number	2	Uses DTMF tones to signal digits. Valid digits are 0

			through 9, '*', '#', 'A', 'B', 'C', and 'D'.
eLINEDIGITMODEDTMFEND	number	4	Uses DTMF tones to signal digits and detect the down edges. Valid digits are 0 through 9, '*', '#', 'A', 'B', 'C', and 'D'.

### 15.3.17 AsnCtiCallData

Data structure (key value pair) to associate additional information with call objects.

Data structure to associate additional information with call objects, which can be transferred together with a call to another client.

The data consists of key/value pairs. The keys can be used for different use cases and should be named in such a way, so that they do not conflict with other uses.

The AsnCtiCallDataList is part of the following OptionalParams of these data structs:

- The Key of the AsnCtiCallDataList is "calldata".

AsnCtiCallData is an Object

Name	Type	Optional	Comment
key	string		
value	string		the string length of 'value' should be limited to a reasonable number because callData is a part of the call information and is delivered from server to the clients with every call status change. If the data is big in size it is recommended to only store sort of a reference in 'value'

### 15.3.18 AsnCtiLineInfo

Description of a line with its state, phone number etc.

This structure contains the complete description of a line. With this information a client can determine the current state of the line, its callable number (u8sPhoneNumber), its unique identification number (u8sLinePhoneNumber, not necessary callable), its current available features and so on.

A client can obtain this information with asnCtiEnumPhoneLines, asnCtiSnapshotPhoneLine and asnCtiLineMonitorStart

For visualization of phone numbers in various formats, it is necessary to get the location information of a line.

The contents of the u8sLineLocationID field is used to fetch the necessary data from the server. At the moment there is no

JavaScript implementation of the needed business logic to execute the complete call number formatting rules.

AsnCtiLineInfo is an Object

Name	Type	Optional	Comment
iType	number		Indicates if this is the primary (first) line of the user or not. (Linked Type: AsnContactPhoneLineType)
iLineOpenStatus	number		The line open status of the line. (Linked Type: AsnCtiLineOpenStatus)
u8sLinePhoneNumber	string		Contains the line identifier. This can be a phone number or (if the line is monitored by the UCServer) a LineURI beginning with 'tel:'. This identifier will be used throughout the API for referencing a line. Exceptions are described if needed.
u8sDescriptor	string		Descriptive text if available.
u8sPhoneNumber	string		This is the phone number of the line in a dialable format, if possible beginning with "+", e.g. "+49815136856177"
u8sLineLocationID	string		ID of the PBX/Line location information to fetch it from the server. With this information, it is possible to transform phone numbers.
iLineFeatures	number		Current features/function available on the line. (Linked Type: EnumLineFeatures)
iForwardFeaturesPBX	number		Available line forwarding PBX features/modes on this line (Linked Type: AsnForwardMode)
iForwardFeaturesSERVER	number		Available line forwarding UCServer features/modes on this line.  At the moment the UCServer can only set a time based redirect on the lines. (Linked Type: AsnForwardMode)
iForwardFeaturesUSER	number		Available user defined line forwarding features/modes on this line.  Currently not used.

optionalParams	AsnOptionalParameters	yes	<p>Additionally line fields added later in the key-value-field for backward compatibility.</p> <ul style="list-style-type: none"> <li>key "AddressNames", Type AsnString, ';' separated strings with the address names of the line.</li> <li>key "CTIFeatureCodes", Type AsnString, List of features codes available on the line. These can be configured in the UCServer.</li> <li>key "PrivateLine", Type AsnBool, Indicates, that this line is flagged as "private".</li> </ul>
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### 15.3.19 AsnRemoteOfficeState

Remove office information object

AsnRemoteOfficeState is an Object

Name	Type	Optional	Comment
u8sController	string		Remote Office Controller (currently not used)
iEnabled	number		remote office enabled (1) / disabled (0)
u8sDestination	string		Destination number

### 15.3.20 AsnCtiSnapshotPhoneLineArgument

Argument for asnCtiSnapshotPhoneLine

AsnCtiSnapshotPhoneLineArgument is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		Identifier of the line

### 15.3.21 AsnCtiLineMonitorStartArgument

Arguments for asnCtiLineMonitorStart

AsnCtiLineMonitorStartArgument is an Object

Name	Type	Optional	Comment

u8sLinePhoneNumber	string		Identifier of the line
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### 15.3.22AsnCtiLineMonitorStopArgument

Arguments for asnCtiLineMonitorStop

AsnCtiLineMonitorStopArgument is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossRefID the client got from the corresponding asnCtiLineMonitorStart.

### 15.3.23AsnCtiLineMonitorStopResult

Result of asnCtiLineMonitorStop

AsnCtiLineMonitorStopResult is an Object

Name	Type	Optional	Comment
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### 15.3.24AsnCtiLineSetDoNotDisturbArgument

Argument for asnCtiLineSetDoNotDisturb (DnD)

AsnCtiLineSetDoNotDisturbArgument is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		Identifier of the line
bDoNotDisturb	boolean		Set DnD (1, true) or remove it (0, false)

### 15.3.25AsnCtiLineSetDoNotDisturbResult

Result of asnCtiLineSetDoNotDisturb

AsnCtiLineSetDoNotDisturbResult is an Object

Name	Type	Optional	Comment
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### 15.3.26AsnCtiLineSetRemoteOfficeResult

Result of asnCtiLineSetRemoteOffice

If the client receives the Result, the operation was successful.

AsnCtiLineSetRemoteOfficeResult is an Object

Name	Type	Optional	Comment
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### 15.3.27 AsnCtiNotifyLineDoNotDisturbChangedArgument

Event arguments of asnCtiNotifyLineDoNotDisturbChanged

AsnCtiNotifyLineDoNotDisturbChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
iDoNotDisturb	number		Current status of DnD - (1) set, (0) not set.
optionalParams	AsnOptionalParameters	yes	<ul style="list-style-type: none"> <li>• Key "BusyOnBusy" Value AsnInt (1) oder (0)</li> </ul>

### 15.3.28 AsnCtiNotifyMonitorStoppedArgument

Event arguments of asnCtiNotifyMonitorStopped

AsnCtiNotifyMonitorStoppedEventArgs is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.

### 15.3.29 AsnCtiNotifyLineSortOrderChangedEventArgs

Event arguments of asnCtiNotifyLineSortOrderChanged

AsnCtiNotifyLineSortOrderChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLineURISortOrder	UTF8StringList		Line sort order based on the user configuration, CTI/SIP LineURIs, AV LineURI, additional lines (not server configured line uris like mobile lines)

### 15.3.30AsnCtiNotifyLineForwardingChangedEventArgs

Event arguments of asnCtiNotifyLineForwardingChanged

AsnCtiNotifyLineForwardingChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
seqLineForwards	AsnLineForwards		New forwarding settings on the line.

### 15.3.31AsnCtiNotifyMakeCallResultArgument

Event arguments of asnCtiNotifyMakeCallResult

AsnCtiNotifyMakeCallResultArgument is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		Line identifier on which the make call was performed.
u8sConnectionID	string		Unique identifier of the call (ConnectionID).
success	number		If make call was successfully executed on TAPI, this is (1), (0) otherwise.

### 15.3.32AsnCtiCallFeature

Helper to combine ConnectionID and call features of a call. See asnCtiNotifyLineCallFeaturesChanged

AsnCtiCallFeature is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Call identifier of the call which features have changed.
iFeatures	number		Bit field of the current features of the call. (Linked Type: EnumCallFeatures)

### 15.3.33AsnCtiNotifyLineProjectSettingsChangedEventArgs

Event arguments for asnCtiNotifyLineProjectSettingsChanged

AsnCtiNotifyLineProjectSettingsChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossRefID the client got from the corresponding asnCtlLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
u8sLocationID	string		The identifier for the current line location settings.
projectList	AsnProjectPinRuleList		The current list of project settings of the line.

### 15.3.34AsnCtlMakeCallArgument

Arguments for asnCtlMakeCall

AsnCtlMakeCallArgument is an Object

Name	Type	Optional	Comment
u8sPhoneNumberFrom	string		Phone number (supercanonic notation, starts with '+', e.g. '+49815136856177') or line URI of the line where the call will be initiated.
u8sPhoneNumberTo	string		Number to dial.
iNumberFormat	number		<p>The u8sPhoneNumberTo is the number to dial and normally the server would reformat the number into a dialable form. This behavior can be altered:</p> <ul style="list-style-type: none"> <li>• 0: Server should not format the number for dialing, it shall use it like it is.</li> <li>• Other values: Server should format the number before dialing (set prefix and area code etc.).</li> </ul> <p>Hint: If you are not sure, the number should always be formatted (-&gt; use '1')</p> <p>(Linked Type: AsnETAPIDialNumberFormat)</p>
newCallParams	AsnCtlNewCallParams	yes	Allows to set additional information (Project/Pin rules, hide caller id, set remote contact details etc.). These information are completely optional and in the most cases you can omit this

			parameter.
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### 15.3.35AsnCtiMakeCallResult

Result of asnCtiMakeCall

Remark: The result will be sent if asnCtiMakeCall was successfully accepted by the server. It does NOT reflect, if the call was successfully made on the PBX! The result is sent as asnCtiNotifyMakeCallResult event asynchronously.

AsnCtiMakeCallResult is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection identifier of the call
optionalParams	AsnOptionalParameters	yes	<p>Additional parameters for asnCtiSetCallData added here for backward compatibility.</p> <ul style="list-style-type: none"> <li>Key "WasProjectFound", Value bool, optional. Only initiate the call if the project (parameter in newCallParams of AsnCtiMakeCallArgument) was found.</li> </ul>

### 15.3.36AsnCtiDropCallArgument

Arguments for asnCtiDropCall

AsnCtiDropCallArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		The connection identifier of the call to drop.

### 15.3.37AsnCtiDropCallResult

Result of asnCtiDropCall

If an error occurred, AsnRequestError will be set.

AsnCtiDropCallResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the call was dropped, false/0 otherwise.

### 15.3.38AsnCtiLineDropCallArgument

Arguments for asnCtiLineDropCall

AsnCtiLineDropCallArgument is an Object

Name	Type	Optional	Comment
u8sLineDescriptor	string		The line number (e.g. +498151368562177) or the line URI of the line.

### 15.3.39AsnCtiLineDropCallResult

Result of asnCtiLineDropCall

If an error occurred, AsnRequestError will be set.

AsnCtiLineDropCallResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the call was dropped, false/0 otherwise.

### 15.3.40AsnCtiAnswerCallArgument

Arguments for asnCtiAnswerCall

AsnCtiAnswerCallArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Call identifier of the call to accept.

### 15.3.41AsnCtiAnswerCallResult

Result of asnCtiAnswerCall

If an error occurred, AsnRequestError will be set.

AsnCtiAnswerCallResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the call was accepted, false/0 otherwise.

### 15.3.42AsnCtiRedirectCallArgument

Arguments for asnCtiRedirectCall

AsnCtiRedirectCallArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID of the contact to redirect a call from his line. Leave it empty if you just want to redirect a call by its identifier.
u8sConnectionID	string		Connection identifier of the call to redirect.
u8sPhoneNumber	string		The line number to redirect to. This number can be in short or long format if you set iNumberFormat to 1.
iNumberFormat	number		<p>The u8sPhoneNumber is the number to redirect to and normally the server would reformat the number into a dialable form. This behavior can be altered:</p> <ul style="list-style-type: none"> <li>• 0: Server should not format the number for redirecting, it shall use it like it is.</li> <li>• Other values: Server should format the number (set prefix and area code etc.). Hint: If you are not sure, the number should always be formatted (-&gt; use '1')</li> </ul> <p>(Linked Type: AsnETAPIDialNumberFormat)</p>

### 15.3.43AsnCtiRedirectCallResult

Result of asnCtiRedirectCall

If an error occurred, AsnRequestError will be set.

AsnCtiRedirectCallResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the call was redirected, false/0 otherwise.

### 15.3.44AsnCtiPickupCallArgument

Arguments for asnCtiPickupCall

AsnCtiPickupCallArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID of the contact to pickup a call from his line. Leave it empty if you just want to pickup a call by its identifier.
u8sConnectionID	string		Connection identifier of the call to redirect.
u8sPhoneNumber	string		The line number to pickup to. This number can be in short or long format if you set iNumberFormat to 1.
iNumberFormat	number		The u8sPhoneNumber is the number to pickup to and

			<p>normally the server would reformat the number into a dialable form. This behavior can be altered:</p> <ul style="list-style-type: none"> <li>• 0: Server should not format the number for pickup, it shall use it like it is.</li> <li>• Other values: Server should format the number (set prefix and area code etc.). Hint: If you are not sure, the number should always be formatted (-&gt; use '1')</li> </ul> <p>(Linked Type: AsnETAPIDialNumberFormat)</p>
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### 15.3.45AsnCtiPickupCallResult

Result of asnCtiPickupCall

If an error occurred, AsnRequestError will be set.

AsnCtiPickupCallResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the call was picked, false/0 otherwise.
optionalParams	AsnOptionalParameters	yes	optionalParams Name "RemoteInvokeID" Value String - Some dirty internal UCServer logic Simon added and should get reworked, the interface does NOT need this property here

### 15.3.46AsnCtiStartCallRecordingArgument

Arguments for asnCtiStartCallRecording

AsnCtiStartCallRecordingArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection identifier of the call to record.

### 15.3.47AsnCtiStartCallRecordingResult

Result of asnCtiStartCallRecording

If an error occurred, AsnRequestError will be set.

AsnCtiStartCallRecordingResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the record starts successful, false/0 otherwise.

### 15.3.48AsnCtiStopCallRecordingArgument

Arguments for asnCtiStopCallRecording

AsnCtiStopCallRecordingArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection identifier of the call to stop recording on.

### 15.3.49AsnCtiStopCallRecordingResult

Result of asnCtiStopCallRecording

If there was no error executing this operation, the result will be returned; otherwise AsnRequestError is set.

AsnCtiStopCallRecordingResult is an Object

Name	Type	Optional	Comment

### 15.3.50AsnCtiSetCallDataResult

Ergebnis fÃ¼r asnCtiSetCallData

AsnCtiSetCallDataResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		Data was accepted true/1 if successful set, false/0 otherwise

### 15.3.51AsnCtiMergeCallsArgument

Arguments for asnCtiMergeCalls

AsnCtiMergeCallsArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID1	string		Connection identifier of the first call to merge.
u8sConnectionID2	string		Connection identifier of the second call to merge.

### 15.3.52AsnCtiMergeCallsResult

Result of asnCtiMergeCalls

If an error occurred, AsnRequestError will be set.

AsnCtiMergeCallsResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the merge was successful, false/0 otherwise.

### 15.3.53AsnCtiSwapHoldArgument

Arguments for asnCtiSwapHold

AsnCtiSwapHoldArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection identifier of the held call.

### 15.3.54AsnCtiSwapHoldResult

Result of asnCtiSwapHold

If an error occurred, AsnRequestError will be set.

AsnCtiSwapHoldResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if swap was successful, false/0 otherwise.

### 15.3.55AsnCtiHoldArgument

Arguments for asnCtiHold

AsnCtiHoldArgument is an Object

Name	Type	Optional	Comment
bHold	boolean		true/1 if the call shall be set on hold, false/0 otherwise.
u8sConnectionID	string		Connection identifier of the call to change hold state.

### 15.3.56AsnCtiHoldResult

Result of asnCtiHold

If an error occurred, AsnRequestError will be set.

AsnCtiHoldResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if execution was successful, false/0 otherwise. If an error

		occured, AsnRequestError will be set.
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### 15.3.57 AsnCtiSetForwardArgument

Arguments for asnCtiSetForward

AsnCtiSetForwardArgument is an Object

Name	Type	Optional	Comment
u8sPhoneNumberFrom	string		Number of the line to forward from. Format should be like '+49815136856177' or it can be a line URI.
u8sPhoneNumberTo	string		Number of the line to forward to. Format must be long format, like '+49815136856177'.
optionalParams	AsnOptionalParameters	yes	<p>Additional parameter added for backward compatibility here.</p> <ul style="list-style-type: none"> <li>Key "ForwardMode", Type AsnInt, optional. Specifies the condition for the forward. If left out, the forward will be unconditional (all calls get forwarded).</li> </ul> <p>(Linked Type: AsnForwardMode)</p>

### 15.3.58 AsnCtiSetForwardResult

Result of asnCtiSetForward

If an error occurred, AsnRequestError will be set.

AsnCtiSetForwardResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the forward is set, false/0 otherwise.
bExistingForwardingChanged	boolean		true/1 if this is the very first forward or if your PBX does not support multiple forwards. A preexisting forward was replaced in this case. false/0 if your forward is added to the list of forwards.
optionalParams	AsnOptionalParameters	yes	optionalParams Name

			"RemoteInvokeID" Value String - Some dirty internal UCServer logic Simon added and should get reworked, the interface does NOT need this property here
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### 15.3.59AsnCtiRemoveForwardArgument

Arguments for asnCtiRemoveForward

AsnCtiRemoveForwardArgument is an Object

Name	Type	Optional	Comment
u8sPhoneNumberFrom	string		Number of the line to remove the forward from. Format should be like '+49815136856177' or it can be a line URI.
optionalParams	AsnOptionalParameters	yes	<p>Additional parameters added for backward compatibility here. To remove exact one forward from the forward list of the line, these optional parameters must be set accordingly.</p> <ul style="list-style-type: none"> <li>• Key "ForwardMode", Type AsnInt, optional.</li> <li>• Key "ForwardDestination", Type AsnString, optional.</li> </ul> <p>(Linked Type: AsnForwardMode)</p>

### 15.3.60AsnCtiRemoveForwardResult

Result of asnCtiRemoveForward

If an error occurred, AsnRequestError will be set.

AsnCtiRemoveForwardResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the forward(s) has been removed, false/0 otherwise. If an error occurred AsnRequestError will be set.
optionalParams	AsnOptionalParameters	yes	optionalParams Name "RemoteInvokeID" Value String - Some dirty internal UCServer logic Simon added and should get reworked, the interface does NOT need this property here

### 15.3.61AsnCtiDialDigitsArgument

Arguments for asnCtiDialDigits

AsnCtiDialDigitsArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		
iDigitMode	number		Dialing mode for the digits. (Linked Type: EnumCtiDigitMode)
iDigitDuration	number		Both the duration in milliseconds of DTMF digits and pulse and DTMF inter-digit spacing. A value of 0 uses a default value.
u8sDigitsToDial	string		The digits to dial. See EnumCtiDigitMode for valid characters.

### 15.3.62AsnCtiDialDigitsResult

Result of asnCtiDialDigits

If an error occurred, AsnRequestError will be set.

AsnCtiDialDigitsResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if operation was successful, false/0 otherwise. If an error occurred AsnRequestError will be set.

### 15.3.63AsnCtiCompleteCallArgument

Arguments for asnCtiCompleteCall

AsnCtiCompleteCallArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection identifier of the call to be completed automatically.

### 15.3.64AsnCtiCompleteCallResult

Result of asnCtiCompleteCall

If an error occurred, AsnRequestError will be set.

AsnCtiCompleteCallResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the call completion was set successful, false/0 otherwise.

### 15.3.65AsnCtiConferenceArgument

Arguments for asnCtiConference

AsnCtiConferenceArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID1	string		Connection identifier of the active call.
u8sConnectionID2	string		Connection identifier of the held call.

### 15.3.66AsnCtiConferenceResult

Result of asnCtiConference

If an error occurred, AsnRequestError will be set.

AsnCtiConferenceResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true/1 if the conference was initiated successful, false/0 otherwise.

### 15.3.67AsnCtiCallDataList

List of AsnCtiCallData objects

AsnCtiCallDataList is an Array of AsnCtiCallData

AsnCtiCallData is an Object

Name	Type	Optional	Comment
key	string		
value	string		the string length of 'value' should be limited to a reasonable number because callData is a part of the call information and is delivered from server to the clients with every call status change. If the data is big in size it is recommended to only store sort of a reference in 'value'

### 15.3.68AsnCtiLineInfoList

List of AsnCtiLineInfo

AsnCtiLineInfoList is an Array of AsnCtiLineInfo

AsnCtiLineInfo is an Object

Name	Type	Optional	Comment
iType	number		Indicates if this is the primary (first) line of the user or not. (Linked Type: AsnContactPhoneLineType)
iLineOpenStatus	number		The line open status of the line. (Linked Type: AsnCtiLineOpenStatus)
u8sLinePhoneNumber	string		Contains the line identifier. This can be a phone number or (if the line is monitored by the UCServer) a LineURI beginning with 'tel:'. This identifier will be used throughout the API for referencing a line. Exceptions are described if needed.
u8sDescriptor	string		Descriptive text if available.
u8sPhoneNumber	string		This is the phone number of the line in a dialable format, if possible beginning with "+", e.g. "+49815136856177"
u8sLineLocationID	string		ID of the PBX/Line location information to fetch it from the server. With this information, it is possible to transform phone numbers.
iLineFeatures	number		Current features/function available on the line. (Linked Type: EnumLineFeatures)
iForwardFeaturesPBX	number		Available line forwarding PBX features/modes on this line (Linked Type: AsnForwardMode)
iForwardFeaturesSERVER	number		Available line forwarding UCServer features/modes on this line.  At the moment the UCServer can only set a time based redirect on the lines. (Linked Type: AsnForwardMode)
iForwardFeaturesUSER	number		Available user defined line forwarding features/modes on this line.  Currently not used.
optionalParams	AsnOptionalParameters	yes	Additionally line fields added later in the key-value-field for backward compatibility. <ul style="list-style-type: none"> <li>• key "AddressNames", Type</li> </ul>

			<p>AsnString, ';' separated strings with the address names of the line.</p> <ul style="list-style-type: none"> <li>• key "CTIFeatureCodes", Type AsnString, List of features codes available on the line. These can be configured in the UCServer.</li> <li>• key "PrivateLine", Type AsnBool, Indicates, that this line is flagged as "private".</li> </ul>
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### 15.3.69 AsnCtiCallInformation

In depth information about a call

AsnCtiCallInformation is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		Contains the line identifier of the line the call is attached to.
u8sConnectionID	string		A GUID of the connection the call is assigned to. This is used to identify the call throughout the API (Journal, Search etc.).
iCallState	number		The call state described in EnumCallState. (Linked Type: EnumCallState)
iCallType	number		Type of the call described in EAsnCallType (normal, consult, callback etc.). (Linked Type: EAsnCallType)
iDisconnectedReason	number		Disconnect reason described in EnumCallDisconnectedReason. (Linked Type: EnumCallDisconnectedReason)
iFeatures	number		The call features available, described in EnumCallFeatures. These features are dynamic and will change with the call state. (Linked Type: EnumCallFeatures)
bOutbound	boolean		The call is outbound (1, true) or inbound (0, false)
bInternal	boolean		The call is an internal call (1, true) or an external call (0, false).

			Internal calls are calls within the same location.
bCallerIDBlocked	boolean		The caller id is blocked on this call.
iCallRecordingState	number		The recording state of this call described in EnumCallRecordingState. (Linked Type: EnumCallRecordingState)
bConferenceCtrlr	boolean		If this is true, this call is the conference controller call
u8sConferenceCtrlrID	string		If the call is part of a conference, this field contains the conference controller ID
u8sLocalNumberSC	string		Number of local line In case of an incoming call, it is the called number. In case of an outgoing call, it is the number of the line.
u8sRemoteNumberSC	string		Number of remote party
iRemoteContactSource	number		The contact data source as described in EnumRemoteContactSource. Only valid if the optional field pRemoteContact is set.
projectPinRule	AsnProjectPinRule		Description of the current project/pin rules applied to the call
u8sNote	string		Free text field (memo) for the call
u8sTrackerID	string		The ID of the CallTracker, this call is part of. CallTracker gathers all calls which belong to the same call scenario. (e.g. All calls in a group call carry the same TrackerID)
utcCallCreated	string		Creation time stamp of the call.
utcCallConnected	string		Time stamp of the call when it is connected. (0 if it was never connected)
utcCallDisconnected	string		Time stamp of the call when it is disconnected. (0 if the call is not yet disconnected)
bIsUnknownHoldContact	boolean		This is true, if a hold contact has no known number.
pLocalContact	AsnNetDatabaseContact	yes	The contact data of the owner of the call. In case of an incoming call, it is the contact of the called number.

			In case of an outgoing call, it is the contact of the line owner.
pRemoteContact	AsnNetDatabaseContact	yes	If it is available, this contains the contact data of the remote party.
pu8sHoldNumberSC	string	yes	If there is a call on hold, this contains its number (if the number is unknown bIsUnknownHoldContact is set)
pHoldContact	AsnNetDatabaseContact	yes	If there is a call on hold and if data is available, this contains contact data of the contact on hold.
pu8sRedirectingNumber	string	yes	If the call was redirected, this number indicate who has redirected it.
pRedirectingContact	AsnNetDatabaseContact	yes	If available and applicable, this contains the contact data of the redirecting party.
optionalParams	AsnOptionalParameters	yes	<p>Additional information which were added later (for backward compatibility):</p> <ul style="list-style-type: none"> <li>• Key "PBXCallID" Value AsnString - CallID of the call in the PBX</li> <li>• Key "AddressID" Value int - The AddressID the call is currently processed on the TAPI line.</li> <li>• Key "CallLinkageID" Value AsnString - CallLinkageID of the Call from the ECSTA (only available on PBX systems supporting it).</li> </ul>
callDataList	AsnCtiCallDataList	yes	If available this is the list of key/value pairs with additional information provided by clients for special use cases (so called CallData). (New optional with PCE 6.1)

### 15.3.70 AsnCtiCallInformationList

List of AsnCtiCallInformation

AsnCtiCallInformationList is an Array of AsnCtiCallInformation

AsnCtiCallInformation is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		Contains the line identifier of the line the call is attached to.
u8sConnectionID	string		A GUID of the connection the call is assigned to. This is used to identify the call throughout the API (Journal, Search etc.).
iCallState	number		The call state described in EnumCallState. (Linked Type: EnumCallState)
iCallType	number		Type of the call described in EAsnCallType (normal, consult, callback etc.). (Linked Type: EAsnCallType)
iDisconnectedReason	number		Disconnect reason described in EnumCallDisconnectedReason. (Linked Type: EnumCallDisconnectedReason)
iFeatures	number		The call features available, described in EnumCallFeatures. These features are dynamic and will change with the call state. (Linked Type: EnumCallFeatures)
bOutbound	boolean		The call is outbound (1, true) or inbound (0, false)
bInternal	boolean		The call is an internal call (1, true) or an external call (0, false). Internal calls are calls within the same location.
bCallerIDBlocked	boolean		The caller id is blocked on this call.
iCallRecordingState	number		The recording state of this call described in EnumCallRecordingState. (Linked Type: EnumCallRecordingState)
bConferenceCtrlr	boolean		If this is true, this call is the conference controller call
u8sConferenceCtrlrID	string		If the call is part of a conference, this field contains the conference controller ID
u8sLocalNumberSC	string		Number of local line In case of an incoming call, it is the called number. In case of an outgoing call, it is the number of the line.

u8sRemoteNumberSC	string		Number of remote party
iRemoteContactSource	number		The contact data source as described in EnumRemoteContactSource. Only valid if the optional field pRemoteContact is set.
projectPinRule	AsnProjectPinRule		Description of the current project/pin rules applied to the call
u8sNote	string		Free text field (memo) for the call
u8sTrackerID	string		The ID of the CallTracker, this call is part of. CallTracker gathers all calls which belong to the same call scenario. (e.g. All calls in a group call carry the same TrackerID)
utcCallCreated	string		Creation time stamp of the call.
utcCallConnected	string		Time stamp of the call when it is connected. (0 if it was never connected)
utcCallDisconnected	string		Time stamp of the call when it is disconnected. (0 if the call is not yet disconnected)
bIsUnknownHoldContact	boolean		This is true, if a hold contact has no known number.
pLocalContact	AsnNetDatabaseContact	yes	The contact data of the owner of the call. In case of an incoming call, it is the contact of the called number. In case of an outgoing call, it is the contact of the line owner.
pRemoteContact	AsnNetDatabaseContact	yes	If it is available, this contains the contact data of the remote party.
pu8sHoldNumberSC	string	yes	If there is a call on hold, this contains its number (if the number is unknown bIsUnknownHoldContact is set)
pHoldContact	AsnNetDatabaseContact	yes	If there is a call on hold and if data is available, this contains contact data of the contact on hold.
pu8sRedirectingNumber	string	yes	If the call was redirected, this number indicate who has redirected it.
pRedirectingContact	AsnNetDatabaseContact	yes	If available and applicable, this contains the contact data of the redirecting party.
optionalParams	AsnOptionalParameters	yes	Additional information which were

			<p>added later (for backward compatibility):</p> <ul style="list-style-type: none"> <li>• Key "PBXCallID" Value AsnString - CallID of the call in the PBX</li> <li>• Key "AddressID" Value int - The AddressID the call is currently processed on the TAPI line.</li> <li>• Key "CallLinkageID" Value AsnString - CallLinkageID of the Call from the ECSTA (only available on PBX systems supporting it).</li> </ul>
callDataList	AsnCtiCallDataList	yes	If available this is the list of key/value pairs with additional information provided by clients for special use cases (so called CallData). (New optional with PCE 6.1)

### 15.3.71AsnCtiEnumPhoneLinesArgument

Arguments for asnCtiEnumPhoneLines

AsnCtiEnumPhoneLinesArgument is an Object

Name	Type	Optional	Comment
typeofLines	AsnCtiEnumPhoneLinesArgumentEnum		Which lines shall be listed for the user (own, additional lines, all).
attachChangeNotify	number		Request events for line add/remove changes (1) or not (0).

### 15.3.72AsnCtiEnumPhoneLinesResult

If successful this result will be returned by asnCtiEnumPhoneLines

AsnCtiEnumPhoneLinesResult is an Object

Name	Type	Optional	Comment
seqLines	AsnCtiLineInfoList		The list with line information requested.
u8sLineMonitorCrossRefID	string	yes	LineMonitorCrossrefID for add/remove event from the server.

### 15.3.73AsnCtiSnapshotPhoneLineResult

If asnCtiSnapshotPhoneLine is executed successful, AsnCtiSnapshotPhoneLineResult will be returned.

AsnCtiSnapshotPhoneLineResult is an Object

Name	Type	Optional	Comment
lineInfo	AsnCtiLineInfo		Current line information
seqCalls	AsnCtiCallInformationList		Current calls on the line
iDoNotDisturb	number		Do Not disturb is set (1) oder not (0)
seqLineForwards	AsnLineForwards		Current list of forwardings set on the line
remoteOfficeState	AsnRemoteOfficeState		Current state of remote office feature
optionalParams	AsnOptionalParameters	yes	Optionals <ul style="list-style-type: none"> <li>• Key "InvalidPasswordState" Value AsnInt (1) oder (0)</li> <li>• Key "InvalidPasswordUser" Value String</li> <li>• Key "BusyOnBusy" Value AsnInt (1) oder (0)</li> </ul>

### 15.3.74AsnCtiLineMonitorStartResult

If asnCtiLineMonitorStart is executed successful, AsnCtiLineMonitorStartResult will be returned.

AsnCtiLineMonitorStartResult is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID to identify the corresponding events after calling asnCtiLineMonitorStart.
lineInfo	AsnCtiLineInfo		Current line state.
seqCalls	AsnCtiCallInformationList		Current calls on the line.
iDoNotDisturb	number		Current state of DoNotDisturb is set (1) or not (0).
seqLineForwards	AsnLineForwards		Current list of forwarding settings on the line.
remoteOfficeState	AsnRemoteOfficeState		Current state of remote office feature.
optionalParams	AsnOptionalParameters	yes	Optionals

			<ul style="list-style-type: none"> <li>• Key "InvalidPasswordState" Value AsnInt (1) oder (0)</li> <li>• Key "InvalidPasswordUser" Value String</li> <li>• Key "BusyOnBusy" Value AsnInt (1) oder (0)</li> </ul>
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### 15.3.75AsnCtiLineSetRemoteOfficeArgument

Argument for asnCtiLineSetRemoteOffice

AsnCtiLineSetRemoteOfficeArgument is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		Identifier of the line
remoteOfficeState	AsnRemoteOfficeState		The state to set. See AsnRemoteOfficeState for more details.

### 15.3.76AsnCtiNotifyLineInfoChangedArgument

Event arguments of asnCtiNotifyLineInfoChanged

AsnCtiNotifyLineInfoChangedArgument is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
lineInfo	AsnCtiLineInfo		The new line information.

### 15.3.77AsnCtiNotifyLineRemoteOfficeChangedArgument

Event arguments of asnCtiNotifyLineRemoteOfficeChanged

AsnCtiNotifyLineRemoteOfficeChangedArgument is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.

remoteOfficeState	AsnRemoteOfficeState	The new remote office state of the line.
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### 15.3.78 AsnCtiNotifyLineCallInformationChangedEventArgs

Event arguments of asnCtiNotifyLineCallInformationChanged

AsnCtiNotifyLineCallInformationChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
reason	number		Reason for the event. See AsnCtiCallInfoChangedReason fro details. (Linked Type: AsnCtiCallInfoChangedReason)
callinformation	AsnCtiCallInformation		(Possible) reduced version a call information according to the reason.

### 15.3.79 AsnCtiNotifyLineAddRemoveArgument

Event arguments of asnCtiNotifyLineAddRemove

AsnCtiNotifyLineAddRemoveArgument is an Object

Name	Type	Optional	Comment
u8sLineMonitorCrossRefID	string		CrossRefID the client got from the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
addremove	AsnCtiNotifyLineAddRemoveArgumentEnum		Line was added (0) or removed (1).
lineInfo	AsnCtiLineInfo		The current line information set.

### 15.3.80 AsnCtiNotifyConferenceCreatedArgument

Event arguments of asnCtiNotifyConferenceCreated

AsnCtiNotifyConferenceCreatedArgument is an Object

Name	Type	Optional	Comment
u8sLineMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
conferenceControllerCallInfo	AsnCtiCallInformation		Information about the conference controller call. See AsnCtiCallInformation for details.
conferenceMemberCallInfoList	AsnCtiCallInformationList		Information about the current participating calls in this conference.

### 15.3.81AsnCtiNotifyConferenceDestroyedArgument

Event arguments of asnCtiNotifyConferenceDestroyed

AsnCtiNotifyConferenceDestroyedArgument is an Object

Name	Type	Optional	Comment
u8sLineMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
conferenceControllerCallInfo	AsnCtiCallInformation		The call information of the conference controller.
conferenceMemberCallInfoList	AsnCtiCallInformationList		The call information of the other participants.

### 15.3.82AsnCtiNotifyConferencePartyAddedArgument

Event arguments of asnCtiNotifyConferencePartyAdded

AsnCtiNotifyConferencePartyAddedArgument is an Object

Name	Type	Optional	Comment
u8sLineMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.

u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
conferenceControllerCallInfo	AsnCtiCallInformation		Call information of the conference controller.
conferenceMemberCallInfo	AsnCtiCallInformation		Call information of the added new conference participant.

### 15.3.83 AsnCtiNotifyConferencePartyRemovedArgument

Event arguments of asnCtiNotifyConferencePartyRemoved

AsnCtiNotifyConferencePartyRemovedArgument is an Object

Name	Type	Optional	Comment
u8sLineMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
conferenceControllerCallInfo	AsnCtiCallInformation		Call information of the conference controller.
conferenceMemberCallInfo	AsnCtiCallInformation		Call information of the removed conference participant.

### 15.3.84 AsnCtiCallFeaturesList

List of AsnCtiCallFeature objects.

AsnCtiCallFeaturesList is an Array of AsnCtiCallFeature

AsnCtiCallFeature is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Call identifier of the call which features have changed.
iFeatures	number		Bit field of the current features of the call. (Linked Type: EnumCallFeatures)

### 15.3.85 AsnCtiNotifyLineCallFeaturesChangedArgument

Event arguments of asnCtiNotifyLineCallFeaturesChanged

AsnCtiNotifyLineCallFeaturesChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sLineMonitorCrossRefID	string		CrossrefID for the corresponding asnCtiLineMonitorStart.
u8sLinePhoneNumber	string		Line identifier for the line where the changes happened.
callFeaturesList	AsnCtiCallFeaturesList		List of call with their current features which have changed.

### 15.3.86AsnCtiSetCallDataArgument

Arguments for asnCtiSetCallData

AsnCtiSetCallDataArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection identifier of the call to set data for. If this is unknown (empty), the additional parameters in optionalParams are needed.
callDataList	AsnCtiCallDataList		Call data key value map
optionalParams	AsnOptionalParameters	yes	<p>Additional parameters for asnCtiSetCallData added here for backward compatibility. These parameters are only needed, if the connection identifier is unknown.</p> <ul style="list-style-type: none"> <li>• Key "calledNumber", Value String</li> <li>• Key "transferringNumber", Value String</li> <li>• Key "callStateMask", Value double</li> <li>• Key "hostCallID", Value double</li> </ul>

## 16 Journal

Journal interface

### Module description

This Module defines structures and operations for accessing the journal database of the UCServer.

### Features

- Get journal entries from the database (asnGetJournalEntries).
- Update journal entries in the database.
- Notify CRUD interface for getting events from the journal database.

New journal entries where only generated by the UCServer if the corresponding events happen (Calls, Chats etc.) and cannot be generated by this client API.

#### 16.1 Journal Operations

##### 16.1.1 asnGetOfflineJournal

Fetch and optionally delete offline journal entries.

The UCServer saves journal entries of missed calls additionally in an offline database, if the owner of the line where the call was happening was not logged into the UCServer.

With this function it is possible to read (and delete) such entries.

##### ArgumentType: AsnGetOfflineJournalArgument

AsnGetOfflineJournalArgument is an Object

Name	Type	Optional	Comment
iMaxDays	number		Maximum Days to get offline journal entries. (0 = 365 days)
iMarkRead	number		0: Don't change the entries; 1: Mark the offline entries as "read", which means delete the entry from the offline database. The corresponding entry in the journal database will not be touched.

##### ResultType: AsnGetOfflineJournalResult

AsnGetOfflineJournalResult is an Object

Name	Type	Optional	Comment
journalList	AsnNetDatabaseJournalList		List of AsnNetDatabaseJournal objects, containing the offline journal entries found.

##### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 16.1.2 asnGetJournalEntriesV2

Search for journal entries of the users conversations.

asnGetJournalEntries makes it possible to search in the journal database of the user. The search is limited to the journal entries of the logged in user himself (public and private) and to the journal entries of users where permissions are granted for the logged in user.

With AsnGetJournalEntriesV2ArgumentfindOptions it is possible to give more search criterias.

#### ArgumentType: AsnGetJournalEntriesV2Argument

AsnGetJournalEntriesV2Argument is an Object

Name	Type	Optional	Comment
findOptions	AsnNetDatabaseJournalFindOptionsV2		

#### ResultType: AsnGetJournalEntriesResult

AsnGetJournalEntriesResult is an Object

Name	Type	Optional	Comment
journalList	AsnNetDatabaseJournalList		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 16.1.3 asnUpdateCallAndJournalContactAndNumber

Update the contact information of a current active call or a journal entry.

A Client can update the contact information for a call. This function updates the information is currently active or, if already disconnected, the corresponding journal entry.

If neither the active call was found nor the journal entry, an error will be returned.

### **ArgumentType: AsnUpdateCallAndJournalContactAndNumberArgument**

AsnUpdateCallAndJournalContactAndNumberArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Unique ID of the call or journal entry to modify.
u8sRemoteNumberSC	string		Phone number to set for the contact in long format (e.g. +49815136856177).
remoteContact	AsnNetDatabaseContact		The contact to set for the journal entry. (Linked Type: AsnNetDatabaseContact)

### **ResultType: AsnUpdateCallAndJournalContactAndNumberResult**

AsnUpdateCallAndJournalContactAndNumberResult is an Object

Name	Type	Optional	Comment
bResultCallInfoUpdate	boolean		If the active call was updated, this will be "true".
bResultJournalUpdate	boolean		If the journal entry was updated, this will be "true".

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### **16.1.4 asnUpdateJournalMemo**

Update Journal memo text

A client can update a memo text of a journal entry without transferring the whole journal entry.

### **ArgumentType: AsnUpdateJournalMemoArgument**

AsnUpdateJournalMemoArgument is an Object

Name	Type	Optional	Comment
u8sConnectionIDList	UTF8StringList		Liste von IDs, anhand welcher der Journaleintrag identifiziert wird.
u8sMemo	string		Die Notiz zu einem bestimmten Call

**ResultType: AsnUpdateJournalMemoResult**

AsnUpdateJournalMemoResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		True if the update was successful, false if not.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**16.1.5 asnUpdateJournalProject**

Change the project information of a journal entry

A client can change the project information/rules of an journal entry independently of the other journal entry data.

**ArgumentType: AsnUpdateJournalProjectArgument**

AsnUpdateJournalProjectArgument is an Object

Name	Type	Optional	Comment
u8sConnectionIDList	UTF8StringList		List of IDs to identify the journal entries to modify with new project rules
projectPinRule	AsnProjectPinRule		Project data to set to the journal entries

**ResultType: AsnUpdateJournalProjectResult**

AsnUpdateJournalProjectResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**16.1.6 asnUpdateJournalReadFlag**

Set the 'read' flag of journal entries

A Client can change the 'read' flag of journal entries in the database independently of the other fields of the entries.

**ArgumentType: AsnUpdateJournalReadFlagArgument**

AsnUpdateJournalReadFlagArgument is an Object

Name	Type	Optional	Comment
u8sConnectionIDList	UTF8StringList		List of ids to specify the journal entries to change their read flag
bReadFlag	boolean		True if the entry(s) should be set to "read", False if they should be set to "unread"

**ResultType: AsnUpdateJournalReadFlagResult**

AsnUpdateJournalReadFlagResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		True if the entries were modified, false if there was a problem.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment

iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 16.1.7 asnUpdateJournalSubject

Change the subject text of a journal entry.

A client can change the subject text of a journal entry independently of the other fields.

#### ArgumentType: AsnUpdateJournalSubjectArgument

AsnUpdateJournalSubjectArgument is an Object

Name	Type	Optional	Comment
u8sConnectionIDList	UTF8StringList		List of ids to specify the journal entries to change their subject field
u8sSubject	string		New text for the subject

#### ResultType: AsnUpdateJournalSubjectResult

AsnUpdateJournalSubjectResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		True if the subject was changed in the database, false is not

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 16.1.8 asnGetJournalEntriesCountV2

Count journal entries in the database and get the result.

A client can get the count of journal entries from the server in the database for a given filter named 'findOptions' in the argument.

This can be used for displaying the count of such journal entries without transferring a lot of journal data via the network.

Popups or pins with the count of unread entries are examples for this.

**ArgumentType: AsnGetJournalEntriesCountV2Argument**

AsnGetJournalEntriesCountV2Argument is an Object

Name	Type	Optional	Comment
findOptions	AsnNetDatabaseJournalFindOptionsV2		specify the journal entries to count

**ResultType: AsnGetJournalEntriesCountResult**

AsnGetJournalEntriesCountResult is an Object

Name	Type	Optional	Comment
iCount	number		Count of journal entries found in the database according the AsnNetDatabaseJournalFindOptions given in the argument

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**16.1.9 asnJournalEntryGet**

Get the journal entry of a call from the server.

A client can retrieve a journal entry from a server by its connection id. The entry can be from the database (if the call was finished earlier), from the pending write list (when the call was finished, but not yet written to the database) or if the call is still ongoing will be generated from its CallInformation data.

**ArgumentType: AsnJournalEntryGetArgument**

AsnJournalEntryGetArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		ConnectionID of the call to get its journal entry

**ResultType: AsnJournalEntryGetResult**

AsnJournalEntryGetResult is an Object

Name	Type	Optional	Comment
journalEntry	AsnNetDatabaseJournal		If a journal entry can be found, this result contains a copy of it.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**16.1.10asnJournalSubscribeEvents**

Subscribe for events of journal database changes

Clients can subscribe for events from the journal database when changes occur.

The server will then send events if there were entries added, deleted or changed.

With the subscription, the client can set a more detailed description, which entries it is interested in the direct result of the call. It is possible to set a last known transaction id to start from, the maximum number of entries to reply or if the client is only interested in the users own journal entries or additional of the groups the user is in (and is allowed to see the journal entries).

To unsubscribe from the journal events, call this function with bReceiveJournalEvents set to false. This will stop the server to send events.

**ArgumentType: AsnJournalSubscribeEventsArgument**

AsnJournalSubscribeEventsArgument is an Object

Name	Type	Optional	Comment
bReceiveJournalEvents	boolean		Set to true to subscribe, set to false to unsubscribe (completely)
iLastKnownGlobTransactionID	number	yes	If this parameter is set to the last known transaction id, the server will only send the journal entries with a higher transaction id. The search is limited to the last 60 days. If older entries are of interest, the client should use asnGetJournalEntries with find options set accordingly.

iMaxEntries	number	yes	Maximum number of journal entries to retrieve by this call
iFlags	number	yes	Additional subscribe options defined in AsnJournalSubscribeFlags

**ResultType: AsnJournalSubscribeEventsResult**

AsnJournalSubscribeEventsResult is an Object

Name	Type	Optional	Comment
iResult	number		If the call was successful, 0 is returned. If there was an error, the AsnRequestError of the call will be returned instead.
optionalParams	AsnOptionalParameters	yes	No optional parameters yet

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**16.1.11asnJournalGetSettings**

Get the current Journal settings from the server

A client can get the current journal settings, in particular the privacy settings, which describes the handling of private calls on the server.

**ArgumentType: AsnJournalGetSettingsArgument**

AsnJournalGetSettingsArgument is an Object

Name	Type	Optional	Comment

**ResultType: AsnJournalGetSettingsResult**

AsnJournalGetSettingsResult is an Object

Name	Type	Optional	Comment
ePrivacyLevel	AsnJournalPrivateCallOptions		Enumerated

			AsnJournalPrivateCallOptions to describe how the privatized calls are handled by the server
bUseOfflineJournal	boolean		True if the server use the offline journal database, false if not
bOfflineDeleteOldEntries	boolean		True: delete old offline journal entries
iOfflineDaysNoDelete	number		Maximum days to keep old offline entries

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**16.1.12asnDeleteJournalEntries**

Delete journal entries form the database.

Depending on the permissions, a client can delete journal entries of the user or from the groups. If the call fails, AsnRequestError will be used instead of the result.

**ArgumentType: AsnDeleteJournalEntriesArgument**

AsnDeleteJournalEntriesArgument is an Object

Name	Type	Optional	Comment
u8sConnectionIDList	UTF8StringList		List of connection ids to indentify the journal entries to delete

**ResultType: AsnDeleteJournalEntriesResult**

AsnDeleteJournalEntriesResult is an Object

Name	Type	Optional	Comment
iResult	number		0 if the call was successful

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 16.1.13 asnMarkAllJournalEntriesAsRead

Mark all journal entries of the current user as 'read'.

To make it a client simpler, this function marks all journal entries of the current user as 'read' in the database.

#### ArgumentType: AsnMarkAllJournalEntriesAsReadArgument

AsnMarkAllJournalEntriesAsReadArgument is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnMarkAllJournalEntriesAsReadResult

AsnMarkAllJournalEntriesAsReadResult is an Object

Name	Type	Optional	Comment
iResult	number		0 if the call was successful

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 16.2 Journal Events

### 16.2.1 asnUpdateCallLocalContact

Update the contact data of the local contact of a journal entry ("Mandantenkontakt").

A client can search and update the called contact of a call ("Mandanten").

#### ArgumentType: AsnUpdateCallLocalContactArgument

AsnUpdateCallLocalContactArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection ID of the journal entry to change the local contact ("Mandantenfunktion")
localContact	AsnNetDatabaseContact		Contact to set in the journal entry

### 16.2.2 asnJournalEntryChanged

Journal update event from the server.

#### ArgumentType: AsnJournalEntryChangedEventArgs

AsnJournalEntryChangedEventArgs is an Object

Name	Type	Optional	Comment
iFlags	number		<p>Journal entry added(1), modified(2), deleted(3), added or modified(4).</p> <p>If the event was triggered by a differential update the server will set 'added or modified'(4) because it cannot differentiate between added or modified.</p>
journalEntry	AsnNetDatabaseJournal		Journal entry (at least with connection id in case of delete)
optionalParams	AsnOptionalParameters	yes	<ul style="list-style-type: none"> <li>optionalParams Name "iTransactionID" Value String, transaction ID of the entries, so older desktop clients can support diff updates.</li> </ul>

### 16.2.3 asnJournalEntryListChanged

Event from the server if journal entries where changed (new version of asnJournalEntryChanged, which only supports a single entry)

#### ArgumentType: AsnJournalEntryChangedEventArgs

AsnJournalEntryChangedEventArgs is an Object

Name	Type	Optional	Comment
iLastTransactionID	number		A counter increased by every database change to support differential updates

journalEntryChangedList	AsnJournalEntryChangedList		List of journal entries changed with this event
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#### 16.2.4 asnUpdateJournal

Event sent to the server to update journal entries asynchronously. The Result will be received from the server as asnJournalEntryChanged event.

##### ArgumentType: AsnUpdateJournalArgument

AsnUpdateJournalArgument is an Object

Name	Type	Optional	Comment
journalList	AsnNetDatabaseJournalList		List of AsnNetDatabaseJournal to update on the server
iFlags	number		Bitfield for describing what has changed. If set to 0, the server assumes that all fields have changed.
optionalParams	AsnOptionalParameters	yes	optionalParam key "CreateMobile", unsigned Integer 0 or 1, 1: special handling of mobile journal entries, should only be set by mobile clients

### 16.3 Journal Types

#### 16.3.1 AsnNetDatabaseJournalCallType

Call type of the journal entry used in AsnNetDatabaseJournal objects.

AsnNetDatabaseJournalCallType is an Enumeration

Name	Type	Value	Comment
eJOURNALCALLTYPEPBX	number	0	Calls on PBX lines (TAPI)
eJOURNALCALLTYPEVIDEOCHAT	number	1	Video Chat (WebRTC based) (only Video, no Audio; e.g. desktop sharing session)
eJOURNALCALLTYPEAUDIOCHAT	number	2	Audio Chat (WebRTC based) (only Audio, no Video)

eJOURNALCALLTYPEAUDIOVIDEOCHAT	number	3	Video Chat (WebRTC based) (Audio and Video)
eJOURNALCALLTYPEIM	number	4	Text Chat
eJOURNALCALLTYPEBLUETOOTHMOBILE	number	5	Bluetooth mobile phone call
eJOURNALCALLTYPEBLUETOOTHMOBILEUNKNOWNDURATION	number	6	Bluetooth mobile phone - Call duration of the connected call is (1 sec, offline Journal)
eJOURNALCALLTYPESIPAVCALL	number	7	Audio chat via SIP connection to PBX. Looks like a normal PBX call, but is technically a SIP softphone call via PBX using WebRTC.
eJOURNALCALLTYPESMS	number	8	SMS
eJOURNALCALLTYPESCREENSHARING	number	9	Screen/Desktop sharing (WebRTC based, invite := outgoing)
eJOURNALCALLTYPESCREENSHARING	number	10	Screen/Desktop sharing (WebRTC based, request := incoming)

### 16.3.2 AspNetDatabaseJournalFilterEnumeration

Flags for filtering journal entries in the result list of `asnGetJournalEntries`. These are used in `AspNetDatabaseJournalFindOptions` in the optionalParams key "iAdditionalFlags". These Bits can be used to set the filter flags in a more convenient way mit normal Bit operations in an integer value.

Additionally newer Flags are only to be set with this Method. These flags are: NoUnknown, TextChats, AudioChats, VideoChats, PhoneCalls, DeskShare.

`AspNetDatabaseJournalFilterEnumeration` is an Enumeration

Name	Type	Value	Comment
flagIntern	number	1	0x00000001 - Internal calls
flagExtern	number	2	0x00000002 - External calls
flagInbound	number	4	0x00000004 - Inbound calls
flagOutbound	number	8	0x00000008 - Outbound calls
flagConnected	number	16	0x00000010 - Connected calls
flagNotConnected	number	32	0x00000020 - Not connected calls
flagHasMemo	number	64	0x00000040 - The memo field contains text
flagHasNoMemo	number	128	0x00000080 - The memo field is empty
flagUnreadOnly	number	256	0x00000100 - Only entries, which are not marked as "read"
flagNoUnknown	number	512	0x00000200 - Exclude all calls without a caller number (clipped numbers)
flagTextChats	number	1024	0x00000400 - Include text chats (default: TBD)
flagAudioChats	number	2048	0x00000800 - Include audio chats (default: TBD)
flagVideoChats	number	4096	0x00001000 - Include video chats (default: TBD)
flagPhoneCalls	number	8192	0x00002000 - Include phone calls (default: set)
flagDeskShare	number	16384	0x00004000 - Include screen-/deskshare chats
flagIncludeAllPublic	number	65536	0x00010000 - Include all entries, which are marked as "public" and the user has access rights on.

### 16.3.3 AsnJournalSubscribeFlags

Options for asnJournalSubscribeEvents which defines if the client is interested in only user owned journal entries or it should include the journal entries of his groups also.

AsnJournalSubscribeFlags is an Enumeration

Name	Type	Value	Comment
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eDEFAULT	number	0	Get only user owned journal entries
eGROUPJOURNAL	number	1	Include the journal entries of the users groups, if the view permissions in the groups are set accordingly

#### 16.3.4 AsnJournalPrivateCallOptions

Flags needed for AsnJournalGetSettingsResult to describe the privacy level of the handling of private calls

AsnJournalPrivateCallOptions is an Enumeration

Name	Type	Value	Comment
eNORMAL	number	0	No special treatment of private calls
eSHORTENNUMBERS	number	1	Numbers in private calls should be shortened
eNONUMBERS	number	2	Numbers of private calls wont be persisted

#### 16.3.5 AsnUpdateJournalUpdateFlags

Flags which part of the journal entries should be updated in the database. Used in AsnUpdateJournalArgument .

AsnUpdateJournalUpdateFlags is an Enumeration

Name	Type	Value	Comment
eUpdateFlagRead	number	1	0x0001 - Read flag update
eUpdateFlagContact	number	2	0x0002 - Contact data update
eUpdateFlagProject	number	4	0x0004 - Project rules update
eUpdateFlagMemo	number	8	0x0008 - Memo text update
eUpdateFlagSubject	number	16	0x0010 - Subject text update
eUpdateFlagAcceptor	number	32	0x0020 - Acceptor changed
eUpdateFlagPhoneNumber	number	64	0x0040 - Phone number changed
eUpdateFlagTrackerLastCall	number	128	0x0080 - Tracker last call changed

eUpdateFlagNoStatistic	number	256	0x0100 - No statistics flag changed
eUpdateFlagCallType	number	512	0x0200 - Call type changed
eUpdateFlagLabel	number	1024	0x0400 - Label changed
eUpdateFlagDeleted	number	2048	0x0800 - Deleted flag changed
eUpdateFlagTrackerCallFlow	number	4096	0x1000 - Tracker call flow changed
eUpdateFlagContactName	number	8192	0x2000 - Contact name changed

### 16.3.6 AsnGetOfflineJournalArgument

Argument for asnGetOfflineJournal

AsnGetOfflineJournalArgument is an Object

Name	Type	Optional	Comment
iMaxDays	number		Maximum Days to get offline journal entries. (0 = 365 days)
iMarkRead	number		0: Don't change the entries; 1: Mark the offline entries as "read", which means delete the entry from the offline database. The corresponding entry in the journal database will not be touched.

### 16.3.7 AspNetDatabaseJournal

The structure of a journal entry of conversations on the UCServer.

This sequence describes a call or other conversation when it is stored in the history database called "journal".

With this structure it is possible to see when a conversation or event has happened and other meta information about it.

The API provides operations to alter or add information of that entry.  
New entries can only be generated by the UCServer.

AspNetDatabaseJournal is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Unique ID of the call
stStartTime	string		Time stamp start of call (first event).

stStopTime	string		Time stamp end of call (last event).
iDurationTotal	number		Duration of the call from stStartTime to stStopTime in seconds.
stConnectTime	string		Time stamp when the call was connected (e.g. accepted).
stDisconnectTime	string		Time stamp when the call was disconnected (e.g. hangup).
iDurationConnected	number		Duration of the call from stConnectTime to stDisconnectTime in seconds.
iOrigin	number		1: outgoing call (outbound), 0: incoming Gespräch (inbound)
iInternal	number		1: internal call (call with internal partner), 0: external call (call with external partner)
u8sLineNumber	string		Number of the line, the call was active.
u8sLineName	string		A Name of the Line (can be the owner's name or a name configured in the PBX).
u8sLineUserName	string		The user name of the line owner.
iLineUserOffline	number		1: user was offline during the call was active.
u8sLocalNumber	string		Number of the line in local format (can be different to u8sLineNumber).
u8sPhoneNumber	string		Phone number of the partner of the call.
u8sRedirectingNumber	string		If the call was redirected from another extension, the phone number of that line is given here.
u8sContactName	string		If available, the name of the call partner.
u8sContactCompany	string		If available, the company of the call partner.
u8sContactEntryID	string		If available, entry id of the contact data to get it from the source database.
u8sContactEntryStoreID	string		If available, store id of the contact data to get it from the source

			database.
u8sContactEntryDBID	string		If available, entry database id of the contact data to get it from the source database.
u8sCtiServerUserName	string		User name of the owner.
u8sProviderNumber	string		TBD
iSuccessState	number		TBD
u8sSubject	string		Free text, unused.
u8sMemo	string		Free text, contains possible comment to the call.
iReadFlag	number		0: call was not marked as read, 1: call was marked as read.
projectPinRule	AsnProjectPinRule		Contains further information about possible used project or pin rules. (Linked Type: AsnProjectPinRule)
u8sTrackerID	string		Unique ID for the call tracker, which contains further information about the call history if the call was forwarded for example.
u8sAcceptorName	string		If available, the name of the user who accepted the call (e.g. if the call was missed by the owner and a colleague has picked it up instead).
u8sAcceptorCtiServerUserName	string		If available, the user name of the user who accepted the call (e.g. if the call was missed by the owner and a colleague has picked it up instead).
u8sAcceptorConnectionID	string		If available, the unique id of the journal entry, which was the call of the acceptor (e.g. if the call was missed by the owner and a colleague has picked it up instead).
optionalParams	AsnOptionalParameters	yes	<p>Additional parameters for AspNetDatabaseJournalFindOptions added here for backward compatibility.</p> <ul style="list-style-type: none"> <li>• Key "bMemoComplete", Value bool, optional. Only present if the entry represents a text chat entry and the logged in user is owner of this entry.</li> </ul>

			<ul style="list-style-type: none"> <li>• Key "TrackerLastCall", Value integer, optional. 1 if it is the last call of a call tracker sequence of calls.</li> <li>• Key "NoStatistic", Value integer, optional. 1 if this entry should be ignored for statistic services (e.g. ProCall Analytics).</li> <li>• Key "CallType", Value integer, not optional. Type of the call, valid values are defined in AspNetDatabaseJournalCallType.</li> <li>• Key "iTransactionID", Value integer, not optional. Transaction id of the entry in the database.</li> <li>• Key "iChatSequenceID", Value integer, optional. Sequence id of text chat entries.</li> </ul>
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### 16.3.8 AspNetDatabaseJournalFindOptionsV2

Filter options for finding more specific journal entries.

The find options are use to give more details about the journal entries which should be in the result list. By default, the search is limited to the journal entries of the logged in user (public and private). Deleted ones are never listed.

If there are user names given in u8slistLineUserNames, the search can be expanded on users, where access rights were granted (public only).

AspNetDatabaseJournalFindOptionsV2 is an Object

Name	Type	Optional	Comment
stStartTimeFrom	string		Filter on "StartTime", first time stamp of a desired time window of journal entries.
stStartTimeTo	string		Filter on "StartTime", last time stamp of a desired time window of journal entries.
u8slistLineUserNames	UTF8StringList		A list of CTIUserNames of which journal entries should be searched.
u8slistPhoneNumber	UTF8StringList		The own user name of the logged in user is not necessary and should not be given here.

			Filter on sought after phone numbers.
u8sContactName	string		Name of the conversational partner.
u8sCompanyName	string		Company name of the conversational partner.
u8sFilterText	string		Free text which will be found in the contact name, company name, phone number or memo field.
iMaxNumEntries	number		Max count of journal entries to return, 0 would be "all". Higher values resulting in a increasing perfomance impact on the ucserver. A good value is 100.
iFilter	number		Defines a filter based on AspNetDatabaseJournalFilterEnumeration (Linked Type: AspNetDatabaseJournalFilterEnumeration )
iLastKnownGlobTransactionID	number	yes	Last known global transaction ID. If this parameter is given, only entries with a global transaction ID newer than iLastKnownGlobTransactionID will be delivered. The value has to be greater than 0.

### 16.3.9 AsnUpdateCallAndJournalContactAndNumberArgument

Argument for asnUpdateCallAndJournalContactAndNumber

AsnUpdateCallAndJournalContactAndNumberArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Unique ID of the call or journal entry to modify.
u8sRemoteNumberSC	string		Phone number to set for the contact in long format (e.g. +49815136856177).
remoteContact	AspNetDatabaseContact		The contact to set for the journal entry. (Linked Type: AspNetDatabaseContact)

### 16.3.10 AsnUpdateCallAndJournalContactAndNumberResult

The result of asnUpdateCallAndJournalContactAndNumber

AsnUpdateCallAndJournalContactAndNumberResult is an Object

Name	Type	Optional	Comment
bResultCallInfoUpdate	boolean		If the active call was updated, this will be "true".
bResultJournalUpdate	boolean		If the journal entry was updated, this will be "true".

### 16.3.11AsnUpdateCallLocalContactArgument

Argument for asnUpdateCallLocalContact event to the server

AsnUpdateCallLocalContactArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Connection ID of the journal entry to change the local contact ("Mandantenfunktion")
localContact	AsnNetDatabaseContact		Contact to set in the journal entry

### 16.3.12AsnUpdateJournalMemoArgument

Argument for asnUpdateJournalMemo

AsnUpdateJournalMemoArgument is an Object

Name	Type	Optional	Comment
u8sConnectionIDList	UTF8StringList		Liste von IDs, anhand welcher der Journaleintrag identifiziert wird.
u8sMemo	string		Die Notiz zu einem bestimmten Call

### 16.3.13AsnUpdateJournalMemoResult

Result of asnUpdateJournalMemo

AsnUpdateJournalMemoResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		True if the update was successful, false if not.

### 16.3.14AsnUpdateJournalProjectArgument

Argument for asnUpdateJournalProject

AsnUpdateJournalProjectArgument is an Object

Name	Type	Optional	Comment
u8sConnectionIDList	UTF8StringList		List of IDs to identify the journal entries to modify with new project rules
projectPinRule	AsnProjectPinRule		Project data to set to the journal entries

### 16.3.15 AsnUpdateJournalProjectResult

Result of asnUpdateJournalProject

AsnUpdateJournalProjectResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

### 16.3.16 AsnUpdateJournalReadFlagArgument

Argument for asnUpdateJournalReadFlag

AsnUpdateJournalReadFlagArgument is an Object

Name	Type	Optional	Comment
u8sConnectionIDList	UTF8StringList		List of ids to specify the journal entries to change their read flag
bReadFlag	boolean		True if the entry(s) should be set to "read", False if they should be set to "unread"

### 16.3.17 AsnUpdateJournalReadFlagResult

Result of asnUpdateJournalReadFlag

AsnUpdateJournalReadFlagResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		True if the entries were modified, false if there was a problem.

### 16.3.18 AsnUpdateJournalSubjectArgument

Argument for asnUpdateJournalSubject

AsnUpdateJournalSubjectArgument is an Object

Name	Type	Optional	Comment
u8sConnectionIDList	UTF8StringList		List of ids to specify the journal entries to change their subject field
u8sSubject	string		New text for the subject

### 16.3.19AsnUpdateJournalSubjectResult

Result of asnUpdateJournalSubject

AsnUpdateJournalSubjectResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		True if the subject was changed in the database, false is not

### 16.3.20AsnGetJournalEntriesCountResult

Result of asnGetJournalEntriesCount and asnGetJournalEntriesCountV2 method

AsnGetJournalEntriesCountResult is an Object

Name	Type	Optional	Comment
iCount	number		Count of journal entries found in the database according the AspNetDatabaseJournalFindOptions given in the argument

### 16.3.21AsnJournalEntryGetArgument

Argument for asnJournalEntryGet

AsnJournalEntryGetArgument is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		ConnectionID of the call to get its journal entry

### 16.3.22AsnJournalSubscribeEventsArgument

Argument for asnJournalSubscribeEvents

AsnJournalSubscribeEventsArgument is an Object

Name	Type	Optional	Comment
bReceiveJournalEvents	boolean		Set to true to subscribe, set to false to

				unsubscribe (completely)
iLastKnownGlobTransactionID	number	yes		If this parameter is set to the last known transaction id, the server will only send the journal entries with a higher transaction id. The search is limited to the last 60 days. If older entries are of interest, the client should use asnGetJournalEntries with find options set accordingly.
iMaxEntries	number	yes		Maximum number of journal entries to retrieve by this call
iFlags	number	yes		Additional subscribe options defined in AsnJournalSubscribeFlags

### 16.3.23AsnJournalSubscribeEventsResult

Result of asnJournalSubscribeEvents if the call is successful. If an error occurred, the AsnRequestError will be returned

AsnJournalSubscribeEventsResult is an Object

Name	Type	Optional	Comment
iResult	number		If the call was successful, 0 is returned. If there was an error, the AsnRequestError of the call will be returned instead.
optionalParams	AsnOptionalParameters	yes	No optional parameters yet

### 16.3.24AsnJournalGetSettingsArgument

Argument for asnJournalGetSettings - there are no parameters needed, but the call needs an argument.

AsnJournalGetSettingsArgument is an Object

Name	Type	Optional	Comment

### 16.3.25AsnDeleteJournalEntriesArgument

Argument for asnDeleteJournalEntries

AsnDeleteJournalEntriesArgument is an Object

Name	Type	Optional	Comment
u8sConnectionIDList	UTF8StringList		List of connection ids to identify the journal entries to delete

### 16.3.26AsnDeleteJournalEntriesResult

Result of asnDeleteJournalEntries

AsnDeleteJournalEntriesResult is an Object

Name	Type	Optional	Comment
iResult	number		0 if the call was successful

### 16.3.27AsnMarkAllJournalEntriesAsReadArgument

Argument for asnMarkAllJournalEntriesAsRead

AsnMarkAllJournalEntriesAsReadArgument is an Object

Name	Type	Optional	Comment

### 16.3.28AsnMarkAllJournalEntriesAsReadResult

Result of asnMarkAllJournalEntriesAsRead

AsnMarkAllJournalEntriesAsReadResult is an Object

Name	Type	Optional	Comment
iResult	number		0 if the call was successful

### 16.3.29AsnNetDatabaseJournalList

List of AspNetDatabaseJournal

AspNetDatabaseJournalList is an Array of AspNetDatabaseJournal

AspNetDatabaseJournal is an Object

Name	Type	Optional	Comment
u8sConnectionID	string		Unique ID of the call
stStartTime	string		Time stamp start of call (first event).
stStopTime	string		Time stamp end of call (last event).
iDurationTotal	number		Duration of the call from stStartTime to stStopTime in seconds.

stConnectTime	string		Time stamp when the call was connected (e.g. accepted).
stDisconnectTime	string		Time stamp when the call was disconnected (e.g. hangup).
iDurationConnected	number		Duration of the call from stConnectTime to stDisconnectTime in seconds.
iOrigin	number		1: outgoing call (outbound), 0: incoming Gespräch (inbound)
iInternal	number		1: internal call (call with internal partner), 0: external call (call with external partner)
u8sLineNumber	string		Number of the line, the call was active.
u8sLineName	string		A Name of the Line (can be the owner's name or a name configured in the PBX).
u8sLineUserName	string		The user name of the line owner.
iLineUserOffline	number		1: user was offline during the call was active.
u8sLocalNumber	string		Number of the line in local format (can be different to u8sLineNumber).
u8sPhoneNumber	string		Phone number of the partner of the call.
u8sRedirectingNumber	string		If the call was redirected from another extension, the phone number of that line is given here.
u8sContactName	string		If available, the name of the call partner.
u8sContactCompany	string		If available, the company of the call partner.
u8sContactEntryID	string		If available, entry id of the contact data to get it from the source database.
u8sContactEntryStoreID	string		If available, store id of the contact data to get it from the source database.
u8sContactEntryDBID	string		If available, entry database id of the contact data to get it from the source database.

u8sCtiServerUserName	string		User name of the owner.
u8sProviderNumber	string		TBD
iSuccessState	number		TBD
u8sSubject	string		Free text, unused.
u8sMemo	string		Free text, contains possible comment to the call.
iReadFlag	number		0: call was not marked as read, 1: call was marked as read.
projectPinRule	AsnProjectPinRule		Contains further information about possible used project or pin rules. (Linked Type: AsnProjectPinRule)
u8sTrackerID	string		Unique ID for the call tracker, which contains further information about the call history if the call was forwarded for example.
u8sAcceptorName	string		If available, the name of the user who accepted the call (e.g. if the call was missed by the owner and a colleague has picked it up instead).
u8sAcceptorCtiServerUserName	string		If available, the user name of the user who accepted the call (e.g. if the call was missed by the owner and a colleague has picked it up instead).
u8sAcceptorConnectionID	string		If available, the unique id of the journal entry, which was the call of the acceptor (e.g. if the call was missed by the owner and a colleague has picked it up instead).
optionalParams	AsnOptionalParameters	yes	<p>Additional parameters for AspNetDatabaseJournalFindOptions added here for backward compatibility.</p> <ul style="list-style-type: none"> <li>• Key "bMemoComplete", Value bool, optional. Only present if the entry represents a text chat entry and the logged in user is owner of this entry.</li> <li>• Key "TrackerLastCall", Value integer, optional. 1 if it is the last call of a call tracker sequence of calls.</li> <li>• Key "NoStatistic", Value integer, optional. 1 if this</li> </ul>

			<p>entry should be ignored for statistic services (e.g. ProCall Analytics).</p> <ul style="list-style-type: none"> <li>• Key "CallType", Value integer, not optional. Type of the call, valid values are defined in AspNetDatabaseJournalC allType.</li> <li>• Key "iTransactionID", Value integer, not optional. Transaction id of the entry in the database.</li> <li>• Key "iChatSequenceID", Value integer, optional. Sequence id of text chat entries.</li> </ul>
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### 16.3.30AsnGetJournalEntriesResult

Result of asnGetJournalEntries and asnGetJournalEntriesV2 operation

AsnGetJournalEntriesResult is an Object

Name	Type	Optional	Comment
journalList	AspNetDatabaseJournalList		

### 16.3.31AsnGetJournalEntriesV2Argument

AsnGetJournalEntriesV2Argument is an Object

Name	Type	Optional	Comment
findOptions	AspNetDatabaseJournalFindOptionsV2		

### 16.3.32AsnGetJournalEntriesCountV2Argument

AsnGetJournalEntriesCountV2Argument is an Object

Name	Type	Optional	Comment
findOptions	AspNetDatabaseJournalFindOptionsV2		specify the journal entries to count

### 16.3.33AsnJournalEntryGetResult

Result of asnJournalEntryGet

AsnJournalEntryGetResult is an Object

Name	Type	Optional	Comment
journalEntry	AsnNetDatabaseJournal		If a journal entry can be found, this result contains a copy of it.

### 16.3.34 AsnJournalEntryChangedEventArgs

Argument for the asnJournalEntryChanged event

AsnJournalEntryChangedEventArgs is an Object

Name	Type	Optional	Comment
iFlags	number		<p>Journal entry added(1), modified(2), deleted(3), added or modified(4).</p> <p>If the event was triggered by a differential update the server will set 'added or modified'(4) because it cannot differentiate between added or modified.</p>
journalEntry	AsnNetDatabaseJournal		Journal entry (at least with connection id in case of delete)
optionalParams	AsnOptionalParameters	yes	<ul style="list-style-type: none"> <li>optionalParams Name "iTransactionID" Value String, transaction ID of the entries, so older desktop clients can support diff updates.</li> </ul>

### 16.3.35 AsnJournalEntryChangedEventArgs

List of AsnJournalEntryChangedEventArgs

AsnJournalEntryChangedEventArgs is an Array of AsnJournalEntryChangedEventArgs

AsnJournalEntryChangedEventArgs is an Object

Name	Type	Optional	Comment
iFlags	number		<p>Journal entry added(1), modified(2), deleted(3), added or modified(4).</p> <p>If the event was triggered by a differential update the server will set 'added or modified'(4) because it cannot differentiate between added</p>

			or modified.
journalEntry	AsnNetDatabaseJournal		Journal entry (at least with connection id in case of delete)
optionalParams	AsnOptionalParameters	yes	<ul style="list-style-type: none"> <li>optionalParams Name "iTransactionID" Value String, transaction ID of the entries, so older desktop clients can support diff updates.</li> </ul>

### 16.3.36AsnJournalEntryChangedListArgument

Argument of asnJournalEntryListChanged from the server

AsnJournalEntryChangedListArgument is an Object

Name	Type	Optional	Comment
iLastTransactionID	number		A counter increased by every database change to support differential updates
journalEntryChangedList	AsnJournalEntryChangedList		List of journal entries changed with this event

### 16.3.37AsnJournalGetSettingsResult

Result of asnJournalGetSettings

AsnJournalGetSettingsResult is an Object

Name	Type	Optional	Comment
ePrivacyLevel	AsnJournalPrivateCallOptions		Enumerated AsnJournalPrivateCallOptions to describe how the privatized calls are handled by the server
bUseOfflineJournal	boolean		True if the server use the offline journal database, false if not
bOfflineDeleteOldEntries	boolean		True: delete old offline journal entries
iOfflineDaysNoDelete	number		Maximum days to keep old offline entries

### 16.3.38AsnUpdateJournalArgument

Argument for asnUpdateJournal, event to the server.

AsnUpdateJournalArgument is an Object

Name	Type	Optional	Comment
journalList	AsnNetDatabaseJournalList		List of AsnNetDatabaseJournal to update on the server
iFlags	number		Bitfield for describing what has changed. If set to 0, the server assumes that all fields have changed.
optionalParams	AsnOptionalParameters	yes	optionalParam key "CreateMobile", unsigned Integer 0 or 1, 1: special handling of mobile journal entries, should only be set by mobile clients

### 16.3.39 AsnGetOfflineJournalResult

Result of asnGetOfflineJournal

AsnGetOfflineJournalResult is an Object

Name	Type	Optional	Comment
journalList	AsnNetDatabaseJournalList		List of AsnNetDatabaseJournal objects, containing the offline journal entries found.

## 17 Management

Administration interface (UCServer administration)

### Module description

This module defines the structures and operations operations for the UCServer management software. It should be used by the UCServer Administrator, Web based administration tools or automatic provisioning applications.

Several operations are a copy of operations in ENetUC\_Admin.asn1 and renamed "asnAdmin..." -> "asnMgmt..."

(for having a clearer separation of the interfaces)

### Versioning

It is important to increment the version of the protocol, whenever there are incompatible changes.

The admin and the server must have an equal version to communicate.

The protocol version defined with the field named AsnManagementProtocolVersion

### Management operations

#### 17.1 Management Operations

##### 17.1.1 asnMgmtSetUserProfile

##### **ArgumentType: AsnAdminSetUserProfileArgument**

AsnAdminSetUserProfileArgument is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		
optionalParams	AsnOptionalParameters	yes	

##### **ResultType: AsnAdminSetUserProfileResult**

AsnAdminSetUserProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

##### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment

iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.2 asnMgmtSetUserProfilesList

#### ArgumentType: AsnAdminSetUserProfilesListArgument

AsnAdminSetUserProfilesListArgument is an Object

Name	Type	Optional	Comment
userProfiles	AsnUserProfileList		

#### ResultType: AsnAdminSetUserProfilesListResult

AsnAdminSetUserProfilesListResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		
errorList	AsnSetUserProfilesErrorList	yes	

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.3 asnMgmt GetUserProfiles

Get all user profiles

Triggers the UCServer to send Events asnMgmt GetUserProfilesResult() to client with 50 user profiles each

#### ArgumentType: AsnMgmt GetUserProfilesArgument

AsnMgmt GetUserProfilesArgument is an Object

Name	Type	Optional	Comment
iActiveUsersOnly	number		CTI-Enabled users only

iFilterOnlineState	number		Filter with actual onlinestate -> AsnAdminUserOnlineStateFilter
u8sCrossRefId	string		

**ResultType: AsnMgmt GetUserProfilesResult**

AsnMgmt GetUserProfilesResult is an Object

Name	Type	Optional	Comment
userProfiles	AsnUserProfileList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.4 asnMgmtGetUsers****ArgumentType: AsnMgmtGetUsersArgument**

AsnMgmtGetUsersArgument is an Object

Name	Type	Optional	Comment
bResultAsList	boolean	yes	if true the users will be sent bundled with asnMgmt GetUserListEvent (if false or omitted the users will be sent individually with asnMgmt GetUsersEvent)

**ResultType: AsnMgmtGetUsersResult**

AsnMgmtGetUsersResult is an Object

Name	Type	Optional	Comment
iNumberOfUsers	number		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.5 asnMgmtReloadUserConfig

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.6 asnMgmtUpdateActiveUserProfiles

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.7 asnMgmtGetUMMode

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtGetUMModeResult

AsnMgmtGetUMModeResult is an Object

Name	Type	Optional	Comment
iType	number		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.8 asnMgmtSetUMMode

#### ArgumentType: AsnMgmtSetUMModeArgument

AsnMgmtSetUMModeArgument is an Object

Name	Type	Optional	Comment
iType	number		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.9 asnMgmtTestUMInterface****ArgumentType: AsnMgmtTestUMInterfaceArgument**

AsnMgmtTestUMInterfaceArgument is an Object

Name	Type	Optional	Comment
iType	number		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.10asnMgmtUserProfileGetLargeImage****ArgumentType: AsnMgmtUserProfileGetLargeImageArgument**

AsnMgmtUserProfileGetLargeImageArgument is an Object

Name	Type	Optional	Comment
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u8sUsername	string		
u8sImgHash	string		

**ResultType: AsnMgmtUserProfileGetLargeImageResult**

AsnMgmtUserProfileGetLargeImageResult is an Object

Name	Type	Optional	Comment
binImageData	string		
u8sImgHash	string		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.11asnMgmtSubscribeUserGroupComputerModifiedEvents****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error

u8sErrorString	string		A string representing the error
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### 17.1.12 asnMgmtUnsubscribeUserGroupComputerModifiedEvents

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.13 asnMgmtGetGroups

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnMgmtGetGroupsResult

AsnMgmtGetGroupsResult is an Object

Name	Type	Optional	Comment
iNumberOfGroups	number		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.14asnMgmtRemoveGroup

#### ArgumentType: AsnMgmtRemoveGroupArgument

AsnMgmtRemoveGroupArgument is an Object

Name	Type	Optional	Comment
u8sGroupName	string		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.15asnMgmtGetGroupAgentPublicPresence

#### ArgumentType: AsnMgmtGetGroupAgentPublicPresenceArgument

AsnMgmtGetGroupAgentPublicPresenceArgument is an Object

Name	Type	Optional	Comment
u8sGroupName	string		

#### ResultType: AsnMgmtGetGroupAgentPublicPresenceResult

AsnMgmtGetGroupAgentPublicPresenceResult is an Object

Name	Type	Optional	Comment
listAgentPresence	AsnMgmtAgentPublicPresenceltemList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.16asnMgmtGetComputers****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtGetComputersResult**

AsnMgmtGetComputersResult is an Object

Name	Type	Optional	Comment
iNumberOfComputers	number		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.17asnMgmtRefreshComputerStatus****ArgumentType: AsnMgmtRefreshComputerStatusArgument**

AsnMgmtRefreshComputerStatusArgument is an Object

Name	Type	Optional	Comment
u8slistComputers	UTF8StringList		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.18asnMgmtClearComputerStatus****ArgumentType: AsnMgmtClearComputerStatusArgument**

AsnMgmtClearComputerStatusArgument is an Object

Name	Type	Optional	Comment
u8slistComputers	UTF8StringList		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 17.1.19 asnMgmtRemoveComputer

### ArgumentType: AsnMgmtRemoveComputerArgument

AsnMgmtRemoveComputerArgument is an Object

Name	Type	Optional	Comment
u8sComputerName	string		

### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 17.1.20 asnMgmtSetSMSManagerSettings

### ArgumentType: AsnMgmtSMSManagerSettings

AsnMgmtSMSManagerSettings is an Object

Name	Type	Optional	Comment
bIsActivated	boolean		
u8sConfiguredProvider	string		
u8sLoginName	string		
u8sLoginPassword	string		
u8sServerSenderAddress	string		
iSenderAddressType	number		(Linked Type: AsnMgmtSMSSenderAddressType)
u8sConfiguredService	string		

### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.21asnMgmtGetSMSManagerSettings

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnMgmtSMSManagerSettings

AsnMgmtSMSManagerSettings is an Object

Name	Type	Optional	Comment
bIsActivated	boolean		
u8sConfiguredProvider	string		
u8sLoginName	string		
u8sLoginPassword	string		
u8sServerSenderAddress	string		
iSenderAddressType	number		(Linked Type: AsnMgmtSMSSenderAddressType)
u8sConfiguredService	string		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
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iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.22asnMgmtGetSMSProvider

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtWebSMSProviderList

AsnMgmtWebSMSProviderList is an Object

Name	Type	Optional	Comment
u8sProviderListAsXML	string		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.23asnMgmtSendSMS

#### ArgumentType: AsnMgmtSendSMSArgument

AsnMgmtSendSMSArgument is an Object

Name	Type	Optional	Comment
u8sFrom	string		
u8sTo	string		
u8sBody	string		

#### ResultType: AsnMgmtSendSMSResult

AsnMgmtSendSMSResult is an Object

Name	Type	Optional	Comment
u8sResultInfo	string		
bResultWasError	boolean		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.24asnMgmtGetGoogleClientID****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtGoogleClientID**

AsnMgmtGoogleClientID is an Object

Name	Type	Optional	Comment
bEnabled	boolean		
u8sClientID	string		
u8sClientSecret	string		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.25asnMgmtSetGoogleClientID****ArgumentType: AsnMgmtGoogleClientID**

AsnMgmtGoogleClientID is an Object

Name	Type	Optional	Comment
bEnabled	boolean		
u8sClientID	string		
u8sClientSecret	string		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.26asnMgmtGetClientInstallProfileComputerNames****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetClientInstallProfileComputerNamesResult**

AsnMgmtGetClientInstallProfileComputerNamesResult is an Object

Name	Type	Optional	Comment
u8slistComputers	UTF8StringList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.27 asnMgmtSendBroadcast

#### ArgumentType: AsnMgmtSendBroadcastArgument

AsnMgmtSendBroadcastArgument is an Object

Name	Type	Optional	Comment
iType	number		(Linked Type: AsnMgmtACUBROADCASTSENUM)
u8slistComputers	UTF8StringList		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.28 asnMgmtGetClientInstallProfile

#### ArgumentType: AsnMgmtGetClientInstallProfileArgument

AsnMgmtGetClientInstallProfileArgument is an Object

Name	Type	Optional	Comment
u8sComputer	string		

#### ResultType: AsnMgmtGetClientInstallProfileResult

AsnMgmtGetClientInstallProfileResult is an Object

Name	Type	Optional	Comment
profileData	AsnMgmtClientInstallProfileData		

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 17.1.29 asnMgmtSetClientInstallProfile

### ArgumentType: AsnMgmtSetClientInstallProfileArgument

AsnMgmtSetClientInstallProfileArgument is an Object

Name	Type	Optional	Comment
iACICommand	number		
profileData	AsnMgmtClientInstallProfileData		

### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 17.1.30 asnMgmtGetAvailableUpdates

### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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### **ResultType: AsnMgmtGetAvailableUpdatesResult**

AsnMgmtGetAvailableUpdatesResult is an Object

Name	Type	Optional	Comment
updateDescriptionList	AsnMgmtACUFileForUpdateDescriptionList		

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

## **17.1.31asnMgmtGetUpdateServiceSettings**

### **ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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### **ResultType: AsnMgmtUpdateServiceSettings**

AsnMgmtUpdateServiceSettings is an Object

Name	Type	Optional	Comment
iStatusUpdateService	number		Status des Update Service. Verfuegbar oder nicht verfuegbar. 0 oder 1
iEACUServiceActive	number		Aktiv Status des Update Service. Fuer Updates eingeschaltet oder nicht. 0 oder 1
iEACUServiceTimeLimited	number		Zeit Limitierung fuer Updates eingeschaltet. 0 oder 1.
iAllowVersionDowngrade	number		Version downgrade erlaubt 0 oder 1.
iAVBehaviour	number		Verhalten bei auf dem Client aktiver Medien

			Verbindungen (Linked Type: AsnUpdateAVBehaviour)
iMaxWaitTimeForIdleMinutes	number		Maximale Wartezeit bis der Client Idle ist
dtTimeFrom	string		Zeitliche Einschraenkung von bis
dtTimeTo	string		
u8sRemoteLocation	string	yes	

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.32asnMgmtSetUpdateServiceSettings****ArgumentType: AsnMgmtUpdateServiceSettings**

AsnMgmtUpdateServiceSettings is an Object

Name	Type	Optional	Comment
iStatusUpdateService	number		Status des Update Service. Verfuegbar oder nicht verfuegbar. 0 oder 1
iEACUServiceActive	number		Aktiv Status des Update Service. Fuer Updates eingeschaltet oder nicht. 0 oder 1
iEACUServiceTimeLimited	number		Zeit Limitierung fuer Updates eingeschaltet. 0 oder 1.
iAllowVersionDowngrade	number		Version downgrade erlaubt 0 oder 1.
iAVBehaviour	number		Verhalten bei auf dem Client aktiver Medien Verbindungen (Linked Type: AsnUpdateAVBehaviour)
iMaxWaitTimeForIdleMinutes	number		Maximale Wartezeit bis der Client Idle ist
dtTimeFrom	string		Zeitliche Einschraenkung von bis
dtTimeTo	string		
u8sRemoteLocation	string	yes	

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.33asnMgmtConResetLine

#### ArgumentType: AsnMgmtConResetLineArgument

AsnMgmtConResetLineArgument is an Object

Name	Type	Optional	Comment
u8sLineID	string		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.34asnMgmtGetLineSources

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetLineSourcesResult**

AsnMgmtGetLineSourcesResult is an Object

Name	Type	Optional	Comment
u8slistSources	UTF8StringList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.35asnMgmtGetLineSourceDeviceIDs****ArgumentType: AsnMgmtGetLineSourceDeviceIDsArgument**

AsnMgmtGetLineSourceDeviceIDsArgument is an Object

Name	Type	Optional	Comment
u8sLineSource	string		

**ResultType: AsnMgmtGetLineSourceDeviceIDsResult**

AsnMgmtGetLineSourceDeviceIDsResult is an Object

Name	Type	Optional	Comment
iListDeviceIDs	SEQInteger		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error

u8sErrorString	string		A string representing the error
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### 17.1.36 asnMgmtGetLinesForSource

#### ArgumentType: AsnMgmtGetLinesForSourceArgument

AsnMgmtGetLinesForSourceArgument is an Object

Name	Type	Optional	Comment
u8sLineSource	string		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.37 asnMgmtGetLineStates

#### ArgumentType: AsnMgmtGetLineStatesArgument

AsnMgmtGetLineStatesArgument is an Object

Name	Type	Optional	Comment
iType	number		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.38asnMgmtGetLineGroups

#### ArgumentType: AsnMgmtGetLineGroupsArgument

AsnMgmtGetLineGroupsArgument is an Object

Name	Type	Optional	Comment
u8sLineSourceName	string		

#### ResultType: AsnMgmtGetLineGroupsResult

AsnMgmtGetLineGroupsResult is an Object

Name	Type	Optional	Comment
u8slistLineGroups	UTF8StringList		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.39asnMgmtUnsubscribeLineEvents

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.40asnMgmtSubscribeLineEvents****ArgumentType: AsnMgmtSubscribeLineEventsArgument**

AsnMgmtSubscribeLineEventsArgument is an Object

Name	Type	Optional	Comment
u8sTAPILineID	string		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.41asnMgmtGetLineConfig****ArgumentType: AsnMgmtGetLineConfigArgument**

AsnMgmtGetLineConfigArgument is an Object

Name	Type	Optional	Comment
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u8sLineSource	string		
iDeviceID	number		

**ResultType: AsnMgmtGetLineConfigResult**

AsnMgmtGetLineConfigResult is an Object

Name	Type	Optional	Comment
config	AsnMgmtTapiLineConfig4Admin		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.42asnMgmtSetLineConfig****ArgumentType: AsnMgmtSetLineConfigArgument**

AsnMgmtSetLineConfigArgument is an Object

Name	Type	Optional	Comment
u8sLineSource	string		
iDeviceID	number		
config	AsnMgmtTapiLineConfiguration		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.43asnMgmtDeleteLine

#### ArgumentType: AsnMgmtDeleteLineArgument

AsnMgmtDeleteLineArgument is an Object

Name	Type	Optional	Comment
u8sLineSource	string		
u8sLineID	string		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.44asnMgmtETapiUIDllCallback

#### ArgumentType: AsnMgmtETapiUIDllCallbackArgument

AsnMgmtETapiUIDllCallbackArgument is an Object

Name	Type	Optional	Comment
binData	string		

#### ResultType: AsnMgmtETapiUIDllCallbackResult

AsnMgmtETapiUIDllCallbackResult is an Object

Name	Type	Optional	Comment
binData	string		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.45asnMgmtGetLineGroupConfig****ArgumentType: AsnMgmtGetLineGroupConfigArgument**

AsnMgmtGetLineGroupConfigArgument is an Object

Name	Type	Optional	Comment
u8sLineSourceName	string		
u8sGroupName	string		

**ResultType: AsnMgmtGetLineGroupConfigResult**

AsnMgmtGetLineGroupConfigResult is an Object

Name	Type	Optional	Comment
config	AsnMgmtTapiLineGroupConfiguration		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.46asnMgmtSetLineGroupConfig****ArgumentType: AsnMgmtSetLineGroupConfigArgument**

AsnMgmtSetLineGroupConfigArgument is an Object

Name	Type	Optional	Comment
config	AsnMgmtTapiLineGroupConfiguration		

### **ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

## **17.1.47 asnMgmtRequestPBXLineExists**

### **ArgumentType: AsnMgmtRequestPBXLineExistsArgument**

AsnMgmtRequestPBXLineExistsArgument is an Object

Name	Type	Optional	Comment
u8sPhoneNumber	string		

### **ResultType: AsnMgmtRequestPBXLineExistsResult**

AsnMgmtRequestPBXLineExistsResult is an Object

Name	Type	Optional	Comment
u8sCorrectNumberSC	string		

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
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iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.48asnMgmtGetUMInterfaceSettings

#### ArgumentType: AsnMgmtGetUMInterfaceSettingsArgument

AsnMgmtGetUMInterfaceSettingsArgument is an Object

Name	Type	Optional	Comment
iInterfaceType	number		(Linked Type: AsnMgmtUserManagerInterfaceType)

#### ResultType: AsnMgmtGetUMInterfaceSettingsResult

AsnMgmtGetUMInterfaceSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnMgmtUserManagerActiveDirectorySettings		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.49asnMgmtSetUMInterfaceSettings

#### ArgumentType: AsnMgmtSetUMInterfaceSettingsArgument

AsnMgmtSetUMInterfaceSettingsArgument is an Object

Name	Type	Optional	Comment
iInterfaceType	number		(Linked Type: AsnMgmtUserManagerInterfaceType)
settings	AsnMgmtUserManagerActiveDirectorySettings		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.50asnMgmtGetUMSettings****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtGetUMSettingsResult**

AsnMgmtGetUMSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnUserManagerSettings		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.51asnMgmtSetUMSettings****ArgumentType: AsnMgmtSetUMSettingsArgument**

AsnMgmtSetUMSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnUserManagerSettings		

### **ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

## **17.1.52asnMgmtAddLicense**

### **ArgumentType: AsnMgmtAddLicenseArgument**

AsnMgmtAddLicenseArgument is an Object

Name	Type	Optional	Comment
u8sLicense	string		

### **ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error

u8sErrorString	string		A string representing the error
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### 17.1.53asnMgmtRemoveLicense

#### ArgumentType: AsnMgmtRemoveLicenseArgument

AsnMgmtRemoveLicenseArgument is an Object

Name	Type	Optional	Comment
u8sLicense	string		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.54asnMgmtSetLicenseGenuineStatus

#### ArgumentType: AsnMgmtSetLicenseGenuineStatusArgument

AsnMgmtSetLicenseGenuineStatusArgument is an Object

Name	Type	Optional	Comment
genuineInfos	AsnStringPairList		

#### ResultType: AsnMgmtSetLicenseGenuineStatusResult

AsnMgmtSetLicenseGenuineStatusResult is an Object

Name	Type	Optional	Comment
u8slistUpdateLicenseCodes	UTF8StringList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.55asnMgmtGetLicense****ArgumentType: AsnMgmtGetLicenseArgument**

AsnMgmtGetLicenseArgument is an Object

Name	Type	Optional	Comment
iCount	number		

**ResultType: AsnMgmtGetLicenseResult**

AsnMgmtGetLicenseResult is an Object

Name	Type	Optional	Comment
details	AsnMgmtLicenseDetails		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.56asnMgmtGetHasCurrentVersionLicenses****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtGetHasCurrentVersionLicensesResult**

AsnMgmtGetHasCurrentVersionLicensesResult is an Object

Name	Type	Optional	Comment
iNumUsers	number		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.57 asnMgmtGetNumLicenses

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtGetNumLicensesResult

AsnMgmtGetNumLicensesResult is an Object

Name	Type	Optional	Comment
iNumLicenses	number		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.58 asnMgmtGetRemainingTrialDays

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetRemainingTrialDaysResult**

AsnMgmtGetRemainingTrialDaysResult is an Object

Name	Type	Optional	Comment
iRemainingTestDays	number		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.59asnMgmtGetHWID****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetHWIDResult**

AsnMgmtGetHWIDResult is an Object

Name	Type	Optional	Comment
u8sHWID	string		
u8sSystemIdentifier	string		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error

u8sErrorString	string		A string representing the error
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### 17.1.60asnMgmtGetUCWebServicesStatus

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnMgmtEUCWebServicesStatus

AsnMgmtEUCWebServicesStatus is an Object

Name	Type	Optional	Comment
u8sUCSID	string		
ucConnectStatus	AsnMgmtEUCWSStatus		
ucwsStatusMap	AsnMgmtEUCWSStatusList		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.61asnMgmtVerifyUCWebServiceConfig

#### ArgumentType: AsnMgmtEUCWebServiceConfig

AsnMgmtEUCWebServiceConfig is an Object

Name	Type	Optional	Comment
u8sWCSID	string		
u8sUCSID	string		
u8sUCSPassword	string		
u8sServerAddress	string		

**ResultType: AsnMgmtEUCWSStatus**

AsnMgmtEUCWSStatus is an Object

Name	Type	Optional	Comment
u8sWCSID	string		
iStatus	number		
u8sURL	string		
u8sUCSID	string		
u8sLastError	string		
bUCConnect	boolean		
capabilities	AsnMgmtEUCWSCapabilities		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.62asnMgmtGetLocalWebServiceConfig4Admin****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtGetLocalWebServiceConfig4AdminResult**

AsnMgmtGetLocalWebServiceConfig4AdminResult is an Object

Name	Type	Optional	Comment
configs	AsnMgmtEUCWebServiceConfigList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.63asnMgmtGetWebServiceConfig4Admin

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnMgmtEUCWebServiceConfig4Admin

AsnMgmtEUCWebServiceConfig4Admin is an Object

Name	Type	Optional	Comment
u8sServicesUser	string		
u8sServicesPassword	string		
configList	AsnMgmtEUCWebServiceConfigList		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.64asnMgmtSetWebServiceConfig4Admin

#### ArgumentType: AsnMgmtEUCWebServiceConfig4Admin

AsnMgmtEUCWebServiceConfig4Admin is an Object

Name	Type	Optional	Comment
u8sServicesUser	string		
u8sServicesPassword	string		

configList	AsnMgmtEUCWebServiceConfigList		
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**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.65asnMgmtGetUCConnectSettings****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtUCConnectSettings**

AsnMgmtUCConnectSettings is an Object

Name	Type	Optional	Comment
iMobileAccessOption	number		(Linked Type: AsnMgmtMobileAccessOption)
u8sUCSID	string		
u8sControllerAddress	string		
u8sUCSPassword	string		
u8sAccountMail	string		
iTurnEnabled	number		
u8sPushServiceAddress	string		

iPushPolicyAccepted	number		
u8sPortalAddress	string		
webServiceExternalAccess	AsnMgmtWebServiceAccessParams		
bUseProxy	number		
u8sProxyServer	string		
u8sProxyUser	string		
u8sProxyPassword	string		
u8sBypassServer	string		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.66asnMgmtSetUCConnectSettings****ArgumentType: AsnMgmtUCConnectSettings**

AsnMgmtUCConnectSettings is an Object

Name	Type	Optional	Comment
iMobileAccessOption	number		(Linked Type: AsnMgmtMobileAccessOption)
u8sUCSID	string		
u8sControllerAddress	string		
u8sUCSPassword	string		
u8sAccountMail	string		
iTurnEnabled	number		
u8sPushServiceAddress	string		
iPushPolicyAccepted	number		

u8sPortalAddress	string		
webServiceExternalAccess	AsnMgmtWebServiceAccessParams		
bUseProxy	number		
u8sProxyServer	string		
u8sProxyUser	string		
u8sProxyPassword	string		
u8sBypassServer	string		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.67asnMgmtSendMail****ArgumentType: AsnMgmtSendMailArgument**

AsnMgmtSendMailArgument is an Object

Name	Type	Optional	Comment
u8sFrom	string		
u8sTo	string		
u8sSubject	string		
u8sMessage	string		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.68asnMgmtSendInviteMail****ArgumentType: AsnMgmtSendInviteMailArgument**

AsnMgmtSendInviteMailArgument is an Object

Name	Type	Optional	Comment
u8slistAddresses	UTF8StringList		
u8sMessage	string		
u8sUserURL	string		
u8sAppConfigURL	string		
iWaitForSend	number		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 17.1.69asnMgmtGetMailSettings

CtiServer Administrator login

### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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### ResultType: AsnMgmtEMailConnectorSettings

AsnMgmtEMailConnectorSettings is an Object

Name	Type	Optional	Comment
u8sSMTPServer	string		
u8sLoginName	string		
u8sLoginPassword	string		
u8sAdminMailAddr	string		
u8sMailFromAddr	string		
u8sMailFromName	string		
iSMTPPort	number		
iAllowUTF8Encoding	number		
iRequireTLS	number		

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 17.1.70asnMgmtSetMailSettings

CtiServer Administrator login

### ArgumentType: AsnMgmtEMailConnectorSettings

AsnMgmtEMailConnectorSettings is an Object

Name	Type	Optional	Comment
u8sSMTPServer	string		
u8sLoginName	string		
u8sLoginPassword	string		
u8sAdminMailAddr	string		
u8sMailFromAddr	string		
u8sMailFromName	string		
iSMTPPort	number		
iAllowUTF8Encoding	number		
iRequireTLS	number		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.71asnMgmtGetTapiProblemSettings**

CtiServer Administrator login

**ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtTapiProblemSettings**

AsnMgmtTapiProblemSettings is an Object

Name	Type	Optional	Comment
iReinitAutorestart	number		
iLineOpenFailedAction	number		
iLineOpenDelayTime	number		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.72asnMgmtSetTapiProblemSettings**

CtiServer Administrator login

**ArgumentType: AsnMgmtTapiProblemSettings**

AsnMgmtTapiProblemSettings is an Object

Name	Type	Optional	Comment
iReinitAutorestart	number		
iLineOpenFailedAction	number		
iLineOpenDelayTime	number		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error

u8sErrorString	string	A string representing the error
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### 17.1.73asnMgmtGetDatabaseManagerSettings

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnMgmtGetDatabaseManagerSettingsResult

AsnMgmtGetDatabaseManagerSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnMgmtDatabaseManagerSettings		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.74asnMgmtSetDatabaseManagerSettings

#### ArgumentType: AsnMgmtSetDatabaseManagerSettingsArgument

AsnMgmtSetDatabaseManagerSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnMgmtDatabaseManagerSettings		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.75asnMgmtGetAvailableDatabases

#### ArgumentType: AsnMgmtGetAvailableDatabasesArgument

AsnMgmtGetAvailableDatabasesArgument is an Object

Name	Type	Optional	Comment
settings	AsnMgmtDatabaseManagerSettings		

#### ResultType: AsnMgmtGetAvailableDatabasesResult

AsnMgmtGetAvailableDatabasesResult is an Object

Name	Type	Optional	Comment
u8slistDatabaseNames	UTF8StringList		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.76asnMgmtGetListeningInterfaces

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtGetListeningInterfacesResult

AsnMgmtGetListeningInterfacesResult is an Object

Name	Type	Optional	Comment
listeningInterfaces	AsnListeningInterfaceList		
u8sServerNameFQDN	string		
iSupportedListenInterfaceTypes	number		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.77asnMgmtSetListeningInterfaces****ArgumentType: AsnMgmtSetListeningInterfacesArgument**

AsnMgmtSetListeningInterfacesArgument is an Object

Name	Type	Optional	Comment
listeningInterfaces	AsnListeningInterfaceList		
bDisconnectClients	boolean		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.78asnMgmtGetListeningInterfaceStatuses****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetListeningInterfaceStatusesResult**

AsnMgmtGetListeningInterfaceStatusesResult is an Object

Name	Type	Optional	Comment
listeningInterfaceStatuses	AsnListeningInterfaceStatusList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.79asnMgmtDeleteLogfiles****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 17.1.80asnMgmtAquireLoggerLock

### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 17.1.81asnMgmtReleaseLoggerLock

### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.82asnMgmtGetLogFileSettings

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtGetLogFileSettingsResult

AsnMgmtGetLogFileSettingsResult is an Object

Name	Type	Optional	Comment
logfileSettings	AsnMgmtLogFileSettings		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.83asnMgmtSetLogFileSettings

#### ArgumentType: AsnMgmtGetLogFileSettingsArgument

AsnMgmtGetLogFileSettingsArgument is an Object

Name	Type	Optional	Comment
logfileSettings	AsnMgmtLogFileSettings		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.84asnMgmtGetLocationInformationMgmt****ArgumentType: AsnMgmtGetLocationInformationMgmtArgument**

AsnMgmtGetLocationInformationMgmtArgument is an Object

Name	Type	Optional	Comment
u8sLocationID	string		

**ResultType: AsnMgmtGetLocationInformationMgmtResult**

AsnMgmtGetLocationInformationMgmtResult is an Object

Name	Type	Optional	Comment
asnLocationData	AsnLocationInformationMgmt		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.85asnMgmtSetLocationInformationMgmt****ArgumentType: AsnMgmtSetLocationInformationMgmtArgument**

AsnMgmtSetLocationInformationMgmtArgument is an Object

Name	Type	Optional	Comment
asnLocationData	AsnLocationInformationMgmt		

**ResultType: AsnMgmtSetLocationInformationMgmtResult**

AsnMgmtSetLocationInformationMgmtResult is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.86asnMgmtDeleteLocation****ArgumentType: AsnMgmtDeleteLocationArgument**

AsnMgmtDeleteLocationArgument is an Object

Name	Type	Optional	Comment
u8sLocationID	string		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.87 asnMgmtGetLocationIDs

#### ArgumentType: AsnGetLocationIDsArgument

AsnGetLocationIDsArgument is an Object

Name	Type	Optional	Comment
locationIDs	UTF8StringList	yes	

#### ResultType: AsnGetLocationIDsResult

AsnGetLocationIDsResult is an Object

Name	Type	Optional	Comment
locationIDMD5ChecksumList	AsnStringPairList		first LocationID, last MD5 Checksum

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.88 asnMgmtGetCSTASettings

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtGetCSTASettingsResult

AsnMgmtGetCSTASettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnCSTASettings		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.89asnMgmtSetCSTA ServerSettings

#### ArgumentType: AsnMgmtSetCSTA ServerSettingsArgument

AsnMgmtSetCSTA ServerSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnCSTA ServerSettings		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.90asnMgmtGetSTUNandTURNSettings

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtGetSTUNandTURNSettingsResult

AsnMgmtGetSTUNandTURNSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnAVStunOrTurnSettings		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.91asnMgmtSetSTUNandTURNSettings****ArgumentType: AsnMgmtSetSTUNandTURNSettingsArgument**

AsnMgmtSetSTUNandTURNSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnAVStunOrTurnSettings		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.92asnMgmtGetSTUNandTURNConsumerConfig****ArgumentType: AsnMgmtGetSTUNandTURNConsumerConfigArgument**

AsnMgmtGetSTUNandTURNConsumerConfigArgument is an Object

Name	Type	Optional	Comment
settings	AsnAVStunOrTurnSettings		

**ResultType: AsnMgmtGetSTUNandTURNConsumerConfigResult**

AsnMgmtGetSTUNandTURNConsumerConfigResult is an Object

Name	Type	Optional	Comment
config	AsnConfigSTUNandTURNList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.93asnMgmtGetDBManSettings****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtGetDBManSettingsResult**

AsnMgmtGetDBManSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnMgmtDBManSettings		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error

u8sErrorString	string		A string representing the error
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### 17.1.94asnMgmtSetDBManSettings

#### ArgumentType: AsnMgmtGetDBManSettingsArgument

AsnMgmtGetDBManSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnMgmtDBManSettings		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.95asnMgmtGetXmppSettings

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnMgmtGetXmppSettingsResult

AsnMgmtGetXmppSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnXMPPSettings		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.96asnMgmtSetXmppSettings

#### ArgumentType: AsnMgmtSetXmppSettingsArgument

AsnMgmtSetXmppSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnXMPPSettings		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.97asnMgmtGetSIPFEDSettings

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtGetSIPFEDSettingsResult

AsnMgmtGetSIPFEDSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnPFEDESettings		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.98asnMgmtSetSIPFEDSettings****ArgumentType: AsnMgmtSetSIPFEDSettingsArgument**

AsnMgmtSetSIPFEDSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnPFEDESettings		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.99asnMgmtGetSIPFEDPubIPAdr****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetSIPFEDPubIPAddrResult**

AsnMgmtGetSIPFEDPubIPAddrResult is an Object

Name	Type	Optional	Comment
u8sPublicIPAddress	string		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.100        asnMgmtStartSipFedXmppDiagnostics****ArgumentType: AsnMgmtStartSipFedXmppDiagnosticsArgument**

AsnMgmtStartSipFedXmppDiagnosticsArgument is an Object

Name	Type	Optional	Comment
u8slistCommands	UTF8StringList		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.101 asnMgmtGetSIPFEDSrvState****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetSIPFEDSrvStateResult**

AsnMgmtGetSIPFEDSrvStateResult is an Object

Name	Type	Optional	Comment
u8sServerState	string		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.102 asnMgmtGetSIPFEDNetState****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetSIPFEDNetStateResult**

AsnMgmtGetSIPFEDNetStateResult is an Object

Name	Type	Optional	Comment
u8slistNetStates	UTF8StringList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.103 asnMgmtGetSIPGatewaySettings

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtGetSIPGatewaySettingsResult

AsnMgmtGetSIPGatewaySettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnSIPGatewayUASettingsList		
iNetworkInterfacesEnabled	number	yes	Network listen Interfaces enabled
networkInterfaces	AsnListenInterfaceDescriptionList	yes	Network listen Interfaces
iUsePublicIP	number	yes	Public IP enabled
iPublicPort	number	yes	Public Port
u8sPublicIP	string	yes	Public IP
iRegistrarEnabled	number	yes	Registrar enabled
u8sSipServerCertHash	string	yes	Auswahl Zertifikat/Hash

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.104 asnMgmtSetSIPGatewaySettings

#### ArgumentType: AsnMgmtSetSIPGatewaySettingsArgument

AsnMgmtSetSIPGatewaySettingsArgument is an Object

Name	Type	Optional	Comment
settingsNew	AsnSIPGatewayUASettingsList		die Liste nach den Aenderungen
settingsOld	AsnSIPGatewayUASettingsList	yes	die Liste vor den Aenderungen
iNetworkInterfacesEnabled	number	yes	Network listen Interfaces enabled
networkInterfaces	AsnListenInterfaceDescriptionList	yes	Network listen Interfaces
iUsePublicIP	number	yes	Public IP enabled
iPublicPort	number	yes	Public Port
u8sPublicIP	string	yes	Public IP
iRegistrarEnabled	number	yes	Registrar enabled
u8sSipServerCertHash	string	yes	Auswahl Zertifikat/Hash

### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

## 17.1.105 asnMgmtGetSIPGatewayNetState

### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

### ResultType: AsnMgmtGetSIPFEDNetStateResult

AsnMgmtGetSIPFEDNetStateResult is an Object

Name	Type	Optional	Comment
u8slistNetStates	UTF8StringList		

### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 17.1.106 asnMgmtSetSIPGatewaySettingsV2

### ArgumentType: AsnMgmtSetSIPGatewaySettingsV2Argument

AsnMgmtSetSIPGatewaySettingsV2Argument is an Object

Name	Type	Optional	Comment
uaSettingsAdded	AsnSIPGatewayUASettingsList	yes	Liste der hinzugefügten SIP Gateways inkl. Registered User
uaSettingsChanged	AsnSIPGatewayUASettingsList	yes	Liste der geänderten SIP Gateways inkl. Änderungen an Registered Users
uaSettingsRemoved	UTF8StringList	yes	Liste der Namen (u8sLineGroupName) der gelöschten SIP Gateways
iNetworkInterfacesEnabled	number	yes	Network listen Interfaces enabled
networkInterfaces	AsnListenInterfaceDescriptionList	yes	Network listen Interfaces
iUsePublicIP	number	yes	Public IP enabled
iPublicPort	number	yes	Public Port
u8sPublicIP	string	yes	Public IP
iRegistrarEnabled	number	yes	Registrar enabled
u8sSipServerCertHash	string	yes	Auswahl Zertifikat/Hash

**ResultType: AsnMgmtSetSIPGatewaySettingsV2Result**

AsnMgmtSetSIPGatewaySettingsV2Result is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.107 asnMgmtSetCallRecorderSettings****ArgumentType: AsnMgmtSetCallRecorderSettingsArgument**

AsnMgmtSetCallRecorderSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnCallRecorderSettings		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.108 asnMgmtGetCallRecorderSettings****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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### **ResultType: AsnMgmtGetCallRecorderSettingsResult**

AsnMgmtGetCallRecorderSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnCallRecorderSettings		

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

## **17.1.109        asnMgmtLogin**

CtiServer Administrator login

### **ArgumentType: AsnMgmtLoginArgument**

AsnMgmtLoginArgument is an Object

Name	Type	Optional	Comment
u8sUsername	string		user login daten
u8sPassword	string		
iVersion	number		
iDuplicate	number		
iSIPAVLINES	number		

### **ResultType: AsnMgmtLoginResult**

AsnMgmtLoginResult is an Object

Name	Type	Optional	Comment
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iOpenState	number		(Linked Type: AsnCtiLineOpenStatus)
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.110      asnMgmtChangeLogin****ArgumentType: AsnMgmtChangeLoginArgument**

AsnMgmtChangeLoginArgument is an Object

Name	Type	Optional	Comment
u8sNewUserName	string		
u8sNewPasswd	string		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.111      asnMgmtLoginV2****ArgumentType: AsnLoginV2Argument**

AsnLoginV2Argument is an Object

Name	Type	Optional	Comment
auth	AsnLoginV2ChoiceArgument	yes	wenn nicht vorhanden,, schickt der server eine Antwort mit den unterstÃ¼tzten Methoden wenn vorhanden, wird die entsprechende Authentisierung durchgefÃ¼hrt

**ResultType: AsnLoginV2Result**

AsnLoginV2Result is a Choice

Name	Type	Comment
supportedAuthMethods	AsnLoginV2ResultSupportedAuthMethods	Supported auth mechanisms
succceeded	AsnLoginV2ResultSuccess	Login succeeded
serverRedirect	AsnLoginV2ResultServerRedirect	Redirect to another server
serverBusy	AsnLoginV2ResultServerBusy	The server is currently busy and asks us to retry later
ntlmRenegotiate	AsnLoginV2ResultRenegotiateNTLM	Authentication requires another step (auth continue)

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.112 asnMgmtNegotiateInterfaceVersion****ArgumentType: AsnNegotiateInterfaceVersionArgument**

AsnNegotiateInterfaceVersionArgument is an Object

Name	Type	Optional	Comment
u8sMinInterfaceVer	string		Requested minimum interface version, usually this should be a .0.0
u8sMaxInterfaceVer	string		Requested maximum interface version, usually this will be the

			interface version the client has been built with
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**ResultType: AsnNegotiateInterfaceVersionResult**

AsnNegotiateInterfaceVersionResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true if the requested version is considered compatible, false otherwise
u8sServerInterfaceVer	string		The interface version the server has been built with

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.113 asnMgmtMonGetServerStatistics****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtMonGetServerStatisticsResult**

AsnMgmtMonGetServerStatisticsResult is an Object

Name	Type	Optional	Comment
serverStatistics	AsnMgmtServerStatistics4AdminList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error

u8sErrorString	string		A string representing the error
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### 17.1.114 asnMgmtSaveSettings

#### ArgumentType: AsnMgmtSaveSettingsArgument

AsnMgmtSaveSettingsArgument is an Object

Name	Type	Optional	Comment
iSaveFlags	number		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.115 asnMgmtStartTLS

Request to start TLS

After calling this function, the server switches to TLS mode. The server now expects that client to start a TLS handshake.

#### ArgumentType: AsnMgmtStartTLSArgument

AsnMgmtStartTLSArgument is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnMgmtStartTLSResult

AsnMgmtStartTLSResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.116      asnMgmtGetServerVersion**

Request server version

Request Interface and server versions.

**ArgumentType: AsnMgmtGetServerVersionArgument**

AsnMgmtGetServerVersionArgument is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetServerVersionResult**

AsnMgmtGetServerVersionResult is an Object

Name	Type	Optional	Comment
u8sInterfaceVersion	string		
u8sBuildVersion	string		
u8sOSVersionString	string		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.117      asnMgmtGetCtiServerType**

Request server Type and Features.

This function is used to determin what kind of server type is running and what features the server has. There are several kinds of similar server types and different features (OEM versions).

**ArgumentType: AsnMgmtGetCtiServerTypeArgument**

AsnMgmtGetCtiServerTypeArgument is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetCtiServerTypeResult**

AsnMgmtGetCtiServerTypeResult is an Object

Name	Type	Optional	Comment
iServerType	AsnMgmtUCServerType		The type of server we are connected to
iServerFeatures	number		The features this server is offering as bitmask (Linked Type: AsnMgmtUCServerFeatures)

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.118      asnMgmtGetIPIInterfaceList****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetIPIInterfaceListResult**

AsnMgmtGetIPIInterfaceListResult is an Object

Name	Type	Optional	Comment
u8slistIPIInterfaces	UTF8StringList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.119 asnMgmtCleanupJournal****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.120 asnMgmtRestartServer****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.121 asnMgmtRestartServerAndInstallDatabaseUpdates****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.122 asnMgmtFullSyncContactCache****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.123 asnMgmtSendPushCheck****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtSendPushCheckResult**

AsnMgmtSendPushCheckResult is an Object

Name	Type	Optional	Comment
u8sErrorString	string		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.124      asnMgmtSetUCCheckServerCookie****ArgumentType: AsnMgmtSetUCCheckServerCookieArgument**

AsnMgmtSetUCCheckServerCookieArgument is an Object

Name	Type	Optional	Comment
u8sCookie	string		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.125      asnMgmtCommitSaveSettings****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.126 asnMgmtGetNotificationSettings

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtGetNotificationSettingsResult

AsnMgmtGetNotificationSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnMgmtNotificationSettings		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.127 asnMgmtSetNotificationSettings

#### ArgumentType: AsnMgmtSetNotificationSettingsArgument

AsnMgmtSetNotificationSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnMgmtNotificationSettings		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.128      asnMgmtFetchMetaDNs****ArgumentType: AsnMgmtFetchMetaDNsArgument**

AsnMgmtFetchMetaDNsArgument is an Object

Name	Type	Optional	Comment
u8sMetaServer	string		
iPort	number		
iForceSSL	number		

**ResultType: AsnMgmtFetchMetaDNsResult**

AsnMgmtFetchMetaDNsResult is an Object

Name	Type	Optional	Comment
u8slistDnsList	UTF8StringList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.129      asnMgmtSetMetaSettings****ArgumentType: AsnSetMetaSettingsArgument**

AsnSetMetaSettingsArgument is an Object

Name	Type	Optional	Comment
eSendPlainPassword	AsnMetaDirectoryPasswordEncryption		Soll das Passwort fÃ¼r das MetaDirectory verschlÃ¼sst Ã¼bermittelt werden 1: ja, 0(default): nein
metasettings	AsnMetaDirectorySettings		

### **ResultType: AsnSetMetaSettingsResult**

AsnSetMetaSettingsResult is an Object

Name	Type	Optional	Comment

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## **17.1.130 asnMgmtSetMetaPhoneBooksSettings**

### **ArgumentType: AsnSetMetaSettingsArgument**

AsnSetMetaSettingsArgument is an Object

Name	Type	Optional	Comment
eSendPlainPassword	AsnMetaDirectoryPasswordEncryption		Soll das Passwort fÃ¼r das MetaDirectory verschlÃ¼sst Ã¼bermittelt werden 1: ja, 0(default): nein
metasettings	AsnMetaDirectorySettings		

### **ResultType: AsnSetMetaSettingsResult**

AsnSetMetaSettingsResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.131      asnMgmtGetMetaSettings****ArgumentType: AsnGetMetaSettingsArgument**

AsnGetMetaSettingsArgument is an Object

Name	Type	Optional	Comment
eSendPlainPassword	AsnMetaDirectoryPasswordEncryption		Soll das Passwort fÃ¼r das MetaDirectory verschlÃ¼sst Ã¼bermittelt werden 1: ja, 0(default): nein

**ResultType: AsnGetMetaSettingsResult**

AsnGetMetaSettingsResult is an Object

Name	Type	Optional	Comment
metasettings	AsnMetaDirectorySettings		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.132      asnMgmtGetMetaPhoneBooksSettings****ArgumentType: AsnGetMetaSettingsArgument**

AsnGetMetaSettingsArgument is an Object

Name	Type	Optional	Comment
eSendPlainPassword	AsnMetaDirectoryPasswordEncryption		Soll das Passwort fÃ¼r das MetaDirectory verschlÃ¼sst Ã¼bermittelt werden 1: ja, 0(default): nein

### **ResultType: AsnGetMetaSettingsResult**

AsnGetMetaSettingsResult is an Object

Name	Type	Optional	Comment
metasettings	AsnMetaDirectorySettings		

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## **17.1.133 asnMgmtGetAvailableCertificates**

### **ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

### **ResultType: AsnMgmtGetAvailableCertificatesResult**

AsnMgmtGetAvailableCertificatesResult is an Object

Name	Type	Optional	Comment
certificateDetailsList	AsnSSLCertificateDetailsList		

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.134 asnMgmtGetSoftwareProfiles

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### ResultType: AsnMgmtGetSoftwareProfilesResult

AsnMgmtGetSoftwareProfilesResult is an Object

Name	Type	Optional	Comment
u8slistSoftwareProfilesAsXML	UTF8StringList		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.135 asnMgmtSetSoftwareProfiles

#### ArgumentType: AsnMgmtSetSoftwareProfilesArgument

AsnMgmtSetSoftwareProfilesArgument is an Object

Name	Type	Optional	Comment
u8slistSoftwareProfilesAsXML	UTF8StringList		

#### ResultType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.136      asnMgmtGetGlobalGroupingAttributes****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetGlobalGroupingAttributesResult**

AsnMgmtGetGlobalGroupingAttributesResult is an Object

Name	Type	Optional	Comment
u8sGroupingAttributeSetGlobal	string		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.137      asnMgmtSetGlobalGroupingAttributes****ArgumentType: AsnMgmtSetGlobalGroupingAttributesArgument**

AsnMgmtSetGlobalGroupingAttributesArgument is an Object

Name	Type	Optional	Comment
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u8sGroupingAttributeSetGlobal	string		
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**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.138 asnMgmt GetUserXmlClientContent****ArgumentType: AsnMgmt GetUserXmlClientContentArgument**

AsnMgmt GetUserXmlClientContentArgument is an Object

Name	Type	Optional	Comment
u8sUserID	string		

**ResultType: AsnMgmt GetUserXmlClientContentResult**

AsnMgmt GetUserXmlClientContentResult is an Object

Name	Type	Optional	Comment
u8sClientContentAsXML	string		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.139 asnMgmtSetUserXmlClientContent****ArgumentType: AsnMgmtSetUserXmlClientContentArgument**

AsnMgmtSetUserXmlClientContentArgument is an Object

Name	Type	Optional	Comment
u8sUserID	string		
u8sClientContentAsXML	string		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.140 asnMgmt GetUserDefinedCustomFields****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmt GetUserDefinedCustomFieldsResult**

AsnMgmt GetUserDefinedCustomFieldsResult is an Object

Name	Type	Optional	Comment
mapCustomFields	AsnStringPairList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.141      **asnMgmtSetUserDefinedCustomFields**

#### **ArgumentType: AsnMgmtSetUserDefinedCustomFieldsArgument**

AsnMgmtSetUserDefinedCustomFieldsArgument is an Object

Name	Type	Optional	Comment
mapCustomFields	AsnStringPairList		

#### **ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.142      **asnMgmtGetSIPFEDXmppDiagnostic**

#### **ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### **ResultType: AsnMgmtGetSIPFEDXmppDiagnosticResult**

AsnMgmtGetSIPFEDXmppDiagnosticResult is an Object

Name	Type	Optional	Comment
u8slistResults	UTF8StringList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.143 asnMgmtGetLineForwarding****ArgumentType: AsnMgmtGetLineForwardingArgument**

AsnMgmtGetLineForwardingArgument is an Object

Name	Type	Optional	Comment
iFWController	number		
u8sLineID	string		

**ResultType: AsnMgmtGetLineForwardingResult**

AsnMgmtGetLineForwardingResult is an Object

Name	Type	Optional	Comment
iEnabled	number		
entryList	AsnMgmtCtiForwardEntryList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.144 asnMgmtSetLineForwarding****ArgumentType: AsnMgmtSetLineForwardingArgument**

AsnMgmtSetLineForwardingArgument is an Object

Name	Type	Optional	Comment
iFWController	number		
u8sLineID	string		
iEnabled	number		
entryList	AsnMgmtCtiForwardEntryList		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.145 asnMgmtGetXMLAvailableLanguages****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtGetXMLAvailableLanguagesResult**

AsnMgmtGetXMLAvailableLanguagesResult is an Object

Name	Type	Optional	Comment
availLanguages	AsnMgmtAvailableLanguageList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.146      asnMgmtUpgradeStart**

Start Upgrade on Server running in administrative Mode.

This function is used to start the chat database conversion when server is upgraded from version 5 to 6. Progress is reported back to Admin with OPID\_asnMgmtUpgradeProgress Events

**ArgumentType: AsnMgmtUpgradeStartArgument**

AsnMgmtUpgradeStartArgument is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtUpgradeStartResult**

AsnMgmtUpgradeStartResult is an Object

Name	Type	Optional	Comment
iResult	number		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.147      asnMgmtGetPushServiceDevices**

Get the List of Push Service Device Registrations

This function initiates the Transfer of the currently active Push Service Devices. The Events, that send the result content are sent before this operation returns.

**ArgumentType: AsnMgmtGetPushServiceDevicesArgument**

AsnMgmtGetPushServiceDevicesArgument is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetPushServiceDevicesResult**

AsnMgmtGetPushServiceDevicesResult is an Object

Name	Type	Optional	Comment
u8sCrossRefID	string		CrossrefID for the Events that contain the requested data.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.148      asnMgmtDeletePushServiceDevice**

Delete an active Push Service Device Registration

This function deletes the Device Registration.

**ArgumentType: AsnMgmtDeletePushServiceDeviceArgument**

AsnMgmtDeletePushServiceDeviceArgument is an Object

Name	Type	Optional	Comment
u8sDeviceID	string		DeviceID of the Push Receiver

**ResultType: AsnMgmtDeletePushServiceDeviceResult**

AsnMgmtDeletePushServiceDeviceResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.149      **asnMgmtSetPhoneJournalSettings**

#### **ArgumentType: AsnMgmtSetPhoneJournalSettingsArgument**

AsnMgmtSetPhoneJournalSettingsArgument is an Object

Name	Type	Optional	Comment
phoneJournalSettings	AsnMgmtPhoneJournalSettings		

#### **ResultType: AsnMgmtSetPhoneJournalSettingsResult**

AsnMgmtSetPhoneJournalSettingsResult is an Object

Name	Type	Optional	Comment

#### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.150      **asnMgmtGetPhoneJournalSettings**

#### **ArgumentType: AsnMgmtGetPhoneJournalSettingsArgument**

AsnMgmtGetPhoneJournalSettingsArgument is an Object

Name	Type	Optional	Comment

#### **ResultType: AsnMgmtGetPhoneJournalSettingsResult**

AsnMgmtGetPhoneJournalSettingsResult is an Object

Name	Type	Optional	Comment
phoneJournalSettings	AsnMgmtPhoneJournalSettings		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.151 asnMgmtAddComputerProfile****ArgumentType: AsnAdminAddComputerProfileArgument**

AsnAdminAddComputerProfileArgument is an Object

Name	Type	Optional	Comment
computerProfile	AsnComputerProfile		

**ResultType: AsnAdminAddComputerProfileResult**

AsnAdminAddComputerProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.152 asnMgmtGetComputerProfile****ArgumentType: AsnAdminGetComputerProfileArgument**

AsnAdminGetComputerProfileArgument is an Object

Name	Type	Optional	Comment
u8sClientComputerName	string		Computer login daten wenn Computername leer, dann leeres default profile liefern

**ResultType: AsnAdminGetComputerProfileResult**

AsnAdminGetComputerProfileResult is an Object

Name	Type	Optional	Comment
computerProfile	AsnComputerProfile		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.153 asnMgmtSetComputerProfile****ArgumentType: AsnAdminSetComputerProfileArgument**

AsnAdminSetComputerProfileArgument is an Object

Name	Type	Optional	Comment
computerProfile	AsnComputerProfile		

**ResultType: AsnAdminSetComputerProfileResult**

AsnAdminSetComputerProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.154 asnMgmtAddGroupProfile

#### ArgumentType: AsnAdminAddGroupProfileArgument

AsnAdminAddGroupProfileArgument is an Object

Name	Type	Optional	Comment
groupProfile	AsnGroupProfile		

#### ResultType: AsnAdminAddGroupProfileResult

AsnAdminAddGroupProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.155 asnMgmtRemoveGroupProfile

#### ArgumentType: AsnAdminRemoveGroupProfileArgument

AsnAdminRemoveGroupProfileArgument is an Object

Name	Type	Optional	Comment
groupProfile	AsnGroupProfile		

#### ResultType: AsnAdminRemoveGroupProfileResult

AsnAdminRemoveGroupProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		AD Implementierung lÃ¤sst das LÃ¶schen von Gruppen nicht zu, aber es wird TRUE zurÃ¼ckgeliefert

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.156 asnMgmtFindGroupProfiles****ArgumentType: AsnAdminFindGroupProfilesArgument**

AsnAdminFindGroupProfilesArgument is an Object

Name	Type	Optional	Comment
iSearchFilter	number		Searchfilter-Wert, siehe dazu AsnAdminFindGroupProfilesFilter Enumeration
u8sStringParameter	string		Stringparameter fÃ¼r verschiedene Searchfilter

**ResultType: AsnAdminFindGroupProfilesResult**

AsnAdminFindGroupProfilesResult is an Object

Name	Type	Optional	Comment
listGroupProfiles	AsnGroupProfileList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.157 asnMgmtSetGroupProfile****ArgumentType: AsnMgmtSetGroupProfileArgument**

AsnMgmtSetGroupProfileArgument is an Object

Name	Type	Optional	Comment
iSearchFilter	number		(Linked Type: AsnMgmtSetGroupProfileFilter)
groupProfile	AsnGroupProfile		
oldMemberListForDeltaChangeCalculation	AsnStringPairList	yes	

**ResultType: AsnMgmtSetGroupProfileResult**

AsnMgmtSetGroupProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.158 asnMgmtAddUserProfile****ArgumentType: AsnAdminAddUserProfileArgument**

AsnAdminAddUserProfileArgument is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		

**ResultType: AsnAdminAddUserProfileResult**

AsnAdminAddUserProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.159 asnMgmtRemoveUserProfile

#### ArgumentType: AsnAdminRemoveUserProfileArgument

AsnAdminRemoveUserProfileArgument is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		Der u8sUserName muss gesetzt werden als Schlüssel

#### ResultType: AsnAdminRemoveUserProfileResult

AsnAdminRemoveUserProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.160 asnMgmtGetUserProfile

#### ArgumentType: AsnAdminGetUserProfileArgument

AsnAdmin GetUserProfileArgument is an Object

Name	Type	Optional	Comment
identifier	AsnAdmin GetUserProfileArgumentChoice		

### **ResultType: AsnAdmin GetUserProfileResult**

AsnAdmin GetUserProfileResult is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

## **17.1.161 asnMgmt GetUserManagerSettings**

### **ArgumentType: AsnGetUserManagerSettingsArgument**

AsnGetUserManagerSettingsArgument is an Object

Name	Type	Optional	Comment

### **ResultType: AsnGetUserManagerSettingsResult**

AsnGetUserManagerSettingsResult is an Object

Name	Type	Optional	Comment
iSelectedUMMode	number		
iUMSecurity	number		
iUMSelfInstall	number		
bAutoBindFirstLine	boolean		
bAutoBindSecondLine	boolean		

iPhoneNumberPreformatFormat	number		
bLDAPBaseAttributeWriteBackEnabled	boolean		
u8slistPresenceDomain	UTF8StringList		
optionalParams	AsnOptionalParameters	yes	<p>Optional Params:</p> <p>Wenn das Usermanagement auf AD gestellt ist, werden folgende Informationen noch ergänzt:</p> <ul style="list-style-type: none"> <li>ActiveDirectoryDomain [UTF8String] Die Domäne, in der der UCServer steht</li> <li>ActiveDirectoryBaseDNUsers [UTF8String] BaseDN der Benutzer (kann eine ';' getrennte Liste sein!)</li> <li>ActiveDirectoryHostName [UTF8String] Rechnername des AD</li> <li>ActiveDirectoryHostPort [INTEGER] Portnummer des AD</li> <li>ActiveDirectoryDisabledFields [UTF8StringList] Liste der UCServer Felder die in der Benutzerverwaltung optional und deaktiviert sind. (HomePhone sowie Pager sind z.B. beides optionale Felder)</li> </ul>

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.162 asnMgmtGetAvailableLines****ArgumentType: AsnGetAvailableLinesArgument**

AsnGetAvailableLinesArgument is an Object

Name	Type	Optional	Comment

optionalParams	AsnOptionalParameters	yes	<ul style="list-style-type: none"> <li>Key "MobileLines" Value boolean - Add mobile lines to the result, defaults to not adding these lines</li> <li>Key "SIPLines" Value boolean - Add SIP lines to the result, defaults to not adding these lines</li> <li>Key "AVLines" Value boolean - Add ProCall AV lines to the result, defaults to not adding these lines</li> </ul>
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**ResultType: AsnGetAvailableLinesResult**

AsnGetAvailableLinesResult is an Object

Name	Type	Optional	Comment
linelist	AsnAvailableLineDetailsList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.163 asnMgmtGetNetworkInterfacePorts****ArgumentType: AsnGetNetworkInterfacePortsArgument**

AsnGetNetworkInterfacePortsArgument is an Object

Name	Type	Optional	Comment
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**ResultType: AsnGetNetworkInterfacePortsResult**

AsnGetNetworkInterfacePortsResult is an Object

Name	Type	Optional	Comment
iAdminPort	number		
u8sAdminBindAddress	string		
iNetCtiPort	number		

u8sNetCtiBindAddress	string		
iNetTSPPort	number		
u8sNetTSPBindAddress	string		
iLDAPServerPort	number		
u8sLDAPServerBindAddress	string		
iHTTPServerPort	number		
u8sHTTPServerBindAddress	string		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.164 asnMgmtSetChatSettings**

operations

**ArgumentType: AsnMgmtChatSettings**

AsnMgmtChatSettings is an Object

Name	Type	Optional	Comment
bDeleteChatEntries	boolean		
iDeleteChatEntriesAfterDays	number		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment

iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.165 asnMgmtGetChatSettings

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnMgmtChatSettings

AsnMgmtChatSettings is an Object

Name	Type	Optional	Comment
bDeleteChatEntries	boolean		
iDeleteChatEntriesAfterDays	number		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.166 asnMgmtSetMeshSettings

#### ArgumentType: AsnMgmtMeshControllerSettings

AsnMgmtMeshControllerSettings is an Object

Name	Type	Optional	Comment
bMeshEnabled	boolean		Mesh operations enabled
bAutoAddMeshNodes	boolean		Auto add new mesh nodes automatically
bAutoAddUseTLS	boolean		Auto add new mesh nodes using TLS
u8sMeshID	string		ID of the mesh the server wants to be part of

u8sMeshPassword	string		Password the server is using to authenticate against other mesh nodes and the server requires others to provide when the is contacted.
u8sMeshNodeID	string		The own mesh node id

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.167 asnMgmtGetMeshSettings****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtMeshControllerSettings**

AsnMgmtMeshControllerSettings is an Object

Name	Type	Optional	Comment
bMeshEnabled	boolean		Mesh operations enabled
bAutoAddMeshNodes	boolean		Auto add new mesh nodes automatically
bAutoAddUseTLS	boolean		Auto add new mesh nodes using TLS
u8sMeshID	string		ID of the mesh the server wants to be part of
u8sMeshPassword	string		Password the server is using to authenticate against other mesh nodes and the server requires others to provide when the is contacted.

u8sMeshNodeID	string		The own mesh node id
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.168      asnMgmtSetMeshNodeConfigs****ArgumentType: AsnMgmtSetMeshNodeConfigsArgument**

AsnMgmtSetMeshNodeConfigsArgument is an Object

Name	Type	Optional	Comment
configs	AsnMgmtMeshNodeConfigs		

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.169      asnMgmtGetMeshNodeConfigs****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetMeshNodeConfigsResult**

AsnMgmtGetMeshNodeConfigsResult is an Object

Name	Type	Optional	Comment
configs	AsnMgmtMeshNodeConfigs		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.170 asnMgmtGetMeshNodeStatuses****ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

**ResultType: AsnMgmtGetMeshNodeStatusesResult**

AsnMgmtGetMeshNodeStatusesResult is an Object

Name	Type	Optional	Comment
statuses	AsnMgmtMeshNodeStatuses		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.171 asnMgmtSubscribeConnectionInformationChanges**

Subscribe ConnectionInformationChanges

**ArgumentType: AsnMgmtSubscribeConnectionInformationChangesArgument**

AsnMgmtSubscribeConnectionInformationChangesArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID we want to subscribe Events for. If no contact id (sip:jan@estos.de) is provided all contact capability changes are reported

**ResultType: AsnMgmtSubscribeConnectionInformationChangesResult**

AsnMgmtSubscribeConnectionInformationChangesResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.172 asnMgmtUnSubscribeConnectionInformationChanges**

UnSubscribe from capability changes

**ArgumentType: AsnMgmtUnSubscribeConnectionInformationChangesArgument**

AsnMgmtUnSubscribeConnectionInformationChangesArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID we want to unsubscribe Events for. If no contact id (sip:jan@estos.de) is provided all contact capability changes are reported

**ResultType: AsnMgmtUnSubscribeConnectionInformationChangesResult**

AsnMgmtUnSubscribeConnectionInformationChangesResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.173 asnMgmtDisconnectClient**

UnSubscribe from capability changes

**ArgumentType: AsnMgmtDisconnectClientArgument**

AsnMgmtDisconnectClientArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID of the user the connection belongs to
u8sConnectionID	string		The id of the connection to disconnect

**ResultType: AsnMgmtDisconnectClientResult**

AsnMgmtDisconnectClientResult is an Object

Name	Type	Optional	Comment
bResult	boolean		success or fail

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.174 asnMgmtGDPERase****ArgumentType: AsnMgmtGDPERaseArgument**

AsnMgmtGDPERaseArgument is an Object

Name	Type	Optional	Comment
u8sSIPAddress	string		

**ResultType: AsnMgmtGDPREraseResult**

AsnMgmtGDPREraseResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.175      asnMgmtGDPRFindContacts**

GDPR function for finding more specific GDPR contact entries.

**ArgumentType: AsnMgmtGDPRFindContactsArgument**

AsnMgmtGDPRFindContactsArgument is an Object

Name	Type	Optional	Comment
u8sFilterText	string		Free text which will be found in the contact name, company name, phone number or memo field.

**ResultType: AsnMgmtGDPRFindContactsResult**

AsnMgmtGDPRFindContactsResult is an Object

Name	Type	Optional	Comment
contactList	AspNetDatabaseContactList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.176      **asnMgmtDatabaseUpdateInProgress**

Check if Database Update is Running

This function is used to check if a Database Update is running in background after Server Start Progress is reported back to Admin with OPID\_asnMgmtUpdateDatabaseProgress Events

#### **ArgumentType: AsnMgmtDatabaseUpdateInProgressArgument**

AsnMgmtDatabaseUpdateInProgressArgument is an Object

Name	Type	Optional	Comment
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#### **ResultType: AsnMgmtDatabaseUpdateInProgressResult**

AsnMgmtDatabaseUpdateInProgressResult is an Object

Name	Type	Optional	Comment
bResult	boolean		

#### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.177      **asnMgmtGetBinaryTransferSettings**

Retrieve the Settings of the BinaryTransferManager

#### **ArgumentType: AsnMgmtGetBinaryTransferSettingsArgument**

AsnMgmtGetBinaryTransferSettingsArgument is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetBinaryTransferSettingsResult**

AsnMgmtGetBinaryTransferSettingsResult is an Object

Name	Type	Optional	Comment
storageSettings	AsnBinaryTransferStorageSettings		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.178      asnMgmtSetBinaryTransferSettings**

Set the Settings of the BinaryTransferManager

**ArgumentType: AsnMgmtSetBinaryTransferSettingsArgument**

AsnMgmtSetBinaryTransferSettingsArgument is an Object

Name	Type	Optional	Comment
storageSettings	AsnBinaryTransferStorageSettings		

**ResultType: AsnMgmtSetBinaryTransferSettingsResult**

AsnMgmtSetBinaryTransferSettingsResult is an Object

Name	Type	Optional	Comment
u8slistComputers	UTF8StringList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.179 asnMgmtGetConnectionOptionsDNS**

Subscribe ConnectionInformationChanges

**ArgumentType: AsnMgmtGetConnectionOptionsDNSArgument**

AsnMgmtGetConnectionOptionsDNSArgument is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetConnectionOptionsDNSResult**

AsnMgmtGetConnectionOptionsDNSResult is an Object

Name	Type	Optional	Comment
listConnectionOptions	AsnMgmtConnectionOptions		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.180 asnMgmtGetConfigurationManagerSettings**

Retrieve the Settings of the ConfigurationManager

**ArgumentType: AsnMgmtGetConfigurationManagerSettingsArgument**

AsnMgmtGetConfigurationManagerSettingsArgument is an Object

Name	Type	Optional	Comment
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**ResultType: AsnMgmtGetConfigurationManagerSettingsResult**

AsnMgmtGetConfigurationManagerSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnMgmtConfigurationManagerSettings		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.181      asnMgmtSetConfigurationManagerSettings**

Set the Settings of the ConfigurationManager

**ArgumentType: AsnMgmtSetConfigurationManagerSettingsArgument**

AsnMgmtSetConfigurationManagerSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnMgmtConfigurationManagerSettings		

**ResultType: AsnMgmtSetConfigurationManagerSettingsResult**

AsnMgmtSetConfigurationManagerSettingsResult is an Object

Name	Type	Optional	Comment

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.182      asnMgmtDirectPersistDeleteSetting**

Delete the given configuration setting from storage (i.e. from xml or remote db)

**ArgumentType: AsnMgmtDirectPersistDeleteSettingArgument**

AsnMgmtDirectPersistDeleteSettingArgument is an Object

Name	Type	Optional	Comment
key	string		The key of the setting to delete
objectName	string		The object name of the setting to delete (empty, if setting does not have an object name)

**ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.183 asnMgmtTestConfigurationManagerDB**

Test if configuration manager can connect with the database (via web service)

**ArgumentType: AsnMgmtTestConfigurationManagerDBArgument**

AsnMgmtTestConfigurationManagerDBArgument is an Object

Name	Type	Optional	Comment
mapRemoteDBProperties	AsnStringPairList	yes	Liste der Properties fÃ¼r die Konfigurations-Datenbank falls nicht angegeben, werden die im UCServer hinterlegten Settings verwendet

**ResultType: AsnMgmtTestConfigurationManagerDBResult**

AsnMgmtTestConfigurationManagerDBResult is an Object

Name	Type	Optional	Comment
bFilledWithConfigurationSettings	boolean		Ist die DB gefuellt mit Configuration Settings?

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.184      **asnMgmt GetUserManagerConnectionStatus**

Get UserManager Connection status

#### **ArgumentType: AsnMgmt GetUserManagerConnectionStatusArgument**

AsnMgmt GetUserManagerConnectionStatusArgument is an Object

Name	Type	Optional	Comment
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#### **ResultType: AsnMgmt GetUserManagerConnectionStatusResult**

AsnMgmt GetUserManagerConnectionStatusResult is an Object

Name	Type	Optional	Comment
status	AsnMgmtUserManagerConnectionStatus		

#### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.185      **asnMgmtClientPersistenceDelete**

#### **ArgumentType: AsnMgmtClientPersistenceDeleteArgument**

AsnMgmtClientPersistenceDeleteArgument is an Object

Name	Type	Optional	Comment
u8sItemStore	string		ItemStore des Elements
u8sItemStoreID	string		wenn eine StoreID angegeben ist, darf diese noch nicht existieren

**ResultType: AsnMgmtClientPersistenceDeleteResult**

AsnMgmtClientPersistenceDeleteResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnClientPersistenceResultDetailsEnum)

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**17.1.186 asnMgmtClientPersistenceCreate****ArgumentType: AsnMgmtClientPersistenceCreateArgument**

AsnMgmtClientPersistenceCreateArgument is an Object

Name	Type	Optional	Comment
u8sItemStore	string		ItemStore des Elements
u8sItemStoreID	string	yes	wenn eine StoreID angegeben ist, darf diese noch nicht existieren
data	string		Nutzdaten des Elements

**ResultType: AsnMgmtClientPersistenceCreateResult**

AsnMgmtClientPersistenceCreateResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnClientPersistenceResultDetailsEnum)

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error

u8sErrorString	string	A string representing the error
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### 17.1.187 asnMgmtGetConfigurationManagerStatus

Get configuration manager status (i.e. multi server status)

#### ArgumentType: AsnMgmtGetConfigurationManagerStatusArgument

AsnMgmtGetConfigurationManagerStatusArgument is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnMgmtGetConfigurationManagerStatusResult

AsnMgmtGetConfigurationManagerStatusResult is an Object

Name	Type	Optional	Comment
status	AsnMgmtConfigurationManagerStatus		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.188 asnMgmtGetConfigurationManagerServerList

Get configuration manager server list (all servers participating in multiserver verbund)  
If a ucserver connects to a remote database ist is automatically added to this server list

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnMgmtGetConfigurationManagerServerListResult

AsnMgmtGetConfigurationManagerServerListResult is an Object

Name	Type	Optional	Comment
serverList	AsnMgmtConfigurationManagerServerList		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.189 asnMgmtCleanupBinaryTransferFiles****ArgumentType: AsnMgmtCleanupBinaryTransferFilesArgument**

AsnMgmtCleanupBinaryTransferFilesArgument is an Object

Name	Type	Optional	Comment
iFileAgeDays	number		fileage for removal

**ResultType: AsnMgmtCleanupBinaryTransferFilesResult**

AsnMgmtCleanupBinaryTransferFilesResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		bool value if succeeded
iCountRemoved	number		count of removed files

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.190 asnMgmtSetPresenceDomain****ArgumentType: AsnMgmtSetPresenceDomainArgument**

AsnMgmtSetPresenceDomain is an Object

Name	Type	Optional	Comment
u8sPresenceDomain	string		string with the new presence domain(s) format of string is like the input in ucserver server setup and as shown in ucadmin operation is only carried out in datacenter ucserver sip addresses of users will not be adapted

### **ResultType: AsnMgmtSetPresenceDomainResult**

AsnMgmtSetPresenceDomainResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnMgmtSetPresenceDomainResultEnum)
u8slistOtherDatacenterServersRunning	UTF8StringList		if iResult is eOtherDatacenterServersRunning then this list contains all datacenter servers running aside of the one that handles this op

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## **17.1.191 asnMgmtGetAdminUserManagerSettings**

### **ArgumentType: AsnMgmtGetAdminUserManagerSettingsArgument**

AsnMgmtGetAdminUserManagerSettingsArgument is an Object

Name	Type	Optional	Comment

### **ResultType: AsnMgmtGetAdminUserManagerSettingsResult**

AsnMgmtGetAdminUserManagerSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnMgmtAdminUserManagerSettings		
iLastErrorCode	number		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.192 asnMgmtSetAdminUserManagerSettings****ArgumentType: AsnMgmtSetAdminUserManagerSettingsArgument**

AsnMgmtSetAdminUserManagerSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnMgmtAdminUserManagerSettings		

**ResultType: AsnMgmtSetAdminUserManagerSettingsResult**

AsnMgmtSetAdminUserManagerSettingsResult is an Object

Name	Type	Optional	Comment
iLastErrorCode	number		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**17.1.193 asnMgmtGetAdminUserRights****ArgumentType: AsnMgmtGetAdminUserRightsArgument**

AsnMgmtGetAdminUserRightsArgument is an Object

Name	Type	Optional	Comment
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### **ResultType: AsnMgmtGetAdminUserRightsResult**

AsnMgmtGetAdminUserRightsResult is an Object

Name	Type	Optional	Comment
rights	AsnMgmtAdminUserRights		

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

## **17.1.194 asnMgmtGetEntraIdSettings**

Set the settings for the entra id replicator

### **ArgumentType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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### **ResultType: AsnMgmtEntraIdSettings**

AsnMgmtEntraIdSettings is an Object

Name	Type	Optional	Comment
u8sClientId	string		The client id from the entra id app
u8sClientSecret	string		The client secret generated for the entra id app
u8sTenantId	string		The tenant id

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 17.1.195      **asnMgmtSetEntralIdSettings**

Get the current settings from the entra id replicator

#### **ArgumentType: AsnMgmtEntralIdSettings**

AsnMgmtEntralIdSettings is an Object

Name	Type	Optional	Comment
u8sClientId	string		The client id from the entra id app
u8sClientSecret	string		The client secret generated for the entra id app
u8sTenantId	string		The tenant id

#### **ResultType: AsnMgmtEmpty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

#### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 17.2 Management Events

### 17.2.1 **asnMgmt GetUserProfilesResult**

You have called asnMgmt GetUserProfiles() and get your results here (50 user profiles every this event)

#### **ArgumentType: AsnMgmt GetUserProfilesResultArgument**

AsnMgmt GetUserProfilesResultArgument is an Object

Name	Type	Optional	Comment
listUserProfiles	AsnUserProfileList		List of user profiles (max 50 in one segment)
u8sCrossRefID	string		CrossrefID from AsnMgmtGetPushServiceDevicesResult.
bLastSegment	boolean		last Segment for this u8sCrossRefID, TRUE, wenn dieses Segment das Ende der Liste ist.

### 17.2.2 **asnMgmt GetUserListEvent**

#### **ArgumentType: AsnMgmt GetUserListEventArgs**

AsnMgmt GetUserListEventArgs is an Object

Name	Type	Optional	Comment
userProfileDataList	AsnMgmtUserProfileDataList		

### 17.2.3 **asnMgmt GetGroupsEvent**

#### **ArgumentType: AsnMgmt GetGroupsEventArgs**

AsnMgmt GetGroupsEventArgs is an Object

Name	Type	Optional	Comment
groupProfile	AsnGroupProfile		

### 17.2.4 **asnMgmt ComputerFoundEvent**

#### **ArgumentType: AsnMgmt ComputerFoundEventArgs**

AsnMgmt ComputerFoundEventArgs is an Object

Name	Type	Optional	Comment
computerProfile	AsnComputerProfile		
softwareStatusComputer	AsnMgmtSoftwareStatusComputer		
clientInstallProfileData	AsnMgmtClientInstallProfileData		

### 17.2.5 **asnMgmt SoftwarePacketsChanged**

#### **ArgumentType: AsnMgmt Empty**

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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### 17.2.6 asnMgmtSoftwareStatusComputerChanged

Software install status on a computer changed event

This event is fired when the software install state on a computer changed.  
This happens during a remote software install operation or a client software update procedure.

#### ArgumentType: AsnMgmtSoftwareStatusComputerChangedArgument

AsnMgmtSoftwareStatusComputerChangedArgument is an Object

Name	Type	Optional	Comment
status	AsnMgmtSoftwareStatusComputer		

### 17.2.7 asnMgmtUpdateSoftwareStatusComputerChanged

#### ArgumentType: AsnMgmtEUCWebServicesStatus

AsnMgmtEUCWebServicesStatus is an Object

Name	Type	Optional	Comment
u8sUCSID	string		
ucConnectStatus	AsnMgmtEUCWSStatus		
ucwsStatusMap	AsnMgmtEUCWSStatusList		

### 17.2.8 asnMgmtGetLineStatesEvent

#### ArgumentType: AsnMgmtGetLineStatesEventArgs

AsnMgmtGetLineStatesEventArgs is an Object

Name	Type	Optional	Comment
iDumpMessage	number		
iDumpType	number		
u8sLineID	string		
iOpenState	number		(Linked Type: AsnCtiLineOpenStatus)

iNumCalls	number		
iSipResponseCode	number		
u8sReasonPhrase	string		
u8sEffectiveHomeServer	string	yes	<p>ProCall DataCenter only. This is the effective home server identification of the UCServer that (currently) provides this line.</p> <p>For SIPAV lines and TAPI lines not enabled by the "use lines automatically" feature, this is usually the same as the home server in the line's configuration. However, when moving a line between two servers, this may differ for a short period of time.</p> <p>For TAPI lines that are enabled by the "use lines automatically" feature this might (temporarily) contain multiple servers in the format (2)server1.domain.de;server2.domain.de</p> <p>Important: The format "(count)server1;server2;servern" is only a temporary workaround. do not try to parse!</p>
lineStatusList	AsnMgmtLineStatusList	yes	ProCall DataCenter only: List of line status from several servers

### 17.2.9 asnMgmtLineStateChanged

Line State changed event

This event is fired from the server to the client.  
It indicates, that the state of a CTI line has changed.

#### ArgumentType: AsnMgmtLineStateChangedArgument

AsnMgmtLineStateChangedArgument is an Object

Name	Type	Optional	Comment
u8sLineID	string		
iOpenState	number		(Linked Type: AsnCtiLineOpenStatus)
iNumCalls	number		
iSipResponseCode	number		

u8sReasonPhrase	string		
u8sEffectiveHomeServer	string	yes	<p>ProCall DataCenter only. This is the effective home server identification of the UCServer that (currently) provides this line.</p> <p>For SIPAV lines and TAPI lines not enabled by the "use lines automatically" feature, this is usually the same as the home server in the line's configuration. However, when moving a line between two servers, this may differ for a short period of time.</p> <p>For TAPI lines that are enabled by the "use lines automatically" feature this might (temporarily) contain multiple servers in the format (2)server1.domain.de;server2.domain.de</p> <p>Important: The format "(count)server1;server2;servern" is only a temporary workaround. do not try to parse!</p>
lineStatusList	AsnMgmtLineStatusList	yes	ProCall DataCenter only: List of line status from several servers

### 17.2.10asnMgmtOnLineRemovedEvent

#### ArgumentType: AsnMgmtOnLineRemovedEventArgs

AsnMgmtOnLineRemovedEventArgs is an Object

Name	Type	Optional	Comment
tapiLineConfig4Admin	AsnMgmtTapiLineConfig4Admin		

### 17.2.11asnMgmtOnLineAddedEvent

#### ArgumentType: AsnMgmtOnLineAddedEventArgs

AsnMgmtOnLineAddedEventArgs is an Object

Name	Type	Optional	Comment
tapiLineConfig4Admin	AsnMgmtTapiLineConfig4Admin		

### 17.2.12asnMgmtOnLineConfigChangedEvent

#### ArgumentType: AsnMgmtOnLineConfigChangedEventArgs

AsnMgmtOnLineConfigChangedEventArgs is an Object

Name	Type	Optional	Comment
tapiLineConfig4Admin	AsnMgmtTapiLineConfig4Admin		

### 17.2.13 asnMgmtOnLineCapsChangedEvent

**ArgumentType: AsnMgmtOnLineCapsChangedEventArgs**

AsnMgmtOnLineCapsChangedEventArgs is an Object

Name	Type	Optional	Comment
tapiLineConfig4Admin	AsnMgmtTapiLineConfig4Admin		

### 17.2.14 asnMgmtOnCtiLineFoundEvent

Wird als Antwort auf asnMgmtGetLinesForSource geschickt

**ArgumentType: AsnMgmtOnCtiLineFoundEventArgs**

AsnMgmtOnCtiLineFoundEventArgs is an Object

Name	Type	Optional	Comment
tapiLineConfig4Admin	AsnMgmtTapiLineConfig4Admin		

### 17.2.15 asnMgmtOnLineGroupAdded

**ArgumentType: AsnMgmtOnLineGroupAddedArgument**

AsnMgmtOnLineGroupAddedArgument is an Object

Name	Type	Optional	Comment
config	AsnMgmtTapiLineGroupConfiguration		

### 17.2.16 asnMgmtOnLineGroupConfigChangedEventArgs

**ArgumentType: AsnMgmtOnLineGroupChangedEventArgs**

AsnMgmtOnLineGroupChangedEventArgs is an Object

Name	Type	Optional	Comment

config	AsnMgmtTapiLineGroupConfiguration		
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### 17.2.17 asnMgmtOnLineGroupRemoved

#### ArgumentType: AsnMgmtOnLineGroupRemovedArgument

AsnMgmtOnLineGroupRemovedArgument is an Object

Name	Type	Optional	Comment
u8sLineSourceName	string		
u8sPBXGroupName	string		

### 17.2.18 asnMgmtOnLineEvent4AdminEvent

#### ArgumentType: AsnMgmtOnLineEvent4AdminEventArgument

AsnMgmtOnLineEvent4AdminEventArgument is an Object

Name	Type	Optional	Comment
lineEvent4Admin	AsnMgmtLineEventForAdmin		

### 17.2.19 asnMgmtOnLicensesHaveChangedEvent

#### ArgumentType: AsnMgmtOnLicensesHaveChangedEventArgument

AsnMgmtOnLicensesHaveChangedEventArgument is an Object

Name	Type	Optional	Comment
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### 17.2.20 asnMgmtUCWebServiceStatusChanged

#### ArgumentType: AsnMgmtEUCWebServicesStatus

AsnMgmtEUCWebServicesStatus is an Object

Name	Type	Optional	Comment
u8sUCSID	string		
ucConnectStatus	AsnMgmtEUCWSStatus		
ucwsStatusMap	AsnMgmtEUCWSStatusList		

### 17.2.21asnMgmtOnListenInterfaceStatusesEvent

#### ArgumentType: AsnMgmtOnListenInterfaceStatusesEventArgs

AsnMgmtOnListenInterfaceStatusesEventArgs is an Object

Name	Type	Optional	Comment
statuses	AsnListeningInterfaceStatusList		

### 17.2.22asnMgmtOnListenInterfaceStatusesChangedEvent

#### ArgumentType: AsnMgmtOnListenInterfaceStatusesChangedEventArgs

AsnMgmtOnListenInterfaceStatusesChangedEventArgs is an Object

Name	Type	Optional	Comment
statusesAdded	AsnListeningInterfaceStatusList		
statusesUpdated	AsnListeningInterfaceStatusList		
statusesRemoved	AsnListeningInterfaceStatusList		

### 17.2.23asnMgmtLocationChanged

Location changed event

This event is fired from the server to the client.

It indicates, that the location information for the given locationID has changed.

The client should reload the location information.

#### ArgumentType: AsnMgmtLocationChangedEventArgs

AsnMgmtLocationChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sLocationID	string		
u8sMD5CheckSum	string		

### 17.2.24asnMgmtFederationServerStatusChanged

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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### 17.2.25asnMgmtFederationServerDiagnosticComplete

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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### 17.2.26asnMgmtUpgradeProgress

Progress Event for Upgrade

This event is sent periodically during Upgrade. Receiver can update a progress bar in the UI with this information.

#### ArgumentType: AsnMgmtUpgradeProgressArgument

AsnMgmtUpgradeProgressArgument is an Object

Name	Type	Optional	Comment
iProgressMax	number		
iProgressCur	number		

### 17.2.27asnMgmtPushServiceDevicesResult

Event that contains the results of asnMgmtGetPushServiceDevices

This event contains the data requested by asnMgmtGetPushServiceDevices

This event is fired multiple times, until bLastSegment is TRUE.

The u8sCrossRefID matches the u8sCrossRefID from the asnMgmtGetPushServiceDevicesResult

#### ArgumentType: AsnMgmtPushServiceDevicesResultArgument

AsnMgmtPushServiceDevicesResultArgument is an Object

Name	Type	Optional	Comment
listPushDevice	AsnMgmtPushServiceDevicePropsList		List of Devices (max 50 in one segment)
u8sCrossRefID	string		CrossrefID from AsnMgmtGetPushServiceDevicesResult.

bLastSegment	boolean		last Segment for this u8sCrossRefID, TRUE, wenn dieses Segment das Ende der Liste ist.
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### 17.2.28asnMgmtPushServiceDeviceChanged

Event that contains changed Push Service Devices

This event is fired when a Push Service Device Property Changes.

#### ArgumentType: AsnMgmtPushServiceDeviceChangedArgument

AsnMgmtPushServiceDeviceChangedEventArgs is an Object

Name	Type	Optional	Comment
iWhat	number		What about the list
deviceProps	AsnMgmtPushServiceDeviceProps		List of Devices (max 50 in one segment)

### 17.2.29asnMgmtRemoveComputerProfileEvent

#### ArgumentType: AsnMgmtRemoveComputerProfileEventArgs

AsnMgmtRemoveComputerProfileEventArgs is an Object

Name	Type	Optional	Comment
u8sComputerName	string		

### 17.2.30asnMgmtRemoveGroupProfileEvent

#### ArgumentType: AsnMgmtRemoveGroupProfileEventArgs

AsnMgmtRemoveGroupProfileEventArgs is an Object

Name	Type	Optional	Comment
u8sGroupName	string		

### 17.2.31asnMgmtRemoveUserProfileEvent

#### ArgumentType: AsnMgmtRemoveUserProfileEventArgs

AsnMgmtRemoveUserProfileEventArgs is an Object

Name	Type	Optional	Comment

u8sUserName	string	
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### 17.2.32asnMgmtMeshNodeStatusChanged

#### ArgumentType: AsnMgmtMeshNodeStatus

AsnMgmtMeshNodeStatus is an Object

Name	Type	Optional	Comment
u8sMeshNodeID	string		The mesh node id
iStatus	number		(Linked Type: AsnMgmtMeshNodeConnectionStatusEnum)
timeLastConnected	string		time_t last successful connect
timeLastStatusUpdate	string		time_t last status change
u8sServerVersion	string		ucserver version of the node
u8sIPAddress	string		IP Adress of the server
bOutbound	boolean		true if connection outbound
tlsStatus	AsnMgmtMeshNodeStatus TLS		details of the tls status of the connection

### 17.2.33asnMgmtMeshUpdateConnections

#### ArgumentType: AsnMgmtEmpty

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment
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### 17.2.34asnMgmtConnectionInformationChanged

#### ArgumentType: AsnMgmtConnectionInformationChangedArgument

AsnMgmtConnectionInformationChangedArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID this information belongs to

conInfo	AsnMgmtClientConnectionInformation		Connection info (always contains the full list of connections, (no dedicated add remove notify)
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### 17.2.35asnMgmtUpdateDatabaseProgress

Progress Event for Database Update

This event is sent periodically during Database Update. Receiver can update a progress bar in the UI with this information.

#### ArgumentType: AsnMgmtUpdateDatabaseProgressArgument

AsnMgmtUpdateDatabaseProgressArgument is an Object

Name	Type	Optional	Comment
iProgressMax	number		
iProgressCur	number		

### 17.2.36asnMgmtUserManagerConnectionStatusChanged

Event to send AD Connection status

This event will be sent to ucadmin if the status changes

#### ArgumentType: AsnMgmtUserManagerConnectionStatusChangedEventArgs

AsnMgmtUserManagerConnectionStatusChangedEventArgs is an Object

Name	Type	Optional	Comment
status	AsnMgmtUserManagerConnectionStatus		

### 17.2.37asnMgmtConfigurationManagerStatusChanged

Event to send configuration manager status

This event will be sent to ucadmin if the status changes

#### ArgumentType: AsnMgmtConfigurationManagerStatusChangedEventArgs

AsnMgmtConfigurationManagerStatusChangedEventArgs is an Object

Name	Type	Optional	Comment
status	AsnMgmtConfigurationManagerStatus		

### 17.2.38asnMgmtConfigurationManagerServerListChanged

Event to send configuration manager server list (all servers participating in multiserver verbund)  
 If a ucserver connects to a remote database ist is automatically added to this server list  
 This event will be sent to ucadmin if the server list is changed

#### ArgumentType: AsnMgmtConfigurationManagerServerListChangedEventArgs

AsnMgmtConfigurationManagerServerListChangedEventArgs is an Object

Name	Type	Optional	Comment
serverList	AsnMgmtConfigurationManagerServerList		

## 17.3 Management Types

### 17.3.1 AsnManagementProtocolVersion

The Management protocol version

This version must be incremented every time the interface is changed and compatibility is broken.

AsnManagementProtocolVersion is an Enumeration

Name	Type	Value	Comment
current	number	3	This is the protocol interface version. Increment whenever there are incompatible changes. just increment the number, do not add additional members.

### 17.3.2 AsnMgmt GetUserProfilesErrorEnum

AsnMgmt GetUserProfilesErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
nouserfound	number	1	
accessdenied	number	2	

### 17.3.3 AsnMgmtSMSenderAddressType

AsnMgmtSMSenderAddressType is an Enumeration

Name	Type	Value	Comment
eSMSenderAddressUserConfigured	number	0	
eSMSenderAddressUserConfiguredIfAvailable	number	1	
eSMSenderAddressServerConfigured	number	2	

#### 17.3.4 AsnMgmtACUBROADCASTSENUM

AsnMgmtACUBROADCASTSENUM is an Enumeration

Name	Type	Value	Comment
eACUBROADCASTUPDATE	number	1	
eACUBROADCASTUPDATEALL	number	2	
eACUBROADCASTREPORTSTATUS	number	3	

#### 17.3.5 AsnUpdateAVBehaviour

AsnUpdateAVBehaviour is an Enumeration

Name	Type	Value	Comment
waitForIdle	number	0	Warten bis der Client Idle ist
immediate	number	1	Update immer sofort ausfÃ¼hren
waitForIdleTimed	number	2	Warten bis der Client Idle ist, maximal iMaxWaitTimeForIdleMinutes Minuten

#### 17.3.6 AsnMgmtTapiLineSINGALCALLSONADDRESSEnum

SINGALCALLSONADDRESS\_ALL: alle  
 SINGALCALLSONADDRESS\_0 : Adresse 0  
 SINGALCALLSONADDRESS\_0 + 1 : Adresse 1\*/

AsnMgmtTapiLineSINGALCALLSONADDRESSEnum is an Enumeration

Name	Type	Value	Comment
eSINGALCALLSONADDRESSALL	number	0	

eSINGALCALLSONADDRESS0	number	1	
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### 17.3.7 AsnSIPAVResponseCodes

AsnSIPAVResponseCodes is an Enumeration

Name	Type	Value	Comment
rcdefault	number	0	
rcbusy	number	1	
rctmpavailable	number	2	
rcdecline	number	3	
rcringing	number	4	

### 17.3.8 AsnMgmtEnumLineType

AsnMgmtEnumLineType is an Enumeration

Name	Type	Value	Comment
unknown	number	0	Unbekannter Leitungstype
cti	number	1	TAPI CTI Leitung
mobile	number	2	Bluetooth Leitung
sipav	number	3	SIP AV Leitung
clientav	number	4	AV Client Leitung

### 17.3.9 AsnMgmtDeskShareAccess

AsnMgmtDeskShareAccess is an Enumeration

Name	Type	Value	Comment
eDeskShareAccessNone	number	0	Benutzer darf kein Desktop Sharing verwenden.
eDeskShareAccessAccept	number	1	Benutzer darf nur Anfragen/Aufforderungen

			beantworten.
eDeskShareAccessFull	number	2	Benutzer dürfen alles, also insb. auch Desktop Sharing selbst initiieren.

### 17.3.10 AsnMgmtEnumUMSecurity

AsnMgmtEnumUMSecurity is an Enumeration

Name	Type	Value	Comment
eUMSECURITYINDIVIDUAL	number	0	
eUMSECURITYWINUSERNAME	number	1	
eUMSECURITYDOMAIN	number	2	

### 17.3.11 AsnMgmtEnumUMSelfInstall

AsnMgmtEnumUMSelfInstall is an Enumeration

Name	Type	Value	Comment
eUMSELFINSTALLFULL	number	0	
eUMSELFINSTALLSIMPLE	number	1	
eUMSELFINSTALLNONE	number	2	

### 17.3.12 AsnEUserReplicatorType

Represents all the available user replicators eNONE is the default and means user replication is disabled

AsnEUserReplicatorType is an Enumeration

Name	Type	Value	Comment
eNONE	number	0	
eENTRAID	number	1	

### 17.3.13 AsnMgmtSchemaExtensionVersion

AsnMgmtSchemaExtensionVersion is an Enumeration

Name	Type	Value	Comment
eSCHEMAEXTENSIONVERSIONNOTDETECTABLE	number	-1	
eSCHEMAEXTENSIONVERSIONNONE	number	0	
eSCHEMAEXTENSIONVERSION3	number	1	
eSCHEMAEXTENSIONVERSION4	number	2	
eSCHEMAEXTENSIONVERSION6	number	3	

### 17.3.14 AsnMgmtPhoneNumberFormats

Plain = superkanonisch

Plain w ext = superkanonisch mit extension - erlaubt

Internal = gekürzt auf rein interne Nummern

Readable = +49(8151)36856-162

DIN 5008:2005 = +49 8151 36856-162

Dialable = durch Rufnummernformatierung wählbar gemacht

AsnMgmtPhoneNumberFormats is an Enumeration

Name	Type	Value	Comment
ePHONENUMBERFORMATPLAIN	number	0	Supercanonisch -> +49815136856116
ePHONENUMBERFORMATPLAININTERNAL	number	1	Supercanonisch, intern gekürzt -> 116
ePHONENUMBERFORMATREADABLE	number	2	Lesbar, ungekürzt -> +49 (8151) 36856-116
ePHONENUMBERFORMATREADABLEINTERNAL	number	3	Lesbar, intern gekürzt -> 116
ePHONENUMBERFORMATDIALABLE	number	4	Wählbar -> 0049815136856116
ePHONENUMBERFORMATDIN	number	5	entsprechend DIN 5008:2005 -> +49 8151 36856-116
ePHONENUMBERFORMATDININTERNAL	number	6	entsprechend DIN 5008:2005, intern gekürzt -> 116
ePHONENUMBERFORMATPLAINWEXT	number	7	Supercanonisch '-' erlaubt -> +49815136856-116

ePHONENUMBERFORMATPLAINWEXTINTERNAL	number	8	Supercanonisch '-' erlaubt -> 116
ePHONENUMBERFORMATUNFORMATTED	number	9	Ãœbergebener String wird nicht formatiert

### 17.3.15 AsnMgmtUserManagerInterfaceType

UserManagement interface type

AsnMgmtUserManagerInterfaceType is an Enumeration

Name	Type	Value	Comment
eUSERMANAGERINTERFACETYPEUNKNOWN	number	0	
eUSERMANAGERINTERFACETYPEBUILTIN	number	1	
eUSERMANAGERINTERFACETYPEACTIVE DIRECTORY	number	2	
eUSERMANAGERINTERFACETYPELDAP	number	3	
eUSERMANAGERINTERFACETYPEBUILTINDB	number	4	

### 17.3.16 AsnMgmtELICENSEFEATURE

AsnMgmtELICENSEFEATURE is an Enumeration

Name	Type	Value	Comment
eLICENSEFEATUREUSERS	number	1	
eLICENSEFEATURELINES	number	2	
eLICENSEFEATURECLIENTS	number	3	
eLICENSEFEATUREUMREPLICATOR	number	4	
eLICENSEFEATUREANALYTICS	number	5	
eLICENSEFEATUREINSTANCES	number	6	
eLICENSEFEATURESERVERLINES	number	7	
eLICENSEFEATURECHALLENGEPBX	number	8	

eLICENSEFEATURECSTA CONNECTIONS	number	9	
eLICENSEFEATURECHANNELS	number	10	

### 17.3.17 AsnMgmtECOMPROMISESTATUS

AsnMgmtECOMPROMISESTATUS is an Enumeration

Name	Type	Value	Comment
eCOMPROMISESTATUSVALID	number	0	Kein Missbrauch bekannt
eCOMPROMISESTATUSBLACKLISTEDINVALID	number	1	Blacklistet in der WaWi (auf Basis ProduktID Seriennummer)
eCOMPROMISESTATUSREBOUNDINVALID	number	2	Blacklistet in der WaWi (auf Basis ProduktID Seriennummer in Verbindung mit dem letzten Bindungsdatum (alle die aelter sind sind ungültig))
eCOMPROMISESTATUSBLACKLISTEDTEMPORARY	number	3	Wie ECOMPROMISESTATUSBLACKLISTEDINVALID aber temporaer gültig (Übergangslizenz) (Ob wirklich gültig steht im expired Flag)
eCOMPROMISESTATUSREBOUNDTTEMPORARY	number	4	Wie ECOMPROMISESTATUSREBOUNDINVALID aber temporaer gültig (Übergangslizenz) (Ob wirklich gültig steht im expired Flag)

### 17.3.18 AsnMgmtGetLicenseErrorEnum

AsnMgmtGetLicenseErrorEnum is an Enumeration

Name	Type	Value	Comment
eLICENSEERREXISTS	number	-23	
eLICENSEERRINVALIDLICENSE	number	-25	

eLICENSEERRDEPENDENCIES	number	-26	
eLICENSEERRREQUIRESHARDWAREID	number	-27	
eLICENSEERRFORBIDDENCOMBINATION	number	-28	
eLICENSEERRLICENSEEXPIRED	number	-29	
eLICENSERRBLACKLISTEDINVALID	number	-30	
eLICENSERRREBOUNDINVALID	number	-31	

### 17.3.19 AsnMgmtVerifyUCWebServicesConfigError

AsnMgmtVerifyUCWebServicesConfigError is an Enumeration

Name	Type	Value	Comment
eUCWSSERVERSTATUSCONNECTED	number	0	
eUCWSSERVERSTATUSUNKNOWN	number	1	
eUCWSSERVERSTATUSINVALIDUCSID	number	2	
eUCWSSERVERSTATUSLOGINFAILED	number	3	
eUCWSSERVERSTATUSFAILED	number	4	
eUCWSSERVERSTATUSREDIRECT	number	5	

### 17.3.20 AsnMgmtMobileAccessOption

AsnMgmtMobileAccessOption is an Enumeration

Name	Type	Value	Comment
eNONE	number	0	
eUCCONNECT	number	1	
eOWNSERVERS	number	2	

### 17.3.21AsnDatabaseManagerAuthModeEnum

AsnDatabaseManagerAuthModeEnum is an Enumeration

Name	Type	Value	Comment
eAuthImplicitWindows	number	0	
eAuthExplicitSQL	number	1	
eAuthExplicitWindows	number	2	

### 17.3.22AsnMgmtGetDatabaseManagerSettingsErrorEnum

AsnMgmtGetDatabaseManagerSettingsErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	Wird in AsnRequestError als Error-Nummer verwendet
accessdenied	number	1	

### 17.3.23AsnMgmtSetDatabaseManagerSettingsErrorEnum

AsnMgmtSetDatabaseManagerSettingsErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	Wird in AsnRequestError als Error-Nummer verwendet
accessdenied	number	1	

### 17.3.24AsnInterfaceTypeEnum

AsnInterfaceTypeEnum is an Enumeration

Name	Type	Value	Comment
eINTERFACETYPEUNDEF	number	-1	
eINTERFACETYPEADMIN	number	0	Interface fÃ¼r die Administration
eINTERFACETYPECLIENT	number	1	Interface fÃ¼r Clients

eINTERFACETYPETSP	number	2	Interface für TSPs
eINTERFACETYPEHTTP	number	3	Interface für WebService (HTTP)
eINTERFACETYPEHTTPS	number	4	Interface für WebService (HTTPS)
eINTERFACETYPELDAP	number	5	Interface für LDAP
eINTERFACETYPELDAPS	number	6	Interface für LDAPs
eINTERFACETYPEHTTPNODEJS	number	7	Interface für WebService via nodejs (HTTP)
eINTERFACETYPEHTTPSNODEJS	number	8	Interface für WebService via nodejs (HTTPS)
eINTERFACETYPESIPREGISTRAR	number	9	Interface für SIP Client Registrierungen (Server ist ein Registrar)
eINTERFACETYPESIPFEDERATION	number	10	Interface für SIP Federation Verbindungen
eINTERFACETYPEXMPPFEDERATION	number	11	Interface für XMPP Federation Verbindungen

### 17.3.25 AsnInterfaceProtocolEnum

AsnInterfaceProtocolEnum is an Enumeration

Name	Type	Value	Comment
ePROTOCOLUNDEF	number	-1	
ePROTOCOLTCP	number	0	TCP unverschlüsselt
ePROTOCOLSTARTTLSOPTIONAL	number	1	STARTTLS optional - Socket initial TCP (Zertifikat im Store)
ePROTOCOLSTARTTLSMANDATORY	number	2	STARTTLS verpflichtend - Socket initial TCP (Zertifikat im Store)
ePROTOCOLTLS	number	3	TLS verschlüsselt - Socket initial TLS (Zertifikat im Store)
ePROTOCOLTLSFILECERT	number	4	TLS verschlüsselt (Zertifikat in einem File)
ePROTOCOLUDP	number	5	UDP unverschlüsselt

ePROTOCOLTLS	number	6	MTLS verschlüsselt
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### 17.3.26 AsnInterfaceStatusEnum

AsnInterfaceStatusEnum is an Enumeration

Name	Type	Value	Comment
eINTERFACESTATUSUNDEF	number	-1	Status bzw. Interface unbekannt
eINTERFACESTATUSNOTINITIALIZED	number	0	Nicht initialisiert
eINTERFACESTATUSFAILED	number	1	Fehlgeschlagen (Port in use, IPV6 nicht verfügbar)
eINTERFACESTATUSCERTERROR	number	2	Fehlgeschlagen, Zertifikats Fehler
eINTERFACESTATUSOPEN	number	5	Initialisiert und offen

### 17.3.27 AsnEConnectedIdDealing

Spezielle Behandlung der ConnectedID

AsnEConnectedIdDealing is an Enumeration

Name	Type	Value	Comment
eCONNECTEDIDDEALINGNORMAL	number	0	ConnectedID nach den eingegebenen Regeln formatieren
eCONNECTEDIDDEALIGNIGNORE	number	1	ConnectedID ignorieren

### 17.3.28 AsnAVSTUNANDTURNSERVERTYPE

AsnAVSTUNANDTURNSERVERTYPE is an Enumeration

Name	Type	Value	Comment
eUNDEF	number	-1	Not used
eSTUN	number	0	Stun Server
eTURNUSERPASSWD	number	1	Turn Server mit Username und Password (momentan)

			unbenutzt)
eTURNSHAREDSECRET	number	2	Turn Server mit Shared Secret (UCServer Intern)

### 17.3.29 AsnAVSTUNANDTURNPROVIDERTYPE

AsnAVSTUNANDTURNPROVIDERTYPE is an Enumeration

Name	Type	Value	Comment
eTURNPROVIDERTYPEOWNSERVERS	number	0	Use own Servers
eTURNPROVIDERTYPEEXTERNAL	number	1	Turn Provider
eTURNPROVIDERTYPEUCCONNECT	number	2	UCConnect

### 17.3.30 AsnGatewayModelEnum

AsnGatewayModelEnum is an Enumeration

Name	Type	Value	Comment
gwmodelgeneral	number	0	
gwmodelunifyopenscapebusiness	number	100	
gwmodelmitelmivoiceoffice400	number	200	
gwmodelmitelmivoiceofficemxone	number	201	
gwmodelferrariofficemastergate	number	300	
gwmodelavmfritzbox7490	number	400	
gwmodelasteriskpbx	number	500	
gwmodelpanasonicns1000	number	600	
gwmodelpanasonicnsx	number	601	

### 17.3.31 AsnGatewayTypeEnum

AsnGatewayTypeEnum is an Enumeration

Name	Type	Value	Comment
gatewaystdsipwsipmediagw	number	0	call to/from a gateway with using a mediaserver
gatewaystdsipwomediagw	number	4	call to/from a gateway without using a mediaserver
mediagatewayrtp	number	1	call to/from mediagateway callleg that speaks rtp
mediagatewaydtls	number	2	call to/from mediagateway callleg that speaks dtls
federationstdsip	number	3	call is a federation call
gatewaystdsipwkurentomediagw	number	5	call to/from a gateway with using a kurento mediaserver

### 17.3.32AsnMediaModesEnum

AsnMediaModesEnum is an Enumeration

Name	Type	Value	Comment
mediastdlegacy	number	0	"Legacy" mode without using encryption
mediastdlegacysrtp	number	1	"Legacy" mode with encryption (SRTP)
mediastdwebrtc	number	2	webRTC mode

### 17.3.33AsnSIPConnectionTypeEnum

AsnSIPConnectionTypeEnum is an Enumeration

Name	Type	Value	Comment
eSIPUDP	number	1	
eSIPTCP	number	2	
eSIPTLS	number	3	
eSIPMTLS	number	6	

### 17.3.34 AsnAudioCodesEnum

AsnAudioCodesEnum is an Enumeration

Name	Type	Value	Comment
audiocodecg711ulaw	number	0	
audiocodecg711alaw	number	1	
audiocodecg722	number	2	
audiocodecopus	number	3	

### 17.3.35 AsnMgmtLoginError

bei nicht erfolgreicher authentisierung kommt in errors was noch zu tun ist

AsnMgmtLoginError is an Enumeration

Name	Type	Value	Comment
eNETLOGININTERNALSERVERERROR	number	100	
eNETLOGININVALIDUSERNAME	number	101	
eNETLOGININVALIDPASS	number	102	
eNETLOGINNOMOREUSERS	number	103	
eNETLOGININVALIDVERSION	number	104	
eNETLOGINNEGOTIATIONREQUIRED	number	105	
eNETLOGININVALIDAUTHENTICATIONMETHOD	number	106	
eNETLOGINUSERNOTENABLED	number	10	

	er	7	
eNETLOGININVALIDCOMPUTERNAME	numb er	10 8	
eNETLOGINDOMAINAUTHFAILED	numb er	10 9	
eNETLOGINMISSINGRIGHTS	numb er	11 0	
eNETLOGINMISSINGRIGHTSTS	numb er	11 1	
eNETLOGINSERVERNOTCOMPATIBLE	numb er	11 2	
eNETLOGINALREADYAUTENTICATED	numb er	11 3	
eNETLOGINTLSREQUIRED	numb er	11 4	
eNETLOGINTOKENEXIRED	numb er	13 0	eNETLOGINACCOUNTPASSWORDLOCKED( 129),

### 17.3.36 AsnMgmtUCServerType

Uses the same values as in global\include\pcoemids.h aben  
If you change or add values here you need to modify the pcoem.h accordingly

AsnMgmtUCServerType is an Enumeration

Name	Type	Value	Comment
enterprise	number	0	
one	number	1	
business	number	2	
datacenter	number	3	
ucaas	number	4	

### 17.3.37 AsnMgmtUCServerFeatures

Uses the same values as in EUserProfile.h

If you change or add values here you need to modify the EUserProfile.h accordingly

AsnMgmtUCServerFeatures is an Enumeration

Name	Type	Value	Comment
none	number	0	no features at all
federation	number	1	server is built with federation and federation is enabled (no matter if it is properly configured)
xmpp_federation	number	2	server is built with xmpp federation and federation (not necessarily xmpp) is enabled (no matter if it is properly configured)
cstaserver	number	4	server is built with csta server support and the server is active
webserver	number	8	there is a EUCWEb.exe next to the ucserver, no matter if the webserver is actually running
ucconnect	number	16	server is build with ucconnect, no matter if ucconnect is enabled properly configured or connected
voiceservices	number	32	the server holds a voice service license (no matter if voiceservices is configured)

### 17.3.38 AsnMgmtLineForwardModeEnum

AsnMgmtLineForwardModeEnum is an Enumeration

Name	Type	Value	Comment
eLINEFORWARDMODEUNCOND	number	1	
eLINEFORWARDMODEUNCONDINTERNAL	number	2	
eLINEFORWARDMODEUNCONDEXTERNAL	number	4	
eLINEFORWARDMODEUNCONDSPECIFIC	number	8	
eLINEFORWARDMODEBUSY	number	16	

eLINEFORWARDMODEBUSYINTERNAL	number	32	
eLINEFORWARDMODEBUSYEXTERNAL	number	64	
eLINEFORWARDMODEBUSYSPECIFIC	number	128	
eLINEFORWARDMODENOANSW	number	256	
eLINEFORWARDMODENOANSWINTERNAL	number	512	
eLINEFORWARDMODENOANSWEXTERNAL	number	1024	
eLINEFORWARDMODENOANSWSPECIFIC	number	2048	
eLINEFORWARDMODEBUSYNA	number	4096	
eLINEFORWARDMODEBUSYNINTERNAL	number	8192	
eLINEFORWARDMODEBUSYNEXTERNAL	number	16384	
eLINEFORWARDMODEBUSYNASPECIFIC	number	32768	
eLINEFORWARDMODEUNKNOWN	number	65536	TAPI v1.4
eLINEFORWARDMODEUNAVAIL	number	131072	TAPI v1.4

### 17.3.39 AsnMgmtForwardControllerEnum

AsnMgmtForwardControllerEnum is an Enumeration

Name	Type	Value	Comment
eCTIFORWARDCONTROLLERPBX	number	1	ForwardController Konstanten Die Rufumleitung wird in der PBX gesetzt
eCTIFORWARDCONTROLLERTAPISERVERADMIN	number	2	Die Rufumleitung wird im TapiServer gesetzt (Administrative Umleitung)
eCTIFORWARDCONTROLLERTAPISERVERUSER	number	4	Die Rufumleitung wird im TapiServer gesetzt (User Umleitung)

### 17.3.40 AsnMgmtForwardMode

Forward Mode constants (mode)

AsnMgmtForwardMode is an Enumeration

Name	Type	Value	Comment
eCTIFORWARDUNKWON	number	0	Forward unknown
eCTIFORWARDIMMEDIATE	number	1	Forward Immediate
eCTIFORWARDBUSY	number	2	Forward on Busy
eCTIFORWARDNOANSW	number	4	Forward on No Answer
eCTIFORWARDBUSYINT	number	8	Forward on Busy for internal callers
eCTIFORWARDBUSYEXT	number	16	Forward on Busy for external callers
eCTIFORWARDNOANSINT	number	32	Forward on No answer for internal callers
eCTIFORWARDNOANSEXT	number	64	Forward on No answer for external callers
eCTIFORWARDIMMINT	number	128	Forward immediate for internal callers
eCTIFORWARDIMMEXT	number	256	Forward immediate for external callers
eCTIBACKENDSPECIFIC	number	32768	Backend specific forwarding entry Vormals 2147483648 0x80000000
eCTIFORWARDALLMODES	number	524799	Alle Weiterleitungsmethoden Vormals 2147484159 0x800001FF

### 17.3.41 AsnMgmtUpgradeStartResultEnum

AsnMgmtUpgradeStartResultEnum is an Enumeration

Name	Type	Value	Comment
eUPGRADESTARTOK	number	0	
eUPGRADESTARTNOTADMIN	number	1	Server is not running administrative
eUPGRADESTARTDBALREADYCONVERTED	number	2	Database Conversion already done

eUPGRADESTARTDBNOTEMPTY	number	3	V6 Database is not empty -> Conversion not possible
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### 17.3.42 AsnMgmtPushServiceDevicesChangedArgumentEnum

AsnMgmtPushServiceDevicesChangedArgumentEnum is an Enumeration

Name	Type	Value	Comment
eAdded	number	0	
eChanged	number	1	
eDeleted	number	2	

### 17.3.43 AsnMgmtPhoneJournalUnansweredEnum

Unbeantwortete Anrufe, Einstellungen abholen

AsnMgmtPhoneJournalUnansweredEnum is an Enumeration

Name	Type	Value	Comment
never	number	0	
all	number	1	
first	number	2	
last	number	3	

### 17.3.44 AsnMgmtPhoneJournalPrivateCallOptionsEnum

Unbeantwortete Anrufe, Einstellungen abholen

AsnMgmtPhoneJournalPrivateCallOptionsEnum is an Enumeration

Name	Type	Value	Comment
enPrivateCallsNormal	number	0	
enPrivateCallsShortenNumbers	number	1	
enPrivateCallsNoNumber	number	2	

### 17.3.45AsnMgmtUnansweredOptionEnum

Einstelloption fÃ¼r die unbearbeiteten Anrufe (gilt sowohl fÃ¼r das Journal als auch fÃ¼r die E-Mails)

AsnMgmtUnansweredOptionEnum is an Enumeration

Name	Type	Value	Comment
eUnansweredOptionNever	number	0	
eUnansweredOptionAll	number	1	
eUnansweredOptionFirst	number	2	
eUnansweredOptionLast	number	3	

### 17.3.46AsnMgmtGetPhoneJournalSettingsErrorEnum

AsnMgmtGetPhoneJournalSettingsErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	

### 17.3.47AsnMgmtSetPhoneJournalSettingsErrorEnum

AsnMgmtSetPhoneJournalSettingsErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	

### 17.3.48AsnMgmtSetGroupProfileFilter

Groupprofile speichern

Die Gruppe wird im Server modifiziert; die Gruppe wird dabei durch die GUID referenziert (stimmt diese nicht, schlägt der Aufruf fehl).

Die Daten, die übernommen werden hängen vom Backend ab.

Änderungen von Datenfeldern, die vom AD verwaltet werden (ObjectSID, GUID, DNPath, Member-Liste, Gruppenname) werden NICHT übernommen.

iGroupProfileVersion kann auch nicht geändert werden, da dies von der UCServer Version abhängig ist.

AsnMgmtSetGroupProfileFilter is an Enumeration

Name	Type	Value	Comment
groupName	number	0	Spezifischer Gruppenname
objectGUID	number	1	Spezifische ObjectGUID

### 17.3.49 AsnMgmtSetGroupProfileErrorEnum

AsnMgmtSetGroupProfileErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	
groupnotfound	number	2	
wrongprofileversion	number	3	
errorsavingprofile	number	4	
nosearchparameter	number	5	

### 17.3.50 AsnMgmtChatSettingsErrorEnum

AsnMgmtChatSettingsErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	

### 17.3.51 AsnMgmtMeshNodeConnectionStatusEnum

The different stati a node can have

AsnMgmtMeshNodeConnectionStatusEnum is an Enumeration

Name	Type	Value	Comment

unknown	number	0	Status unknown
connected	number	1	We are connected
connectiondropped	number	2	Connection was dropped
connectfailedunknown	number	3	Connect failed, reason unkown
connectfailedunreachable	number	4	Connect failed, unreachable
connectfailedinvalidmeshid	number	5	Connect failed, differeten mesh id
connectfailedinvalidpassword	number	6	Connect failed, invalid password
connectfailednomorelicensesonserver	number	7	Connect failed, no licenses on the server side
connectfaileddisabledonserver	number	8	Connect failed, mesh disabled on the server side
connectfailednomeshidonserver	number	9	Connect failed, no meshid on the server side
connectfailednoautoaddonserver	number	10	Connect failed, partner node not known and autoadd is disabled on the server side
connectfailednodedisabledonserver	number	11	Connect failed, partner node is known, but disabled
connectfailednodetlsforcedonserver	number	12	Connect failed, partner node is known, but requires TLS
connectfailednolICENSESONCLIENT	number	20	Connect failed, no licenses on our side
connectfaileddisabledonclient	number	21	Connect failed, mesh disabled on our side
connectfailednomeshidonclient	number	22	Connect failed, no meshid on our side
connectfailednodedisabledonclient	number	23	Connect failed, node disabled on our side
connectfailedTLSforcedonclient	number	24	Connect failed, no TLS on the server side network interface
connectfailedalreadyconnected	number	29	Connect failed, another node already connected with same remote ip address

connectfailedtlscerterror	number	30	Connect failed, some error in certificate chain
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### 17.3.52AsnMgmtGDPREraseErrorEnum

AsnMgmtGDPREraseErrorEnum is an Enumeration

Name	Type	Value	Comment
success	number	0	
accessdenied	number	1	

### 17.3.53AsnMgmtSetPresenceDomainResultEnum

AsnMgmtSetPresenceDomainResultEnum is an Enumeration

Name	Type	Value	Comment
eDone	number	0	
eNotDoneCauseOtherDatacenterServersRunning	number	1	
eNotDoneCauseConfigDBNotConnected	number	2	

### 17.3.54AsnMgmtAdminUserManagerType

AdminUserManager type

AsnMgmtAdminUserManagerType is an Enumeration

Name	Type	Value	Comment
eNONE	number	0	
eACTIVEDIRECTORY	number	1	

### 17.3.55AsnMgmtAdminUserRightEnum

The different rights in groups with own id blocks

AsnMgmtAdminUserRightEnum is an Enumeration

Name	Type	Value	Comment
common_DataImport	number	1	AsnMgmtAdminUserRightExecute rights:
common_DataExport	number	2	
common_RestartServer	number	3	
common_NetworkInterfaces	number	4	
common_CoreServices	number	5	
common_SynchronizeContactData	number	6	
common_ChangePassword	number	7	
general_Licenses	number	100	AsnMgmtAdminUserRightReadWrite rights:
general_PresenceDomain	number	101	
general_UserDatabase	number	102	
general_UserAuthentication	number	103	
general_UserAdminAccess	number	104	
general_Database	number	105	
general_MultiServerDatabase	number	106	
general_Events	number	107	
general_Redis	number	108	
telephony_Lines	number	200	
telephony_LinesDetails_LineGroups	number	201	
telephony_Location	number	210	
telephony_Journal	number	211	
telephony_UnansweredCalls	number	212	

telephony_Problems	number	213
usermgmt_User	number	300
usermgmt_Groups	number	301
usermgmt_Computer	number	302
usermgmt_Profiles	number	303
usermgmt_GlobalSettings	number	304
services_UpdateServer	number	400
services_ExternalServer	number	401
services_EmailDelivery	number	402
services_Notifications	number	403
services_SMSDispatch	number	404
services_CallRecording	number	405
services_ShareContents	number	406
services_OnlineServices	number	407
services_StunTurn	number	408
services_PushNotifications	number	409
services_TeamsIntegration	number	410
federation_SIPFederation	number	500
federation_SIPServer	number	501
federation_SIPStaticRouting	number	502
federation_XMPPFederation	number	503
federation_DomainsAuthorization	number	504

federation_BlockDomain	number	505	
federation_Diagnostics	number	506	
database_MetaDirectory	number	600	
database_Google	number	601	
allsettings_ServerSettings	number	700	
status_StatusMonitor	number	800	
status_ServerEvents	number	801	

### 17.3.56AsnMgmtEmpty

Empty argument/result

this type is used as argument or result type when we have no members inside

AsnMgmtEmpty is an Object

Name	Type	Optional	Comment

### 17.3.57AsnMgmt GetUserProfilesArgument

get all user profiles

Create a new GUID and send it as parameter u8sCrossRefId  
UCServer will then send Events asnMgmt GetUserProfilesResult with this GUID

AsnMgmt GetUserProfilesArgument is an Object

Name	Type	Optional	Comment
iActiveUsersOnly	number		CTI-Enabled users only
iFilterOnlineState	number		Filter with actual onlinestate -> AsnAdminUserOnlineStateFilter
u8sCrossRefId	string		

### 17.3.58AsnMgmt GetUserProfilesResult

AsnMgmt GetUserProfilesResult is an Object

Name	Type	Optional	Comment
userProfiles	AsnUserProfileList		

### 17.3.59 AsnMgmt GetUserProfilesResultArgument

bLastSegment is true if this is the last deliver of user profiles

AsnMgmt GetUserProfilesResultArgument is an Object

Name	Type	Optional	Comment
listUserProfiles	AsnUserProfileList		List of user profiles (max 50 in one segment)
u8sCrossRefID	string		CrossrefID from AsnMgmtGetPushServiceDevicesResult.
bLastSegment	boolean		last Segment for this u8sCrossRefID, TRUE, wenn dieses Segment das Ende der Liste ist.

### 17.3.60 AsnMgmt GetUsersArgument

AsnMgmt GetUsersArgument is an Object

Name	Type	Optional	Comment
bResultAsList	boolean	yes	if true the users will be sent bundled with asnMgmt GetUserListEvent (if false or omitted the users will be sent individually with asnMgmt GetUsersEvent)

### 17.3.61 AsnMgmt GetUsersResult

AsnMgmt GetUsersResult is an Object

Name	Type	Optional	Comment
iNumberOfUsers	number		

### 17.3.62 AsnClientConnectionDescription

AsnClientConnectionDescription is an Object

Name	Type	Optional	Comment
u8sContactID	string		
u8sAnonymousUserName	string		

u8sHintData	string		
u8sConnectionGUID	string		
u8sDeviceName	string		
u8sDeviceID	string		
iClientAppID	number		(Linked Type: AsnClientAppID)
bIsIdle	boolean		

### 17.3.63AsnMgmtGetUMModeResult

AsnMgmtGetUMModeResult is an Object

Name	Type	Optional	Comment
iType	number		

### 17.3.64AsnMgmtSetUMModeArgument

AsnMgmtSetUMModeArgument is an Object

Name	Type	Optional	Comment
iType	number		

### 17.3.65AsnMgmtTestUMInterfaceArgument

AsnMgmtTestUMInterfaceArgument is an Object

Name	Type	Optional	Comment
iType	number		

### 17.3.66AsnMgmtUserProfileGetLargeImageArgument

AsnMgmtUserProfileGetLargeImageArgument is an Object

Name	Type	Optional	Comment
u8sUsername	string		
u8sImgHash	string		

### 17.3.67AsnMgmtUserProfileGetLargeImageResult

AsnMgmtUserProfileGetLargeImageResult is an Object

Name	Type	Optional	Comment
binImageData	string		
u8sImgHash	string		

### 17.3.68AsnMgmtGetGroupsResult

AsnMgmtGetGroupsResult is an Object

Name	Type	Optional	Comment
iNumberOfGroups	number		

### 17.3.69AsnMgmtRemoveGroupArgument

AsnMgmtRemoveGroupArgument is an Object

Name	Type	Optional	Comment
u8sGroupName	string		

### 17.3.70AsnMgmtGetGroupsEventArgs

AsnMgmtGetGroupsEventArgs is an Object

Name	Type	Optional	Comment
groupProfile	AsnGroupProfile		

### 17.3.71AsnMgmtAgentPublicPresenceItem

AsnMgmtAgentPublicPresenceItem is an Object

Name	Type	Optional	Comment
u8sAgentURI	string		URI des Agenten
iPublicAgentPresence	number		aktuelle öffentliche Präsenz des Agenten (Linked Type: AsnRankingAgentPublicPresenceEnum)

### 17.3.72AsnMgmtGetGroupAgentPublicPresenceArgument

AsnMgmtGetGroupAgentPublicPresenceArgument is an Object

Name	Type	Optional	Comment

u8sGroupName	string		
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### 17.3.73AsnMgmtGetComputersResult

AsnMgmtGetComputersResult is an Object

Name	Type	Optional	Comment
iNumberOfComputers	number		

### 17.3.74AsnMgmtRefreshComputerStatusArgument

AsnMgmtRefreshComputerStatusArgument is an Object

Name	Type	Optional	Comment
u8slistComputers	UTF8StringList		

### 17.3.75AsnMgmtClearComputerStatusArgument

AsnMgmtClearComputerStatusArgument is an Object

Name	Type	Optional	Comment
u8slistComputers	UTF8StringList		

### 17.3.76AsnMgmtRemoveComputerArgument

AsnMgmtRemoveComputerArgument is an Object

Name	Type	Optional	Comment
u8sComputerName	string		

### 17.3.77AsnMgmtSMSManagerSettings

AsnMgmtSMSManagerSettings is an Object

Name	Type	Optional	Comment
blsActivated	boolean		
u8sConfiguredProvider	string		
u8sLoginName	string		
u8sLoginPassword	string		

u8sServerSenderAddress	string		
iSenderAddressType	number		(Linked Type: AsnMgmtSMSenderAddressType)
u8sConfiguredService	string		

### 17.3.78AsnMgmtWebSMSProviderList

AsnMgmtWebSMSProviderList is an Object

Name	Type	Optional	Comment
u8sProviderListAsXML	string		

### 17.3.79AsnMgmtSendSMSArgument

AsnMgmtSendSMSArgument is an Object

Name	Type	Optional	Comment
u8sFrom	string		
u8sTo	string		
u8sBody	string		

### 17.3.80AsnMgmtSendSMSResult

AsnMgmtSendSMSResult is an Object

Name	Type	Optional	Comment
u8sResultInfo	string		
bResultWasError	boolean		

### 17.3.81AsnMgmtGoogleClientID

AsnMgmtGoogleClientID is an Object

Name	Type	Optional	Comment
bEnabled	boolean		
u8sClientID	string		
u8sClientSecret	string		

### 17.3.82AsnMgmtGetClientInstallProfileComputerNamesResult

AsnMgmtGetClientInstallProfileComputerNamesResult is an Object

Name	Type	Optional	Comment
u8slistComputers	UTF8StringList		

### 17.3.83AsnMgmtSendBroadcastArgument

AsnMgmtSendBroadcastArgument is an Object

Name	Type	Optional	Comment
iType	number		(Linked Type: AsnMgmtACUBROADCASTSENUM)
u8slistComputers	UTF8StringList		

### 17.3.84AsnMgmtClientInstallProfileAction

AsnMgmtClientInstallProfileAction is an Object

Name	Type	Optional	Comment
u8sPacketIdentifier	string		Identifier des Installationspaketes. Immer verfuegbares vordefiniertes Paket ist: "EACUSRV" - der update service (ACUFileForUpdate::strIdentifier */)
iAction	number		Auszufuehrende Aktion. einer der ACI_ACTION_NONE konstanten */
iClientTspInstallOption	number		MSI Optionen fuer die Installation ProCall Spezifisch Installationsoption fuer den Client TSP Konstanten aus ACI_CLIENTTSPINSTALLOPTION_NONE*/

### 17.3.85AsnMgmtACUFileForUpdateDescription

AsnMgmtACUFileForUpdateDescription is an Object

Name	Type	Optional	Comment
iFileID	number		Eindeutige Nummer welche die entsprechende Datei referenziert
u8sIdentifier	string		Identifier fuer die zum Update vorgesehene Datei

			<p>Der Identifier entspricht dem im XML. Wenn das Paket ueber den MSI UpgradeCode gesucht wurde wird mit: die Sprache als Zahl angehaengt 1033 fuer English (United States)</p>
u8sDescription	string		Beschreibung der Datei
u8sProduct	string		Produkt zu dem das File gehoert
u8sFileName	string		Dateiname wie er auf der Platte vorliegt (Alternativ ist der MSIUpgradeCode befuellt)
iExecuteType	number		Typ wie die Datei auf dem Client ausgefuehrt wird Eine der ACU_EXECUTETYPE_PROCALMSI Optionen
u8sExecuteCom mand	string		Kommando fuer execute. Das hat verschiedene Bedeutungen je nach iExecuteType
u8sVersion	string		Versionsnummer der Datei auf Platte. Diese wird beim einlesen des Files in den Server bestimmt. exe: Datei version aus resourcen msi: productversion Property andere: MD5
u8sMSIUpgradeC ode	string		MSI UpgradeCode des MSI auf Platte. Dieser wird beim einlesen des Files in den Server bestimmt. Dieser wird zum uninstall eines msi produktes auf dem client verwendet
u8sValidationCo de	string		MD5 der Datei. Dieses wird beim einlesen der Dateio in den Server berechnet. Der MD56 dient zum validieren des Files nach dem download durch den ACI Service
iFileLanguage	number		Language des Files oder 0 fuer alle Sprachen (Neutral) Muss im xml konfiguriert sein
iLCIDsEmbedded	SEQInte ger		
u8sPlatform	string		Zielplatform fuer dieses File. Das ist entweder leer (alle) oder x64 fuer Windows AMD 64 Platformen oder x86 fuer Windows x86 Platformen.
u8sKeyInstalled	string		reg key oder file key ob das file installiert ist (int) reg:HKEY_LOCAL_MACHINE\Software\ESTOS\UCServer4\Client\InstallCtiClient file:%CTICLIENTDIR%\config\oeminfo.bmp
u8sKeyVersion	string		reg key oder file key fuer die version.(u8sing) reg:HKEY_LOCAL_MACHINE\Software\ESTOS\UCServer4\Client\InstallVersion file:%CTICLIENTDIR%\config\oeminfo.bmp

u8sRegPathLanguage	string		HREGKEY unter dem nach der Sprache zu suchen ist (int) HKEY_LOCAL_MACHINE\Software\ESTOS\UCServer4\Client\Language
iAllowUpdate	number		Dieses File darf fuer Updates verwendet werden
iAllowInstall	number		Dieses File darf fuer Remote Installationen verwendet werden
u8sFilePath	string	yes	

### 17.3.86 AsnMgmtGetClientInstallProfileArgument

AsnMgmtGetClientInstallProfileArgument is an Object

Name	Type	Optional	Comment
u8sComputer	string		

### 17.3.87 AsnMgmtUpdateServiceSettings

AsnMgmtUpdateServiceSettings is an Object

Name	Type	Optional	Comment
iStatusUpdateService	number		Status des Update Service. Verfuegbar oder nicht verfuegbar. 0 oder 1
iEACUServiceActive	number		Aktiv Status des Update Service. Fuer Updates eingeschaltet oder nicht. 0 oder 1
iEACUServiceTimeLimited	number		Zeit Limitierung fuer Updates eingeschaltet. 0 oder 1.
iAllowVersionDowngrade	number		Version downgrade erlaubt 0 oder 1.
iAVBehaviour	number		Verhalten bei auf dem Client aktiver Medien Verbindungen (Linked Type: AsnUpdateAVBehaviour)
iMaxWaitTimeForIdleMinutes	number		Maximale Wartezeit bis der Client Idle ist
dtTimeFrom	string		Zeitliche Einschraenkung von bis
dtTimeTo	string		
u8sRemoteLocation	string	yes	

### 17.3.88 AsnMgmtClientInstallProfilePacket

AsnMgmtClientInstallProfilePacket is an Object

Name	Type	Optional	Comment
u8sPacketIdentifier	string		
u8sVersion	string		

### 17.3.89AsnMgmtConResetLineArgument

AsnMgmtConResetLineArgument is an Object

Name	Type	Optional	Comment
u8sLineID	string		

### 17.3.90AsnMgmtGetLineSourcesResult

AsnMgmtGetLineSourcesResult is an Object

Name	Type	Optional	Comment
u8slistSources	UTF8StringList		

### 17.3.91AsnMgmtLineStatus

ProCall DataCenter only - The line status of one line at a specific server

AsnMgmtLineStatus is an Object

Name	Type	Optional	Comment
u8sLineID	string		
eOpenState	AsnCtiLineOpenStatus		
iNumCalls	number		
iSipResponseCode	number		
u8sReasonPhrase	string		
u8sAffectedServer	string	yes	The server identification for the UCServer that reported this line status

### 17.3.92AsnMgmtGetLineSourceDeviceIDsArgument

AsnMgmtGetLineSourceDeviceIDsArgument is an Object

Name	Type	Optional	Comment

u8sLineSource	string		
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### 17.3.93AsnMgmtGetLineSourceDeviceIDsResult

AsnMgmtGetLineSourceDeviceIDsResult is an Object

Name	Type	Optional	Comment
iListDeviceIDs	SEQInteger		

### 17.3.94AsnMgmtGetLinesForSourceArgument

AsnMgmtGetLinesForSourceArgument is an Object

Name	Type	Optional	Comment
u8sLineSource	string		

### 17.3.95AsnMgmtGetLineStatesArgument

AsnMgmtGetLineStatesArgument is an Object

Name	Type	Optional	Comment
iType	number		

### 17.3.96AsnMgmtTapiLineConfiguration

AsnMgmtTapiLineConfiguration is an Object

Name	Type	Optional	Comment
iEnabled	number		Enabled to be used by the Server */
iJournal	number		Journal fÃ¼r die Leitung wird geschrieben */
iDummyWirelessPhone	number		nicht verwendet
iUseAutomaticPhoneNumber	number		Rufnummer automatisch bestimmen - aus Address bzw. linename Dies ist keine gespeicherte Einstellung. Dies wird immer nur aus der Gruppe bestimmt. */
u8sManualPhoneNumber	string		Phone Number Manuell
iUseTapiLineName	number		Leitungsname aus Tapi verwenden */
u8sLocationID	string		LocationID */

iPrivatePhone	number		Privates Telefon
iTrunk	number		Dies ist eine Amtsleitung */
customProps	AsnStringPairList		Custom Properties for individual Line Sources Property strings are defined as ELINEPROP_XXX ies */
iSignalCallsOnAddress	number		Call auf den folgenden Adressen signalisieren (Linked Type: AsnMgmtTapiLineSINGALCALLSONADDRESSE num)
u8sHomeServer	string	yes	FÃ¼r DataCenter: Konfigurierter HomeServer, der fÃ¼r diese Leitung zustÃ¤ndig ist

### 17.3.97 AsnMgmtTapiLineConfig4Admin

AsnMgmtTapiLineConfig4Admin is an Object

Name	Type	Optional	Comment
iEnabled	number		Enabled to be used by the Server */
iJournal	number		Journal fÃ¼r die Leitung wird geschrieben */
iDummyWirelessPhone	number		nicht verwendet
iUseAutomaticPhoneNumber	number		Rufnummer automatisch bestimmen - aus Address bzw. linename Dies ist keine gespeicherte Einstellung. Dies wird immer nur aus der Gruppe bestimmt. */
u8sManualPhoneNumber	string		Phone Number Manuell
iUseTapiLineName	number		Leitungsname aus Tapi verwenden */
u8sLocationID	string		LocationID */
iTapiDeviceID	number		Tapi DeviceID ist nur wÃ¤hrend der Laufzeit konstant, nicht nach einem Neustart
u8sLineID	string		LineID
u8sAutomaticPhoneNumber	string		Phone Number Automatisch
u8sTapiLineName	string		Tapi Line Name
u8sPBXGroupName	string		Tapi Gruppen Name
iAdminForwardingEnabled	number		Administrative CtiServer Rufumleitungen eingeschaltet
adminForwarding	AsnLineForwar		Administrative CtiServer Rufumleitungen

	ds		fÃ¼r die Line
iUserForwardingEnabled	number		User CtiServer Rufumleitungen eingeschaltet
userForwarding	AsnLineForwards		User CtiServer Rufumleitungen fÃ¼r die Line
iPrivatePhone	number		
u8sLineSourceName	string		Leitungsquelle Name (z.B. Tapi)
customProps	AsnStringPairList		Custom Properties for individual Line Sources Property strings are defined as ELINEPROP_XXX ies */
iAutoActivate	number		Dynamic enable - Group setting Diese Leitung kann dynamisch enabled werden, wenn benÃ¶tigt */
u8sPhysicalDeviceID	string		PhysicalDeviceID
u8sLineURI	string		LineUri
iTrunk	number		Dies ist eine Amtsleitung */
iSignalCallsOnAddress	number		Call auf den folgenden Adressen signalisieren (Linked Type: AsnMgmtTapiLineSINGALCALLSONADRESSE num)
u8slistAddressNames	UTF8StringList		Addressen auf der Leitung
u8sLineConfigIdentifier	string		LineConfigIdentifier
u8sHomeServer	string	yes	FÃ¼r DataCenter: Konfigurierter HomeServer, der fÃ¼r diese Leitung zustÃ¤ndig ist

### 17.3.98AsnMgmtOnLineGroupRemovedArgument

AsnMgmtOnLineGroupRemovedArgument is an Object

Name	Type	Optional	Comment
u8sLineSourceName	string		
u8sPBXGroupName	string		

### 17.3.99AsnMgmtGetLineGroupsArgument

AsnMgmtGetLineGroupsArgument is an Object

Name	Type	Optional	Comment
u8sLineSourceName	string		

**17.3.100 AsnMgmtGetLineGroupsResult**

AsnMgmtGetLineGroupsResult is an Object

Name	Type	Optional	Comment
u8slistLineGroups	UTF8StringList		

**17.3.101 AsnMgmtSubscribeLineEventsArgument**

AsnMgmtSubscribeLineEventsArgument is an Object

Name	Type	Optional	Comment
u8sTAPILineID	string		

**17.3.102 AsnMgmtGetLineConfigArgument**

AsnMgmtGetLineConfigArgument is an Object

Name	Type	Optional	Comment
u8sLineSource	string		
iDeviceID	number		

**17.3.103 AsnMgmtDeleteLineArgument**

AsnMgmtDeleteLineArgument is an Object

Name	Type	Optional	Comment
u8sLineSource	string		
u8sLineID	string		

**17.3.104 AsnMgmtETapiUIDllCallbackArgument**

AsnMgmtETapiUIDllCallbackArgument is an Object

Name	Type	Optional	Comment
binData	string		

**17.3.105 AsnMgmtETapiUIDllCallbackResult**

AsnMgmtETapiUIDllCallbackResult is an Object

Name	Type	Optional	Comment
binData	string		

### 17.3.106 AsnMgmtCtiFeatureCode

AsnMgmtCtiFeatureCode is an Object

Name	Type	Optional	Comment
bEnabled	boolean		FeatureCode ist aktive
u8sFeatureName	string		Name
u8sFeatureCode	string		Code

### 17.3.107 AsnMgmtGetLineGroupConfigArgument

AsnMgmtGetLineGroupConfigArgument is an Object

Name	Type	Optional	Comment
u8sLineSourceName	string		
u8sGroupName	string		

### 17.3.108 AsnMgmtRequestPBXLineExistsArgument

AsnMgmtRequestPBXLineExistsArgument is an Object

Name	Type	Optional	Comment
u8sPhoneNumber	string		

### 17.3.109 AsnMgmtRequestPBXLineExistsResult

AsnMgmtRequestPBXLineExistsResult is an Object

Name	Type	Optional	Comment
u8sCorrectNumberSC	string		

### 17.3.110 AsnMgmtLineEventForAdmin

AsnMgmtLineEventForAdmin is an Object

Name	Type	Optional	Comment
u8sTAPILineID	string		
u8sCallerIDTAPI	string		
u8sCalledIDTAPI	string		
u8sConnectedIDTAPI	string		
bOutBoundCall	boolean		
iCallState	number		

### 17.3.111 AsnMgmtUserManagerLDAPAttribute

AsnMgmtUserManagerLDAPAttribute is an Object

Name	Type	Optional	Comment
u8sCtiServerAttributeName	string		CtiServer Attributename (normalerweise der Feldname des NetDatabaseContact Feldes)
u8sLDAPAttributeName	string		LDAP Attributname
u8sLDAPAttributeDefaultName	string		Default Name des Attributes (Default Mapping)
bThisFieldCanQueryaPhoneLine	boolean		Flag das definiert ob diese Feld Ã¼berhaupt als Leitung gezogen werden darf
bQueryLinesForThisPhoneNumberField	boolean		Leitungen fÃ¼r dieses Rufnummernfeld binden
bQueryLinesForThisPhoneNumberFieldDefault	boolean		Leitungen fÃ¼r dieses Rufnummernfeld binden
bOptionalEnabled	boolean		Dieses Feld darf deaktiviert werden (ist Optional aktiv)
bEnabled	boolean		Dieses Feld ist aktiv (nur gÃ¼ltig wenn bOptionalEnabled = true ist, ansonsten immer true)
bEnabledDefault	boolean		Default Wert fÃ¼r enabled (nur gÃ¼ltig wenn bOptionalEnabled = true ist, ansonsten immer true)

**17.3.112 AsnMgmtGetUMInterfaceSettingsArgument**

AsnMgmtGetUMInterfaceSettingsArgument is an Object

Name	Type	Optional	Comment
iInterfaceType	number		(Linked Type: AsnMgmtUserManagerInterfaceType)

**17.3.113 AsnMgmtAddLicenseArgument**

AsnMgmtAddLicenseArgument is an Object

Name	Type	Optional	Comment
u8sLicense	string		

**17.3.114 AsnMgmtRemoveLicenseArgument**

AsnMgmtRemoveLicenseArgument is an Object

Name	Type	Optional	Comment
u8sLicense	string		

**17.3.115 AsnMgmtFeatureCount**

AsnMgmtFeatureCount is an Object

Name	Type	Optional	Comment
feature	number		(Linked Type: AsnMgmtELICENSEFEATURE)
iCount	number		

**17.3.116 AsnMgmtSetLicenseGenuineStatusArgument**

AsnMgmtSetLicenseGenuineStatusArgument is an Object

Name	Type	Optional	Comment
genuineInfos	AsnStringPairList		

**17.3.117 AsnMgmtSetLicenseGenuineStatusResult**

AsnMgmtSetLicenseGenuineStatusResult is an Object

Name	Type	Optional	Comment
u8slistUpdateLicenseCodes	UTF8StringList		

### 17.3.118 AsnMgmtGetLicenseArgument

AsnMgmtGetLicenseArgument is an Object

Name	Type	Optional	Comment
iCount	number		

### 17.3.119 AsnMgmtGetHasCurrentVersionLicensesResult

AsnMgmtGetHasCurrentVersionLicensesResult is an Object

Name	Type	Optional	Comment
iNumUsers	number		

### 17.3.120 AsnMgmtGetNumLicensesResult

AsnMgmtGetNumLicensesResult is an Object

Name	Type	Optional	Comment
iNumLicenses	number		

### 17.3.121 AsnMgmtGetRemainingTrialDaysResult

AsnMgmtGetRemainingTrialDaysResult is an Object

Name	Type	Optional	Comment
iRemainingTestDays	number		

### 17.3.122 AsnMgmtGetHWIDResult

AsnMgmtGetHWIDResult is an Object

Name	Type	Optional	Comment
u8sHWID	string		
u8sSystemIdentifier	string		

**17.3.123 AsnMgmtOnLicensesHaveChangedEventArgs**

AsnMgmtOnLicensesHaveChangedEventArgs is an Object

Name	Type	Optional	Comment
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**17.3.124 AsnMgmtEUCWSCapabilities**

AsnMgmtEUCWSCapabilities is an Object

Name	Type	Optional	Comment
iCapabilities	number		
u8slistAliases	UTF8StringList		
u8slistLicenses	UTF8StringList		
u8slistCEROObject	UTF8StringList		
u8sVserviceDomain	string	yes	address of Starface PBX used for SIP Registration configuration
u8sVserviceLastImageVersion	string	yes	Version of the newest configured PBX-Image - needed for Update trigger

**17.3.125 AsnMgmtEUCWebServiceConfig**

AsnMgmtEUCWebServiceConfig is an Object

Name	Type	Optional	Comment
u8sWCSID	string		
u8sUCSID	string		
u8sUCSPassword	string		
u8sServerAddress	string		

**17.3.126 AsnMgmtWebServiceAccessParams**

AsnMgmtWebServiceAccessParams is an Object

Name	Type	Optional	Comment
u8sHost	string		
iPort	number		

iSSL	number		
iController	number		
u8sUCSID	string		

### 17.3.127 AsnMgmtSendMailArgument

AsnMgmtSendMailArgument is an Object

Name	Type	Optional	Comment
u8sFrom	string		
u8sTo	string		
u8sSubject	string		
u8sMessage	string		

### 17.3.128 AsnMgmtSendInviteMailArgument

AsnMgmtSendInviteMailArgument is an Object

Name	Type	Optional	Comment
u8slistAddresses	UTF8StringList		
u8sMessage	string		
u8sUserURL	string		
u8sAppConfigURL	string		
iWaitForSend	number		

### 17.3.129 AsnMgmtEMailConnectorSettings

AsnMgmtEMailConnectorSettings is an Object

Name	Type	Optional	Comment
u8sSMTPServer	string		
u8sLoginName	string		
u8sLoginPassword	string		
u8sAdminMailAddr	string		
u8sMailFromAddr	string		

u8sMailFromName	string		
iSMTPPort	number		
iAllowUTF8Encoding	number		
iRequireTLS	number		

### 17.3.130 AsnMgmtTapiProblemSettings

AsnMgmtTapiProblemSettings is an Object

Name	Type	Optional	Comment
iReinitAutorestart	number		
iLineOpenFailedAction	number		
iLineOpenDelayTime	number		

### 17.3.131 AsnMgmtDatabaseManagerSettings

Get DatabaseManager Settings

return: success(0), accessdenied(1)

Attention: this type is momentarily not used by asnMgmtGetDatabaseManagerSettings()

AsnMgmtDatabaseManagerSettings is an Object

Name	Type	Optional	Comment
iAuthMode	number		(Linked Type: AsnDatabaseManagerAuthModeEnum)
u8sEngine	string		mssql_mdac, jet
u8sServer	string		SQL-Server Name
u8sFilePath	string		Filepath zur Datenbank im jet/MSAccess Fall
u8sLoginName	string		Loginname bei SQL-Server Fall; Ist der Name leer, wird der SQL-Server mit Windows-Anmeldung verwendet. Enthält der Name etwas, wird SQL-Server internes Benutzerverwaltung verwendet.
u8sPassword	string		Passwort für den Loginname; wird nur benötigt, wenn SQL-Server Benutzerkennwörter verlangt
u8sDatabaseName	string		Datenbanknamen-Prefix für jet-Datenbanken

u8sOfflineTable	string		Name der Offline-Journal Datenbank/Tabelle
u8sJournalTable	string		Name der Journal Datenbank/Table
u8sTrackerTable	string		Name der Call-Tracker Datenbank/Table
u8sConversationTable	string		Name der Conversation Datenbank/Table (Chat)
u8sAppointmentTable	string		Name der Termin Datenbank/Tabelle
u8sTaskTable	string		Name der Aufgaben/geplante Anrufe Datenbank/Tabelle
u8sODBCConfiguredDriver	string		Which ODBC driver shall be used (allows the user to select one)
u8sODBCAvailableDrivers	AsnStringPairList	yes	the list of available ODBC drivers
bJetDBsExist	boolean	yes	true if the server has found a JETDB on disc

### 17.3.132 AsnMgmtGetAvailableDatabasesResult

AsnMgmtGetAvailableDatabasesResult is an Object

Name	Type	Optional	Comment
u8slistDatabaseNames	UTF8StringList		

### 17.3.133 AsnListeningInterface

AsnListeningInterface is an Object

Name	Type	Optional	Comment
bEnabled	boolean		interface enabled/disabled
u8sInterfaceGUID	string		Eindeutige ID fÃ¼r dieses Interface
iInterfaceType	number		Dieses Interface ist fÃ¼r folgende Verbindungen (kann sich zur Laufzeit NICHT Ändern) (Linked Type: AsnInterfaceTypeEnum)
iProtocol	number		Protokoll welches verwendet wird (Linked Type: AsnInterfaceProtocolEnum)
u8sBindAddress	string		Bind Adresse
iPort	number		Port
bIsDefault	boolean		Interface ist das Default Interface
u8sCertHash	string		Fingerprint des zu verwendenden Zertifikats

u8sCertContainerFile	string		Certificate Container File (.ecert)
u8sCertContainerContent	string		Certificate Container Content (only for Server->Admin->Server)
u8sDNSName	string		DNS Name unter dem das Interface erreichbar ist
u8sPublicIP	string		Ä-ffentliche IP-Adresse/Port
iPublicPort	number		

### 17.3.134 AsnListeningInterfaceStatus

AsnListeningInterfaceStatus is an Object

Name	Type	Optional	Comment
u8sInterfaceGUID	string		Eindeutige ID fÃ¼r dieses Interface
iStatus	number		Status des Interfaces (Linked Type: AsnInterfaceStatusEnum)
iSocketServerIDs	SEQInteger		Liste der SocketServer SocketIDs zum Interface
iOpenConnections	number		Anzahl der aktuell verbundenen Clients

### 17.3.135 AsnMediaServerLogFile

Entries to enable the Administrator to select the the logging of the Media Server

AsnMediaServerLogFile is an Object

Name	Type	Optional	Comment
u8sLogLevel	string		aktuell selekterter Log-Level (Alias Name)
u8slistLogLevel	UTF8StringList		Alias Namensliste der Log-Levels
iRestartImmediately	number		

### 17.3.136 AsnNumberFormatRegExpressionMgmt

Standortinformationen mit vollstaendigem Satz fuer Uebrtragung zwischen UCSERVER und UCADMIN

AsnNumberFormatRegExpressionMgmt is an Object

Name	Type	Optional	Comment
u8sSearch	string		
u8sReplace	string		

bMatchReplace	boolean		
bAutoCreatedRule	boolean		
u8sAutoRuleforLocation	string		

### 17.3.137 AsnRuleSoftphoneEmergencyMgmt

AsnRuleSoftphoneEmergencyMgmt is an Object

Name	Type	Optional	Comment
u8sName	string		
u8sEmergencyNumber	string		
u8sPrefix	string		
u8sSubnetID	string		
iSubnetMaskLen	number		

### 17.3.138 AsnELocalDialingRuleForeignPNALocalCallItem

Vorwahl mit liste von NXX nummern,  
die als Foreign PNA Local Calls gewählt werden.

AsnELocalDialingRuleForeignPNALocalCallItem is an Object

Name	Type	Optional	Comment
u8sAreaCode	string		Wie vom TAPI-Treiber gemeldet
u8slistNXXPrefixList	UTF8StringList		Mit Standortinformationen erweitert

### 17.3.139 AsnELCRProvider

Liste der Provider

AsnELCRProvider is an Object

Name	Type	Optional	Comment
u8sProviderName	string		
u8sProviderNumber	string		
iProviderCOLOR	number		

**17.3.140 AsnELCRZone**

Liste der Provider nach Zeit

AsnELCRZone is an Object

Name	Type	Optional	Comment
u8sZoneName	string		
u8slistZonePrefixList	UTF8StringList		
u8sTimeToProviderWeekDay	string		Jeder dieser Strings enthält 48 Zeichen (48 Halbe Stunden) Jedes dieser Zeichen zeigt auf einen Provider Die Zeichen sind 0 - 9 und A - Z 0 bedeutet kein Provider
u8sTimeToProviderSaturday	string		
u8sTimeToProviderSunday	string		

**17.3.141 AsnMgmtGetLocationInformationMgmtArgument**

AsnMgmtGetLocationInformationMgmtArgument is an Object

Name	Type	Optional	Comment
u8sLocationID	string		

**17.3.142 AsnMgmtSetLocationInformationMgmtResult**

AsnMgmtSetLocationInformationMgmtResult is an Object

Name	Type	Optional	Comment

**17.3.143 AsnMgmtDeleteLocationArgument**

AsnMgmtDeleteLocationArgument is an Object

Name	Type	Optional	Comment
u8sLocationID	string		

**17.3.144 AsnMgmtLocationChangedEventArgs**

AsnMgmtLocationChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sLocationID	string		
u8sMD5CheckSum	string		

### 17.3.145 AsnCSTAServerSettings

AsnCSTAServerSettings is an Object

Name	Type	Optional	Comment
iCSTAServerEnabled	number		TCP Server enabled?
iCSTAServerPort	number		TCP Port
u8sCSTAServerBindAddress	string		bind to tcp address
iCSTAServerSSLEnabled	number		TCP Server enabled?
iCSTAServerSSLPort	number		TCP Port
u8sCSTAServerSSLBindAddress	string		bind to tcp address
u8sCSTAServerSSLCertificateHash	string		Hash for Certificate
u8sCSTAServerUser	string		User Name
u8sCSTAServerPasswd	string		User Password

### 17.3.146 AsnAVStunOrTurnServer

AsnAVStunOrTurnServer is an Object

Name	Type	Optional	Comment
iType	number		Typ (Linked Type: AsnAVSTUNANDTURNERTYPE)
u8sUsername	string		typ = TURN_USER_PASSWD: username; typ = TURN_SHARED_SECRET: Leer
u8sPassword	string		typ = TURN_USER_PASSWD: credential; typ = TURN_SHARED_SECRET: Shared Secret
iTTLSeconds	number		Config Value
u8slistStrUrIs	UTF8StringList		Liste der Turn Server URLs

### 17.3.147 AsnMgmtGetSTUNandTURNConsumerConfigResult

AsnMgmtGetSTUNandTURNConsumerConfigResult is an Object

Name	Type	Optional	Comment
config	AsnConfigSTUNandTURNList		

### 17.3.148 AsnMgmtDBManSettings

AsnMgmtDBManSettings is an Object

Name	Type	Optional	Comment
iNetDBEnabled	number		

### 17.3.149 AsnXMPPSettings

AsnXMPPSettings is an Object

Name	Type	Optional	Comment
iXMPPEnabled	number		general
iS2SPort	number		s2s port
u8sS2SBindAddress	string		s2s bind address
iProxyEnabled	number		proxy
iProxyPort	number		proxy port
u8sProxyAddress	string		proxy address
u8sProxyPwdEncrypted	string		proxy password
u8sintpairlistDomainsAllow	AsnStringIntegerPairList		Domain allow (whitelist)
u8sCertificateHash	string		TLS certificate hash
iEncryptionLevel	number		global tls level
u8sintpairlistDomainEncryptionLevel	AsnStringIntegerPairList		per host tls level

### 17.3.150 AsnListenInterfaceDescription

AsnListenInterfaceDescription is an Object

Name	Type	Optional	Comment
bEnabled	boolean		
u8sIPAddress	string		
iPort	number		

iProtocol	number		
iService	number		
u8sGUID	string		
iStaticRouteRefCount	number		

### 17.3.151 AsnMgmtGetSIPFEDPubIPAddrResult

AsnMgmtGetSIPFEDPubIPAddrResult is an Object

Name	Type	Optional	Comment
u8sPublicIPAddress	string		

### 17.3.152 AsnMgmtStartSipFedXmppDiagnosticsArgument

AsnMgmtStartSipFedXmppDiagnosticsArgument is an Object

Name	Type	Optional	Comment
u8slistCommands	UTF8StringList		

### 17.3.153 AsnMgmtGetSIPFEDSrvStateResult

AsnMgmtGetSIPFEDSrvStateResult is an Object

Name	Type	Optional	Comment
u8sServerState	string		

### 17.3.154 AsnMgmtGetSIPFEDNetStateResult

AsnMgmtGetSIPFEDNetStateResult is an Object

Name	Type	Optional	Comment
u8slistNetStates	UTF8StringList		

### 17.3.155 AsnSIPGatewaySettingsRegisteredUser

AsnSIPGatewaySettingsRegisteredUser is an Object

Name	Type	Optional	Comment
u8sUserName	string		I.d.R. die Leitungsnummer. Wird als UserPart in der SIP-

			Adresse verwendet.
u8sListenUserName	string		Scheint Äberall im Code ein "*" zu sein. Wird das wirklich benutzt?
u8sDisplayName	string		Anzeigename (Benutzername) -> das was dann typischerweise im Telefondisplay angezeigt wird.
u8sAuthUserName	string		Entspricht normalerweise der Leitungsnummer. Damit wird sich angemeldet.
u8sAuthPassword	string		Passwort zum Anmelden.
u8sManualNumber	string		um die rufnummer bis zum CreateLine durchzuschleifen. Ist bei manchen Anlagen nicht der UserName.
bMainTrunkUser	boolean	yes	PROCALL-2289: SIP-Trunk flag for the User that holds the Register, optional wegen kompatibilität

### 17.3.156 AsnMgmtSetSIPGatewaySettingsV2Result

AsnMgmtSetSIPGatewaySettingsV2Result is an Object

Name	Type	Optional	Comment
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### 17.3.157 AsnCallRecorderSettings

AsnCallRecorderSettings is an Object

Name	Type	Optional	Comment
iEnabled	number		
iUseAudioCompression	number		
iMaxConn	number		
u8sMSNList	string		
u8sLocationID	string		
iDoNOTValidateCalledMSN	number		
u8sEncoderPath	string		
u8sEncoderParams	string		
u8sEncoderOutSuffix	string		
u8sManagedMailbox	string		

### 17.3.158 AsnMgmtLoginArgument

AsnMgmtLoginArgument is an Object

Name	Type	Optional	Comment
u8sUsername	string		user login daten
u8sPassword	string		
iVersion	number		
iDuplicate	number		
iSIPAVLINES	number		

### 17.3.159 AsnMgmtLoginResult

AsnMgmtLoginResult is an Object

Name	Type	Optional	Comment
iOpenState	number		(Linked Type: AsnCtiLineOpenStatus)

### 17.3.160 AsnMgmtChangeLoginArgument

AsnMgmtChangeLoginArgument is an Object

Name	Type	Optional	Comment
u8sNewUserName	string		
u8sNewPasswd	string		

### 17.3.161 AsnMgmtServerStatistics4Admin

Server Status/Statistic to Admin/ServerMonitor  
Licenses/ActiveCalls/Interfaces

AsnMgmtServerStatistics4Admin is an Object

Name	Type	Optional	Comment
u8sService	string		Statistics Categories (STATCAT_PROCALLOUTERS, ...)
u8sServiceUIName	string		Service UI Name
iServiceState	number		Stat (ESERVERSTATSTATE_UNKNOWN, ...)
u8sActive	string		active/consumed/used Licenses/Calls/Interfaces

u8sCount	string	Diverse of Interfaces Status/IP/Port (eg 'Port:7222', 'active')
u8sLicenses	string	Number of available licenses

### 17.3.162 AsnMgmtSaveSettingsArgument

AsnMgmtSaveSettingsArgument is an Object

Name	Type	Optional	Comment
iSaveFlags	number		

### 17.3.163 AsnMgmtStartTLSArgument

AsnMgmtStartTLSArgument is an Object

Name	Type	Optional	Comment

### 17.3.164 AsnMgmtStartTLSResult

AsnMgmtStartTLSResult is an Object

Name	Type	Optional	Comment

### 17.3.165 AsnMgmtGetServerVersionArgument

AsnMgmtGetServerVersionArgument is an Object

Name	Type	Optional	Comment

### 17.3.166 AsnMgmtGetServerVersionResult

AsnMgmtGetServerVersionResult is an Object

Name	Type	Optional	Comment
u8sInterfaceVersion	string		
u8sBuildVersion	string		
u8sOSVersionString	string		

### 17.3.167 AsnMgmtGetCtiServerTypeArgument

AsnMgmtGetCtiServerTypeArgument is an Object

Name	Type	Optional	Comment
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### 17.3.168 AsnMgmtGetIPInterfaceListResult

AsnMgmtGetIPInterfaceListResult is an Object

Name	Type	Optional	Comment
u8slistIPInterfaces	UTF8StringList		

### 17.3.169 AsnMgmtSendPushCheckResult

AsnMgmtSendPushCheckResult is an Object

Name	Type	Optional	Comment
u8sErrorString	string		

### 17.3.170 AsnMgmtSetUCCheckServerCookieArgument

AsnMgmtSetUCCheckServerCookieArgument is an Object

Name	Type	Optional	Comment
u8sCookie	string		

### 17.3.171 AsnMgmtNotificationSettingsExclusions

AsnMgmtNotificationSettingsExclusions is an Object

Name	Type	Optional	Comment
bNotForInternalCalls	boolean		
bNotForCallsWithoutNumber	boolean		
bNotForCallsWithoutContactDetails	boolean		
bNotForRecurrentCallsWhileOffline	boolean		
bNotForRecurrentCallsForTimeSpan	boolean		
iNotForRecurrentCallsTimeSpan	number		
bNotForShortRingingCall	boolean		
iNotForShortRingingCallTimeSpan	number		
bNotForLongRingingCall	boolean		

iNotForLongRingingCallTimeSpan	number		
bNotForCallsFromSpecificExtensions	boolean		
u8sNotForCallsFromSpecificExtensions	string		

### 17.3.172 AsnMgmtFetchMetaDNsArgument

AsnMgmtFetchMetaDNsArgument is an Object

Name	Type	Optional	Comment
u8sMetaServer	string		
iPort	number		
iForceSSL	number		

### 17.3.173 AsnMgmtFetchMetaDNsResult

AsnMgmtFetchMetaDNsResult is an Object

Name	Type	Optional	Comment
u8slistDnsList	UTF8StringList		

### 17.3.174 AsnSSLCertificateDetails

AsnSSLCertificateDetails is an Object

Name	Type	Optional	Comment
u8sCertHash	string		
u8sIssuedTo	string		
u8sIssuer	string		
timValidFrom	string		
timValidTo	string		
u8sListAlternateNames	UTF8StringList		
bPrivateKeyAvail	boolean		

### 17.3.175 AsnMgmtGetSoftwareProfilesResult

AsnMgmtGetSoftwareProfilesResult is an Object

Name	Type	Optional	Comment
u8slistSoftwareProfilesAsXML	UTF8StringList		

### 17.3.176 AsnMgmtSetSoftwareProfilesArgument

AsnMgmtSetSoftwareProfilesArgument is an Object

Name	Type	Optional	Comment
u8slistSoftwareProfilesAsXML	UTF8StringList		

### 17.3.177 AsnMgmtGetGlobalGroupingAttributesResult

AsnMgmtGetGlobalGroupingAttributesResult is an Object

Name	Type	Optional	Comment
u8sGroupingAttributeSetGlobal	string		

### 17.3.178 AsnMgmtSetGlobalGroupingAttributesArgument

AsnMgmtSetGlobalGroupingAttributesArgument is an Object

Name	Type	Optional	Comment
u8sGroupingAttributeSetGlobal	string		

### 17.3.179 AsnMgmt GetUserXmlClientContentArgument

AsnMgmt GetUserXmlClientContentArgument is an Object

Name	Type	Optional	Comment
u8sUserID	string		

### 17.3.180 AsnMgmt GetUserXmlClientContentResult

AsnMgmt GetUserXmlClientContentResult is an Object

Name	Type	Optional	Comment
u8sClientContentAsXML	string		

**17.3.181 AsnMgmtSetUserXmlClientContentArgument**

AsnMgmtSetUserXmlClientContentArgument is an Object

Name	Type	Optional	Comment
u8sUserID	string		
u8sClientContentAsXML	string		

**17.3.182 AsnMgmt GetUserDefinedCustomFieldsResult**

AsnMgmt GetUserDefinedCustomFieldsResult is an Object

Name	Type	Optional	Comment
mapCustomFields	AsnStringPairList		

**17.3.183 AsnMgmtSetUserDefinedCustomFieldsArgument**

AsnMgmtSetUserDefinedCustomFieldsArgument is an Object

Name	Type	Optional	Comment
mapCustomFields	AsnStringPairList		

**17.3.184 AsnMgmtGetSIPFEDXmppDiagnosticResult**

AsnMgmtGetSIPFEDXmppDiagnosticResult is an Object

Name	Type	Optional	Comment
u8slistResults	UTF8StringList		

**17.3.185 AsnMgmtCtiForwardEntry**

AsnMgmtCtiForwardEntry is an Object

Name	Type	Optional	Comment
iInternalID	number		Identifier dieses Eintrags in der Liste
iForwardController	number		Ist es eine Rufumleitung in der PBX oder im TapiServer (Linked Type: AsnMgmtForwardControllerEnum)
iForwardMode	number		Forward Mode (Linked Type: AsnMgmtForwardMode)

iBackEndSpecific	number		Backend specific Forwarding (used if m_dwForwardMode = ICTI_BACKENDSPECIFIC) Bei Tapi enthält das die eLINEFORWARDMODE_konstanten (Linked Type: AsnMgmtLineForwardModeEnum)
iNoAnswerTime	number		Zeit (Sekunden) für Umleitung bei NoAnswer (Wenn 0 wird die default Zeit verwendet)
u8sDestinationSC	string		Destination Rufnummer
u8slistCallerIDs	UTF8StringList		Liste der Anrufer CallerIDs (superkanonisch, lang), falls es sich um eine spezifische Umleitung handelt

### 17.3.186 AsnMgmtGetLineForwardingArgument

AsnMgmtGetLineForwardingArgument is an Object

Name	Type	Optional	Comment
iFWController	number		
u8sLineID	string		

### 17.3.187 AsnMgmtAvailableLanguage

AsnMgmtAvailableLanguage is an Object

Name	Type	Optional	Comment
iLanguage	number		
mapTranslatedStrings	AsnStringIntegerPairList		
mapTranslatedStringToString	AsnStringPairList		

### 17.3.188 AsnMgmtUpgradeProgressArgument

Database Upgrade

AsnMgmtUpgradeProgressArgument is an Object

Name	Type	Optional	Comment
iProgressMax	number		
iProgressCur	number		

**17.3.189 AsnMgmtUpgradeStartArgument**

AsnMgmtUpgradeStartArgument is an Object

Name	Type	Optional	Comment

**17.3.190 AsnMgmtUpgradeStartResult**

AsnMgmtUpgradeStartResult is an Object

Name	Type	Optional	Comment
iResult	number		

**17.3.191 AsnMgmtPushServiceDeviceProps**

Push Service Device Properties

This struct contains the properties of a device that has an active Push Service registration.

AsnMgmtPushServiceDeviceProps is an Object

Name	Type	Optional	Comment
u8sDeviceID	string		DeviceID (vom Client generiert muss eindeutig sein)
u8sDeviceName	string		DeviceName (vom Client übermittelt, Freitext - Normalerweise Gerätename)
u8sContactID	string		UserName (Login Name)
u8sPushID	string		Push Device Token
u8sPushChannel	string		Push Channel (z.b. ios.estos.procall.6)
iOnlineState	number		Ist dieses Device gerade online?
timlastRegisterTime	string		Letzter Register Aufruf (windows utc)
iMessageTypes	number		Für welche Arten von Messages ist dieses Device angemeldet Dieser Member wird normalerweise über SetNewMessageTypes gesetzt, dann werden die Handler auch aktualisiert
iEncryptionMode	number		Encryption Mode for push messages

**17.3.192 AsnMgmtGetPushServiceDevicesArgument**

AsnMgmtGetPushServiceDevicesArgument is an Object

Name	Type	Optional	Comment
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### 17.3.193 AsnMgmtGetPushServiceDevicesResult

AsnMgmtGetPushServiceDevicesResult is an Object

Name	Type	Optional	Comment
u8sCrossRefID	string		CrossrefID for the Events that contain the requested data.

### 17.3.194 AsnMgmtDeletePushServiceDeviceArgument

AsnMgmtDeletePushServiceDeviceArgument is an Object

Name	Type	Optional	Comment
u8sDeviceID	string		DeviceID of the Push Receiver

### 17.3.195 AsnMgmtDeletePushServiceDeviceResult

AsnMgmtDeletePushServiceDeviceResult is an Object

Name	Type	Optional	Comment
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### 17.3.196 AsnMgmtPhoneJournalSettings

AsnMgmtPhoneJournalSettings is an Object

Name	Type	Optional	Comment
iPrivateCallOptions	number		Optionen fÃ¼r PrivatGesprÃ¤che (Linked Type: AsnMgmtPhoneJournalPrivateCallOptionsEnum)
iUseOfflineJournal	number		Offline Journal Verwenden 1 / 0
iOfflineDeleteOldEntries	number		Werden veraltete Offline EintrÃ¤ge gelÃ¶scht 1 / 0
iOfflineDaysNoDelete	number		Anzahl der Tage, die im Offline Journal behalten werden
bDeleteInternalJournalEntries	boolean		LÃ¶schen der internen JournaleintrÃ¤ge

iDeleteInternalJournalEntriesAfterDays	number		
bDeleteExternalJournalEntries	boolean		Löschen der externen Journaleinträge
iDeleteExternalJournalEntriesAfterDays	number		
bDeleteNoteJournalEntries	boolean		Löschen der Journaleinträge mit Notitz
iDeleteNoteJournalEntriesAfterDays	number		
iUnansweredCallJournalOption	number		(Linked Type: AsnMgmtPhoneJournalUnansweredEnum)
iAnsweredRedirectedCallJournalOption	number		(Linked Type: AsnMgmtPhoneJournalUnansweredEnum)
bAutoMarkReadGroupCallsOnCallback	boolean		Gruppenrufe die von einem Teilnehmer der Gruppe beantwortet wurden werden für alle Teilnehmer als beantwortet maskiert Automatically mark journal entries as read, if one member of the group answered the call
iHandlingMode	number		Was wird mit veralteten Einträgen gemacht? (Linked Type: AsnMgmtUnansweredOptionEnum)
iArchiveJournalEntriesAfterDays	number		

### 17.3.197 AsnMgmtGetPhoneJournalSettingsArgument

AsnMgmtGetPhoneJournalSettingsArgument is an Object

Name	Type	Optional	Comment

### 17.3.198 AsnMgmtSetPhoneJournalSettingsResult

AsnMgmtSetPhoneJournalSettingsResult is an Object

Name	Type	Optional	Comment

### 17.3.199 AsnMgmtSetGroupProfileArgument

AsnMgmtSetGroupProfileArgument is an Object

Name	Type	Optional	Comment
iSearchFilter	number		(Linked Type: AsnMgmtSetGroupProfileFilter)
groupProfile	AsnGroupProfile		
oldMemberListForDeltaChangeCalculation	AsnStringPairList	yes	

### 17.3.200 AsnMgmtSetGroupProfileResult

AsnMgmtSetGroupProfileResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		

### 17.3.201 AsnMgmtRemoveUserProfileEventArgs

AsnMgmtRemoveUserProfileEventArgs is an Object

Name	Type	Optional	Comment
u8sUserName	string		

### 17.3.202 AsnMgmtRemoveGroupProfileEventArgs

AsnMgmtRemoveGroupProfileEventArgs is an Object

Name	Type	Optional	Comment
u8sGroupName	string		

### 17.3.203 AsnMgmtRemoveComputerProfileEventArgs

AsnMgmtRemoveComputerProfileEventArgs is an Object

Name	Type	Optional	Comment
u8sComputerName	string		

### 17.3.204 AsnMgmtChatSettings

AsnMgmtChatSettings is an Object

Name	Type	Optional	Comment
bDeleteChatEntries	boolean		
iDeleteChatEntriesAfterDays	number		

### 17.3.205 AsnMgmtMeshControllerSettings

AsnMgmtMeshControllerSettings is an Object

Name	Type	Optional	Comment
bMeshEnabled	boolean		Mesh operations enabled
bAutoAddMeshNodes	boolean		Auto add new mesh nodes automatically
bAutoAddUseTLS	boolean		Auto add new mesh nodes using TLS
u8sMeshID	string		ID of the mesh the server wants to be part of
u8sMeshPassword	string		Password the server is using to authenticate against other mesh nodes and the server requires others to provide when the is contacted.
u8sMeshNodeID	string		The own mesh node id

### 17.3.206 AsnMgmtMeshNodeConfig

Settings of a node

AsnMgmtMeshNodeConfig is an Object

Name	Type	Optional	Comment
u8sComputerNameFQDN	string		The nodes FQDN DNS name
iPort	number		the node port
bForceTLS	boolean		force TLS?
u8sMeshNodeID	string		The mesh node id
bIsDynamicMode	boolean		is not configured but dynamically found?
bNodeEnabled	boolean		This node is enabled (we try to contact the node, the node is allowed to contact us)

### 17.3.207 AsnMgmtMeshNodeStatusTLS

TLS status of a node

AsnMgmtMeshNodeStatusTLS is an Object

Name	Type	Optional	Comment
bTLS	boolean		true if connection is TLS encrypted
iTLSProtocol	number		Protocol used (if no TLS: 0) google SecPkgContext_ConnectionInfo structure
iCertChainVerifyReturn	number		certificate chain error (success: 0); only valid if connection outbound and bTls = true
u8sIssuedTo	string		server certificate issuedTo; only valid if connection outbound and bTls = true
u8sIssuer	string		server certificate issuer; only valid if connection outbound and bTls = true
timValidFrom	string		server certificate valid from; only valid if connection outbound and bTls = true
timValidTo	string		server certificate valid to; only valid if connection outbound and bTls = true
u8sListAlternateNames	UTF8StringList		server certificate alternate names; only valid if connection outbound and bTls = true

### 17.3.208 AsnMgmtSubscribeConnectionInformationChangesArgument

Subscribe to capability changes

AsnMgmtSubscribeConnectionInformationChangesArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID we want to subscribe Events for. If no contact id (sip:jan@estos.de) is provided all contact capability changes are reported

### 17.3.209 AsnMgmtSubscribeConnectionInformationChangesResult

AsnMgmtSubscribeConnectionInformationChangesResult is an Object

Name	Type	Optional	Comment

### 17.3.210 AsnMgmtUnSubscribeConnectionInformationChangesArgument

AsnMgmtUnSubscribeConnectionInformationChangesArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID we want to unsubscribe Events for.

			If no contact id (sip:jan@estos.de) is provided all contact capability changes are reported
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### 17.3.211 AsnMgmtUnSubscribeConnectionInformationChangesResult

AsnMgmtUnSubscribeConnectionInformationChangesResult is an Object

Name	Type	Optional	Comment
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### 17.3.212 AsnMgmtDisconnectClientArgument

Disconnect a specific client connection

AsnMgmtDisconnectClientArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID of the user the connection belongs to
u8sConnectionID	string		The id of the connection to disconnect

### 17.3.213 AsnMgmtDisconnectClientResult

AsnMgmtDisconnectClientResult is an Object

Name	Type	Optional	Comment
bResult	boolean		success or fail

### 17.3.214 AsnMgmtGDPRDeleteArgument

- OPID\_asnMgmtGDPRFindContacts 2676
- OPID\_asnMgmtGDPRGetData 2675
- OPID\_asnMgmtGDPRRectify 2674
- OPID\_asnMgmtGDPRDelete 2673

AsnMgmtGDPRDeleteArgument is an Object

Name	Type	Optional	Comment
u8sSIPAddress	string		

### 17.3.215 AsnMgmtGDPRDeleteResult

AsnMgmtGDPRDeleteResult is an Object

Name	Type	Optional	Comment
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**17.3.216 AsnMgmtGDPRFindContactsArgument**

AsnMgmtGDPRFindContactsArgument is an Object

Name	Type	Optional	Comment
u8sFilterText	string		Free text which will be found in the contact name, company name, phone number or memo field.

**17.3.217 AsnMgmtGDPRFindContactsResult**

AsnMgmtGDPRFindContactsResult is an Object

Name	Type	Optional	Comment
contactList	AspNetDatabaseContactList		

**17.3.218 AsnMgmtUpdateDatabaseProgressArgument**

Database Update

AsnMgmtUpdateDatabaseProgressArgument is an Object

Name	Type	Optional	Comment
iProgressMax	number		
iProgressCur	number		

**17.3.219 AsnMgmtDatabaseUpdateInProgressArgument**

AsnMgmtDatabaseUpdateInProgressArgument is an Object

Name	Type	Optional	Comment
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**17.3.220 AsnMgmtDatabaseUpdateInProgressResult**

AsnMgmtDatabaseUpdateInProgressResult is an Object

Name	Type	Optional	Comment
bResult	boolean		

**17.3.221 AsnMgmtGetBinaryTransferSettingsArgument**

AsnMgmtGetBinaryTransferSettingsArgument is an Object

Name	Type	Optional	Comment

**17.3.222 AsnMgmtGetBinaryTransferSettingsResult**

AsnMgmtGetBinaryTransferSettingsResult is an Object

Name	Type	Optional	Comment
storageSettings	AsnBinaryTransferStorageSettings		

**17.3.223 AsnMgmtSetBinaryTransferSettingsArgument**

AsnMgmtSetBinaryTransferSettingsArgument is an Object

Name	Type	Optional	Comment
storageSettings	AsnBinaryTransferStorageSettings		

**17.3.224 AsnMgmtSetBinaryTransferSettingsResult**

AsnMgmtSetBinaryTransferSettingsResult is an Object

Name	Type	Optional	Comment
u8slistComputers	UTF8StringList		

**17.3.225 AsnMgmtConnectionOption**

Connection option

AsnMgmtConnectionOption is an Object

Name	Type	Optional	Comment
u8sHostOrIP	string		Konfigurierte Serveradresse, dies kann ein Name oder eine Adresse sein
iPort	number		Zielport
bIsFromDNSRecords	boolean		Diese Option wurde aus dem DNS System gelesen
iDNSWeight	number		Wenn der Eintrag aus dem DNS Kommt ein mögliches Gewicht dieses Eintrages

**17.3.226 AsnMgmtGetConnectionOptionsDNSArgument**

Get all ctiserver dns srv records

AsnMgmtGetConnectionOptionsDNSArgument is an Object

Name	Type	Optional	Comment
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**17.3.227 AsnMgmtConfigurationManagerSettings**

AsnMgmtConfigurationManagerSettings is an Object

Name	Type	Optional	Comment
bRemoteDBUse	boolean		Wird die Konfigurations-Datenbank verwendet?
mapRemoteDBProperties	AsnStringPairList		Liste der Properties fÃ¼r die Konfigurations-Datenbank
u8sHomeServerName	string		HomeServerName: identifies the UCServer with its name in the remote db
u8sHomeServerVersion	string		HomeServerVersion: the UCServer version for the remote db

**17.3.228 AsnMgmtGetConfigurationManagerSettingsArgument**

AsnMgmtGetConfigurationManagerSettingsArgument is an Object

Name	Type	Optional	Comment
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**17.3.229 AsnMgmtSetConfigurationManagerSettingsResult**

AsnMgmtSetConfigurationManagerSettingsResult is an Object

Name	Type	Optional	Comment
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**17.3.230 AsnMgmtDirectPersistDeleteSettingArgument**

AsnMgmtDirectPersistDeleteSettingArgument is an Object

Name	Type	Optional	Comment
key	string		The key of the setting to delete
objectName	string		The object name of the setting to delete (empty, if setting does not

			have an object name)
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### 17.3.231 AsnMgmtTestConfigurationManagerDBArgument

AsnMgmtTestConfigurationManagerDBArgument is an Object

Name	Type	Optional	Comment
mapRemoteDBProperties	AsnStringPairList	yes	Liste der Properties fÃ¼r die Konfigurations-Datenbank falls nicht angegeben, werden die im UCServer hinterlegten Settings verwendet

### 17.3.232 AsnMgmtTestConfigurationManagerDBResult

AsnMgmtTestConfigurationManagerDBResult is an Object

Name	Type	Optional	Comment
bFilledWithConfigurationSettings	boolean		Ist die DB gefuellt mit Configuration Settings?

### 17.3.233 AsnMgmtUserManagerConnectionStatus

UserManager Connection status

AsnMgmtUserManagerConnectionStatus is an Object

Name	Type	Optional	Comment
bADConnected	boolean		

### 17.3.234 AsnMgmt GetUserManagerConnectionStatusArgument

AsnMgmt GetUserManagerConnectionStatusArgument is an Object

Name	Type	Optional	Comment

### 17.3.235 AsnMgmtClientPersistenceDeleteArgument

AsnMgmtClientPersistenceDeleteArgument is an Object

Name	Type	Optional	Comment
u8sItemStore	string		ItemStore des Elements
u8sItemStoreID	string		wenn eine StoreID angegeben ist, darf diese noch nicht existieren

**17.3.236 AsnMgmtClientPersistenceDeleteResult**

AsnMgmtClientPersistenceDeleteResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnClientPersistenceResultDetailsEnum)

**17.3.237 AsnMgmtClientPersistenceCreateArgument**

AsnMgmtClientPersistenceCreateArgument is an Object

Name	Type	Optional	Comment
u8sItemStore	string		ItemStore des Elements
u8sItemStoreID	string	yes	wenn eine StoreID angegeben ist, darf diese noch nicht existieren
data	string		Nutzdaten des Elements

**17.3.238 AsnMgmtClientPersistenceCreateResult**

AsnMgmtClientPersistenceCreateResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnClientPersistenceResultDetailsEnum)

**17.3.239 AsnMgmtConfigurationManagerStatus**

Configuration manager status

AsnMgmtConfigurationManagerStatus is an Object

Name	Type	Optional	Comment
bRemoteDBEnabled	boolean		
bRemoteDBConnected	boolean		
bRemoteDBInitiallyFullSynced	boolean		
bRemoteDBEmpty	boolean		
u8sRemoteDBLastError	string		

**17.3.240 AsnMgmtGetConfigurationManagerStatusArgument**

AsnMgmtGetConfigurationManagerStatusArgument is an Object

Name	Type	Optional	Comment
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**17.3.241 AsnMgmtConfigurationManagerServerListIItem**

Configuration server list

AsnMgmtConfigurationManagerServerListIItem is an Object

Name	Type	Optional	Comment
serverListIItem	string		Name of server
bRedisHeartbeat	boolean		Heartbeat in Redis? (i.e. connected to Redis?)

**17.3.242 AsnMgmtCleanupBinaryTransferFilesArgument**

cleanup binarytransfer files

AsnMgmtCleanupBinaryTransferFilesArgument is an Object

Name	Type	Optional	Comment
iFileAgeDays	number		fileage for removal

**17.3.243 AsnMgmtCleanupBinaryTransferFilesResult**

AsnMgmtCleanupBinaryTransferFilesResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		bool value if succeeded
iCountRemoved	number		count of removed files

**17.3.244 AsnMgmtSetPresenceDomainArgument**

AsnMgmtSetPresenceDomainArgument is an Object

Name	Type	Optional	Comment
u8sPresenceDomain	string		string with the new presence domain(s) format of string is like the input in ucserver server setup and as shown in ucadmin operation is only carried out in datacenter ucserver sip addresses of users will not be adapted

### 17.3.245 AsnMgmtSetPresenceDomainResult

AsnMgmtSetPresenceDomainResult is an Object

Name	Type	Optional	Comment
iResult	number		(Linked Type: AsnMgmtSetPresenceDomainResultEnum)
u8slistOtherDatacenterServersRunning	UTF8StringList		if iResult is eOtherDatacenterServersRunning then this list contains all datacenter servers running aside of the one that handles this op

### 17.3.246 AsnMgmtAdminUserManagerSettings

AsnMgmtAdminUserManagerSettings is an Object

Name	Type	Optional	Comment
iAdminUserManagerType	number		type of AdminUserManager (Linked Type: AsnMgmtAdminUserManagerType)
bUseUserManagerLDAPSettings	boolean		if true the ldap settings of usermanagement are used (only relevant if type is eACTIVE DIRECTORY)
u8sHost	string		Active Directory Server (only relevant if iAdminUserManagerType = eACTIVE DIRECTORY and bUseUserManagerLDAPSettings = false)
iPort	number		Active Directory Server LDAP Port (only relevant if iAdminUserManagerType = eACTIVE DIRECTORY and bUseUserManagerLDAPSettings = false)
u8sUsername	string		Username for AD access (Administrator@estos.de) (only relevant if iAdminUserManagerType = eACTIVE DIRECTORY and bUseUserManagerLDAPSettings = false)
u8sPassword	string		Password for AD access (only relevant if iAdminUserManagerType = eACTIVE DIRECTORY and bUseUserManagerLDAPSettings = false)
iForceLDAPS	number		LDAPS erzwingen (only relevant if iAdminUserManagerType = eACTIVE DIRECTORY and

			bUseUserManagerLDAPSettings = false)
u8sBaseDNUsers	string		User BaseDN in the AD If empty it will be automatically defined by the defaultNamingContext (only relevant if iAdminUserManagerType = eACTIVEDIRECTORY and bUseUserManagerLDAPSettings = false)

### 17.3.247 AsnMgmtGetAdminUserManagerSettingsArgument

AsnMgmtGetAdminUserManagerSettingsArgument is an Object

Name	Type	Optional	Comment

### 17.3.248 AsnMgmtSetAdminUserManagerSettingsResult

AsnMgmtSetAdminUserManagerSettingsResult is an Object

Name	Type	Optional	Comment
iLastErrorCode	number		

### 17.3.249 AsnMgmtAdminUserRightStateReadWrite

A simple read write flag

AsnMgmtAdminUserRightStateReadWrite is an Object

Name	Type	Optional	Comment
bWrite	boolean		

### 17.3.250 AsnMgmtAdminUserRightStateExecute

Executing is allowed

AsnMgmtAdminUserRightStateExecute is an Object

Name	Type	Optional	Comment

### 17.3.251 AsnMgmtGetAdminUserRightsArgument

AsnMgmtGetAdminUserRightsArgument is an Object

Name	Type	Optional	Comment
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### 17.3.252 AsnMgmtEntraIdSettings

Represents the internal entra id replicator settings

AsnMgmtEntraIdSettings is an Object

Name	Type	Optional	Comment
u8sClientId	string		The client id from the entra id app
u8sClientSecret	string		The client secret generated for the entra id app
u8sTenantId	string		The tenant id

### 17.3.253 AsnClientConnectionDescriptions

AsnClientConnectionDescriptions is an Array of AsnClientConnectionDescription

AsnClientConnectionDescription is an Object

Name	Type	Optional	Comment
u8sContactID	string		
u8sAnonymousUserName	string		
u8sHintData	string		
u8sConnectionGUID	string		
u8sDeviceName	string		
u8sDeviceID	string		
iClientAppID	number		(Linked Type: AsnClientAppID)
bIsIdle	boolean		

### 17.3.254 AsnMgmtClientConnectionInformation

AsnMgmtClientConnectionInformation is an Object

Name	Type	Optional	Comment
u8sLastLoginDeviceName	string		Letztes Gerät auf dem sich der Nutzer angemeldet hat
timLastLogin	string		Letzter Anmeldezeitpunkt

bOnline	boolean		Dieser Client ist aktuell Online
bAVLineIsDND	boolean		Die AV Leitung dieses Nutzers ist DND
connectionDescriptions	AsnClientConnectionDescriptions		Informationen zu den Verbindungen dieses Clients (GerÄteverbindungen)
clientCapabilities	AsnClientCapabilitiesV2ByIDList		Die Capabilities der verschiedenen GerÄteverbindungen (aufgelistet nach der Verbindungs GUID)
clientCapabilitiesSum	AsnClientCapabilitiesV2		Die Summe der Capabilities aller Client Verbindnugen

### 17.3.255 AsnMgmtUserProfileData

AsnMgmtUserProfileData is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		
clientConnectionInfo	AsnMgmtClientConnectionInformation		

### 17.3.256 AsnMgmtUserProfileDataList

AsnMgmtUserProfileDataList is an Array of AsnMgmtUserProfileData

AsnMgmtUserProfileData is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		
clientConnectionInfo	AsnMgmtClientConnectionInformation		

### 17.3.257 AsnMgmtGetUserListEventArgs

AsnMgmtGetUserListEventArgs is an Object

Name	Type	Optional	Comment
userProfileDataList	AsnMgmtUserProfileDataList		

**17.3.258 AsnMgmtAgentPublicPresenceItemList**

AsnMgmtAgentPublicPresenceItemList is an Array of AsnMgmtAgentPublicPresenceItem

AsnMgmtAgentPublicPresenceItem is an Object

Name	Type	Optional	Comment
u8sAgentURI	string		URI des Agenten
iPublicAgentPresence	number		aktuelle Äffentliche Präsenz des Agenten (Linked Type: AsnRankingAgentPublicPresenceEnum)

**17.3.259 AsnMgmtGetGroupAgentPublicPresenceResult**

AsnMgmtGetGroupAgentPublicPresenceResult is an Object

Name	Type	Optional	Comment
listAgentPresence	AsnMgmtAgentPublicPresenceItemList		

**17.3.260 AsnMgmtClientInstallProfileActionList**

AsnMgmtClientInstallProfileActionList is an Array of AsnMgmtClientInstallProfileAction

AsnMgmtClientInstallProfileAction is an Object

Name	Type	Optional	Comment
u8sPacketIdentifier	string		Identifier des Installationspaketes. Immer verfügbares vordefiniertes Paket ist: "EACUSRV" - der update service (ACUFileForUpdate::strIdentifier */
iAction	number		Auszuführende Aktion. einer der ACI_ACTION_NONE konstanten */
iClientTspInstallOption	number		MSI Optionen für die Installation ProCall Spezifisch Installationsoption für den Client TSP Konstanten aus ACI_CLIENTTSPINSTALLOPTION_NONE*/

**17.3.261 AsnMgmtClientInstallProfileData**

AsnMgmtClientInstallProfileData is an Object

Name	Type	Optional	Comment

u8sComputerName	string		Computer Name auf dem die Installation durchgefuehrt werden soll
u8sProfileName	string		Profil Name. Mehrere EClientInstallProfileData, die den selben Profil Namen haben koennen im Admin zusammen bearbeitet werden.*/
actionList	AsnMgmtClientInstallProfileActionList		Konfiguration der Installation. Die Aktionen fuer die Installationen /Updates, die durchzufuehren sind */
u8sAdminName	string		
u8sAdminPassword	string		
bFirstInstallation	boolean		
iLastServiceStatus	number		Letzter Status des Service (ACI_SERVICE_STATUS_...)
iLastSoftwareStatus	number		Letzter Status der laufenden Software Installation (ACU_UPDATE_STATUS_...)
u8sLogData	string		

### 17.3.262 AsnMgmtGetClientInstallProfileResult

AsnMgmtGetClientInstallProfileResult is an Object

Name	Type	Optional	Comment
profileData	AsnMgmtClientInstallProfileData		

### 17.3.263 AsnMgmtSetClientInstallProfileArgument

AsnMgmtSetClientInstallProfileArgument is an Object

Name	Type	Optional	Comment
iACICommand	number		
profileData	AsnMgmtClientInstallProfileData		

### 17.3.264 AsnMgmtACUFileForUpdateDescriptionList

AsnMgmtACUFileForUpdateDescriptionList is an Array of AsnMgmtACUFileForUpdateDescription

AsnMgmtACUFileForUpdateDescription is an Object

Name	Type	Optional	Comment
iFileID	number		Eindeutige Nummer welche die entsprechende Datei referenziert
u8sIdentifier	string		Identifier fuer die zum Update vorgesehene Datei Der Identifier entspricht dem im XML. Wenn das Paket ueber den MSI UpgradeCode gesucht wurde wird mit: die Sprache als Zahl angehaengt 1033 fuer English (United States)
u8sDescription	string		Beschreibung der Datei
u8sProduct	string		Produkt zu dem das File gehoert
u8sFileName	string		Dateiname wie er auf der Platte vorliegt (Alternativ ist der MSIUpgradeCode befuellt)
iExecuteType	number		Typ wie die Datei auf dem Client ausgefuehrt wird Eine der ACU_EXECUTETYPE_PROCALMSI Optionen
u8sExecuteCommand	string		Kommando fuer execute. Das hat verschiedene Bedeutungen je nach iExecuteType
u8sVersion	string		Versionsnummer der Datei auf Platte. Diese wird beim einlesen des Files in den Server bestimmt. exe: Datei version aus resourcen msi: productversion Property andere: MD5
u8sMSIUpgradeCode	string		MSI UpgradeCode des MSI auf Platte. Dieser wird beim einlesen des Files in den Server bestimmt. Dieser wird zum unistall eines msi produktes auf dem client verwendet
u8sValidationCode	string		MD5 der Datei. Dieses wird beim einlesen der Dateio in den Server berechnet. Der MD56 dient zum validieren des Files nach dem download durch den ACI Service
iFileLanguage	number		Language des Files oder 0 fuer alle Sprachen (Neutral) Muss im xml konfiguriert sein
iLCIDsEmbedded	SEQInteger		
u8sPlatform	string		Zielplatform fuer dieses File.

			Das ist entweder leer (alle) oder x64 fuer Windows AMD 64 Platformen oder x86 fuer Windows x86 Platformen.
u8sKeyInstalled	string		reg key oder file key ob das file installiert ist (int) reg:HKEY_LOCAL_MACHINE\Software\ESTOS\UCServer4\Client\InstallCtClient file:%CTICLIENTDIR%\config\oeminfo.bmp
u8sKeyVersion	string		reg key oder file key fuer die version.(u8sing) reg:HKEY_LOCAL_MACHINE\Software\ESTOS\UCServer4\Client\InstallVersion file:%CTICLIENTDIR%\config\oeminfo.bmp
u8sRegPathLanguage	string		HREGKEY unter dem nach der Sprache zu suchen ist (int) HKEY_LOCAL_MACHINE\Software\ESTOS\UCServer4\Client\Language
iAllowUpdate	number		Dieses File darf fuer Updates verwendet werden
iAllowInstall	number		Dieses File darf fuer Remote Installationen verwendet werden
u8sFilePath	string	yes	

### 17.3.265 AsnMgmtGetAvailableUpdatesResult

AsnMgmtGetAvailableUpdatesResult is an Object

Name	Type	Optional	Comment
updateDescriptionList	AsnMgmtACUFileForUpdateDescriptionList		

### 17.3.266 AsnMgmtClientInstallProfilePacketList

AsnMgmtClientInstallProfilePacketList is an Array of AsnMgmtClientInstallProfilePacket

AsnMgmtClientInstallProfilePacket is an Object

Name	Type	Optional	Comment
u8sPacketIdentifier	string		
u8sVersion	string		

### 17.3.267 AsnMgmtSoftwareStatusComputer

AsnMgmtSoftwareStatusComputer is an Object

Name	Type	Optional	Comment
u8sComputerName	string		

u8sUpdateServer	string
u8sProCallVersion	string
u8sProCallPacketIdentifier	string
timProCallLastLogin	string
u8sUpdateServiceVersion	string
timUpdateServiceLastLogin	string
iUpdateServiceStatus	number
iUpdateServiceWorkingStatus	number
u8slistInstallLogs	UTF8StringList
installedSoftwareList	AsnMgmtClientInstallProfilePacketList

### 17.3.268 AsnMgmtSoftwareStatusComputerChangedEventArgs

AsnMgmtSoftwareStatusComputerChangedEventArgs is an Object

Name	Type	Optional	Comment
status	AsnMgmtSoftwareStatusComputer		

### 17.3.269 AsnMgmtLineStatusList

AsnMgmtLineStatusList is an Array of AsnMgmtLineStatus

AsnMgmtLineStatus is an Object

Name	Type	Optional	Comment
u8sLineID	string		
eOpenState	AsnCtiLineOpenStatus		
iNumCalls	number		
iSipResponseCode	number		
u8sReasonPhrase	string		
u8sAffectedServer	string	yes	The server identification for the UCServer that reported this line status

### 17.3.270 AsnMgmtLineStateChangedEventArgs

AsnMgmtLineStateChangedEventArgs is an Object

Name	Type	Optional	Comment
u8sLineID	string		
iOpenState	number		(Linked Type: AsnCtiLineOpenStatus)
iNumCalls	number		
iSipResponseCode	number		
u8sReasonPhrase	string		
u8sEffectiveHomeServer	string	yes	<p>ProCall DataCenter only. This is the effective home server identification of the UCServer that (currently) provides this line.</p> <p>For SIPAV lines and TAPI lines not enabled by the "use lines automatically" feature, this is usually the same as the home server in the line's configuration. However, when moving a line between two servers, this may differ for a short period of time.</p> <p>For TAPI lines that are enabled by the "use lines automatically" feature this might (temporarily) contain multiple servers in the format (2)server1.domain.de;server2.domain.de</p> <p><b>Important:</b> The format "(count)server1;server2;serverN" is only a temporary workaround. do not try to parse!</p>
lineStatusList	AsnMgmtLineStatusList	yes	ProCall DataCenter only: List of line status from several servers

### 17.3.271 AsnMgmtOnLineRemovedEventArgs

AsnMgmtOnLineRemovedEventArgs is an Object

Name	Type	Optional	Comment
tapiLineConfig4Admin	AsnMgmtTapiLineConfig4Admin		

### 17.3.272 AsnMgmtOnLineAddedEventArgs

AsnMgmtOnLineAddedEventArgs is an Object

Name	Type	Optional	Comment

tapiLineConfig4Admin	AsnMgmtTapiLineConfig4Admin		
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### 17.3.273 AsnMgmtOnLineConfigChangedEventArgs

AsnMgmtOnLineConfigChangedEventArgs is an Object

Name	Type	Optional	Comment
tapiLineConfig4Admin	AsnMgmtTapiLineConfig4Admin		

### 17.3.274 AsnMgmtOnLineCapsChangedEventArgs

AsnMgmtOnLineCapsChangedEventArgs is an Object

Name	Type	Optional	Comment
tapiLineConfig4Admin	AsnMgmtTapiLineConfig4Admin		

### 17.3.275 AsnMgmtOnCtiLineFoundEventArgs

AsnMgmtOnCtiLineFoundEventArgs is an Object

Name	Type	Optional	Comment
tapiLineConfig4Admin	AsnMgmtTapiLineConfig4Admin		

### 17.3.276 AsnMgmtGetLineConfigResult

AsnMgmtGetLineConfigResult is an Object

Name	Type	Optional	Comment
config	AsnMgmtTapiLineConfig4Admin		

### 17.3.277 AsnMgmtSetLineConfigArgument

AsnMgmtSetLineConfigArgument is an Object

Name	Type	Optional	Comment
u8sLineSource	string		
iDeviceID	number		
config	AsnMgmtTapiLineConfiguration		

**17.3.278 AsnMgmtCtiFeatureCodeList**

AsnMgmtCtiFeatureCodeList is an Array of AsnMgmtCtiFeatureCode

AsnMgmtCtiFeatureCode is an Object

Name	Type	Optional	Comment
bEnabled	boolean		FeatureCode ist aktive
u8sFeatureName	string		Name
u8sFeatureCode	string		Code

**17.3.279 AsnMgmtTapiLineGroupConfiguration**

AsnMgmtTapiLineGroupConfiguration is an Object

Name	Type	Optional	Comment
u8sLineSourceName	string		Tapi Provider Name - identifier for the group
u8sPBXGroupName	string		
iDefaultEnabled	number		
iDefaultAutoActivate	number		
iDefaultAutoCreate	number		
iDefaultJournal	number		
iLineIDAUTOMATIC	number		
iPhoneNumberAutomatic	number		
iUseTapiLineNames	number		
u8sLocationID	string		
bAutomaticLocationFinding	boolean		Wenn m_bAutomaticLocationFinding gesetzt ist versucht der Server Anhand der Rufnummer der Leitung die passende Location automatisch zu ermitteln
iSupportedFeatures	number		In dieser BitMaske werden ETAPILINEFEATURESUPPORTED _ Bits gespeichert die Aufschluss darüber geben ob ein TSP ein bestimmtes

			Leistungsmerkmal untersttzt Es handelt sich hierbei also nicht um ein konfiguratives Property
objFeatureCodes	AsnMgmtCtiFeatureCodeList		
customProps	AsnStringPairList		Custom Properties for individual Line groups Property strings are defined as ELINEPROP_XXX ies */
iRejectCodeSrv	number		Server side SIPAV Response for rejecting calls if no client registered (Linked Type: AsnSIPAVResponseCodes)
iRejectCodeClt	number		SIPAV Response for rejecting calls if client registered (Linked Type: AsnSIPAVResponseCodes)
bHideRejectClt	boolean		hide client side softphone reject
iLineType	number		Typ der Leitung (SIP, CTI, AV, BlueTooth etc.) (Linked Type: AsnMgmtEnumLineType)
adminGroupForwarding	AsnLineForwards		Forwarding for line group when no client is registered (connected) for that line
iMinPort	number		@Cfg Media min Ports to Clients
iMaxPort	number		@Cfg Media max Ports to Clients
bNoEarlyMedia	boolean		@Cfg Disable Early Media

### 17.3.280 AsnMgmtGetLineGroupConfigResult

AsnMgmtGetLineGroupConfigResult is an Object

Name	Type	Optional	Comment
config	AsnMgmtTapiLineGroupConfiguration		

### 17.3.281 AsnMgmtSetLineGroupConfigArgument

AsnMgmtSetLineGroupConfigArgument is an Object

Name	Type	Optional	Comment
config	AsnMgmtTapiLineGroupConfiguration		

### 17.3.282 AsnMgmtOnLineEvent4AdminEventArgument

AsnMgmtOnLineEvent4AdminEventArgument is an Object

Name	Type	Optional	Comment
lineEvent4Admin	AsnMgmtLineEventForAdmin		

### 17.3.283 AsnUserManagerSettings

AsnUserManagerSettings is an Object

Name	Type	Optional	Comment
iUMSecurity	number		Security for User Authentication (Linked Type: AsnMgmtEnumUMSecurity)
iUMSelfInstall	number		Security for User Self Installation (Linked Type: AsnMgmtEnumUMSelfInstall)
iComputerIsDomainMember	number		Ist der Computer Mitglied einer Domain? Statische Konfiguration, die beim Start des Servers bestimmt wird. Nicht konfigurierbar
u8sComputerDomainNT	string		NT Domain Name des Computers (ESTOS) Statische Konfiguration, die beim Start des Servers bestimmt wird. Nicht konfigurierbar
u8sComputerDomainFQ	string		Full Qualified domain name (estos.de) Statische Konfiguration, die beim Start des Servers bestimmt wird. Nicht konfigurierbar
u8sDomainController	string		Hostname des Domain controller (AVALON) Statische Konfiguration, die beim Start des Servers

		bestimmt wird. Nicht konfigurierbar
objGlobalUserRightDetails	AsnUserDynamicRights	Nutzerrechte die fÃ¼r alle Nutzer gleich gelten. Die Rechte sind additiv, d.h., wenn hier ein Recht gesetzt wird, kann es einem Nutzer nicht mehr genommen werden. Soll es keine globalen Rechte geben, einfach alle Flags auf 0 setzen.
iShowAllUsersInAllMonitors	number	1 Wenn alle Benutzer alle Benutzer in den Monitor eingeblendet bekommen. 0 Wenn nicht.
iDisableAllMonitorConfiguration	number	1 Wenn kein Benutzer seine Monitorkonfiguration Ã¤ndern darf. 0 Wenn die Benutzer ihre Konfiguration Ã¤ndern dÃ¼rfen.
bAllJournalEntriesVisible	boolean	true: Clients kÃ¶nnen das gesamte Journal einsehen, false (default): Clients kÃ¶nnen das Journal nicht komplett sehen
iFeatures	number	Bitfeld fÃ¼r speziell unterstützte Features des UserManagers. Ermöglicht das Aktivieren und Deaktivieren von Funktionen z.B. auf Basis des Lizenzschlüssels oder Gegebenheiten, auf die nur der Server direkt Zugriff hat.
bDeleteJournalEntriesEnabled	boolean	true: Benutzer dÃ¼rfen Journaleinträge löschen.
bAutoBindLinesForUsersPhoneNumbers	boolean	true: Leitungen zu den Rufnummern des Benutzers automatisch suchen und zuweisen
u8slistPresenceDomains	UTF8StringList	Die Liste der Domänen, für die dieser Server auch Präsenzinformationen bereit stellt
u8sHomeServerIdentification	string	Server Identifikation als Homeserver für

Benutzerprofile			
bInternalChatDisabled	boolean		Unterbindet das Chaten im lokalen Netzwerk. Einstellung kann auch von der Registry beeinflusst werden.
iDeskShareAccess	number		(Linked Type: AsnMgmtDeskShareAccess)
bPresenceDisabled	boolean		true: Presence ist fÃ¼r alle Clients abgeschalten; false oder nicht existent: Presence ist an (default).
bUserUserRightsDisabled	boolean		true: Benutzer dÃ¼rfen keine Rechte Ã¼ber den Client vergeben; false oder nicht existent: Benutzer dÃ¼rfen (default).
bChatDatabaseDisabled	boolean		true: Chats werden nicht in der Datenbank persistiert; false oder nicht existent: Chats werden in der Datenbank persistiert (default).
bAVAudioDisabled	boolean		true: Audio Chat ist fÃ¼r alle User abgeschalten; default ist an (false).
bAVVideoDisabled	boolean		true: Video Chat ist fÃ¼r alle User abgeschalten; default ist an (false).
bDeskshareFedDisabled	boolean		true: Deskshare Ã¼ber Federartion fÃ¼r alle User abgeschalten; default ist an (false).
bLoginByMobile	boolean		true: Benutzer darf sich per Mobile App anmelden
bLoginOverInternet	boolean		true: Benutzer darf sich von ausserhalb des Intranets (mit Mobile) anmelden
bEnableForAnonymousApi	boolean		true: Benutzer ist fÃ¼r Anonyme Benutzer sichtbar, z.B. per suche
bProfilePageVisible	boolean		true: Die Profilseite des Benutzers wird dargestellt
bEnableUserdefinedCustomFields	boolean		userdefined customfields aktivieren

bEnableBinaryTransferSend	boolean		binarytransfer enabled; default ist an (true)
mapUserDefinedCustomFields	AsnStringPairList		Liste der UserDefined CustomFields (Key-Value-Liste, Key=Feldbezeichner, Value=Anzeigename)
objGlobalObserverGroupUserRightDetails	AsnUserDynamicRights	yes	globale userrechte fuer user die ueber monitorgruppen andere user im monitor haben. optional wegen kompatibilitaet
bEnableTeamsIntegration	boolean		Die naechsten Settings werden in GetCallParams()/PutCallParams() nicht uebertragen -> also auch nicht ueber Asn alle Properties wurden in den Settings gefunden -> Seite im Admin im WizardFall nicht anzeigen bool m_bFullyConfigured, Voreinstellung zur Verwendung von Kontaktdaten d. CtiUser iDefaultPhonebookFlags, die liste der domÃ¤nen, fuer die web2procall presence geleakt wird FIVE-1351 mapWebPresenceDomains AsnUserDynamicRights, use anonymous user management mit lazy initialization LC-593 bUseLazyAnonymousUserManager BOOLEAN, MS-TeamsIntegration enabled; default ist aus (false)
bLoginOverInternetAllowDesktop	boolean		true: Benutzer darf sich von ausserhalb des Intranets auch mit Desktop Clients anmelden
bUseWebAppEnabled	boolean	yes	true: Benutzer darf sich mit der WebApp (PWA) anmelden
eUserReplicator	AsnEUserReplicatorType	yes	Wich user replicator should be used (defaults to eNONE)

### 17.3.284 AsnMgmtUserManagerLDAPAttributeList

AsnMgmtUserManagerLDAPAttributeList is an Array of AsnMgmtUserManagerLDAPAttribute

AsnMgmtUserManagerLDAPAttribute is an Object

Name	Type	Optional	Comment
u8sCtiServerAttributeName	string		CtiServer Attributename (normalerweise der Feldname des NetDatabaseContact Feldes)
u8sLDAPAttributeName	string		LDAP Attributname
u8sLDAPAttributeDefaultName	string		Default Name des Attributes (Default Mapping)
bThisFieldCanQueryaPhoneLine	boolean		Flag das definiert ob diese Feld Ã¼berhaupt als Leitung gezogen werden darf
bQueryLinesForThisPhoneNumberField	boolean		Leitungen fÃ¼r dieses Rufnummernfeld binden
bQueryLinesForThisPhoneNumberFieldDefault	boolean		Leitungen fÃ¼r dieses Rufnummernfeld binden
bOptionalEnabled	boolean		Dieses Feld darf deaktiviert werden (ist Optional aktiv)
bEnabled	boolean		Dieses Feld ist aktiv (nur gÃ¼ltig wenn bOptionalEnabled = true ist, ansonsten immer true)
bEnabledDefault	boolean		Default Wert fÃ¼r enabled (nur gÃ¼ltig wenn bOptionalEnabled = true ist, ansonsten immer true)

### 17.3.285 AsnMgmtUserManagerActiveDirectorySettings

AsnMgmtUserManagerActiveDirectorySettings is an Object

Name	Type	Optional	Comment
u8sHost	string		Active Directory Server
iPort	number		Active Directory Server LDAP Port
u8sDomain	string		Domain
u8sUsername	string		Username (Administrator@estos.de)
u8sPassword	string		Password

iForceLDAPS	number		LDAP erzwingen
u8sBaseDNUsers	string		User BaseDN aus der Konfiguration. Wenn dieser leer ist wird er automatisch bestimmt. (defaultNamingContext)
u8sBaseDNComputers	string		Computer BaseDN aus der Konfiguration. Wenn dieser leer ist wird er automatisch bestimmt. (defaultNamingContext)
u8sBaseDNGroups	string		Group BaseDN aus der Konfiguration. Wenn dieser leer ist wird er automatisch bestimmt. (defaultNamingContext)
bLDAPBaseAttributeWriteBac kEnabled	boolean		ZurÃ¼ckschreiben von LDAP Basisattributen wird unterstÃ¼tzt */
objAttributeMapping	AsnMgmtUserManagerLDAPAtt ributeList		Attributmapping fÃ¼r die CtiServer LDAP Attribute (Welches Benutzerprofilfeld wird aus welchem LDAP Feld geholt...)
iPhoneNumberPreformatFor mat	number		Rufnummernformat welches der Admin beim zuweisen von Leitungen automatisch anwendet. UnabhÃ¤ngig davon werden die Rufnummern genau so in die Benutzerverwaltung geschrieben wie diese im Admin im Benutzerprofil eingegeben wurden. Es ist eine reine Vorformatierung. (Linked Type: AsnMgmtPhoneNumberFor mats)
iExtensionVersion	number		Dieses Property ist kein Settings Property sondern ein Laufzeit Property. Es ist in den Settings hinterlegt da das generische Interface zu den Benutzerverwaltungen fÃ¼r ein Property kein

			weitere Methode erhält. Schema Erweiterungsversion (Linked Type: AsnMgmtSchemaExtension Version)
iLastErrorCode	number		Dieses Property ist kein Settings Property sondern ein Laufzeit Property. Es ist in den Settings hinterlegt da das generische Interface zu den Benutzerverwaltungen für ein Property kein weitere Methode erhält. Letzter Error Code
u8sLDAPFilterUsers	string	yes	LDAP Filter fuer User-Objekte
u8sLDAPFilterGroups	string	yes	LDAP Filter fuer Gruppen-Objekte
u8sLDAPFilterComputers	string	yes	LDAP Filter fuer Computer-Objekte

### 17.3.286 AsnMgmtGetUMInterfaceSettingsResult

AsnMgmtGetUMInterfaceSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnMgmtUserManagerActiveDirectorySettings		

### 17.3.287 AsnMgmtSetUMInterfaceSettingsArgument

AsnMgmtSetUMInterfaceSettingsArgument is an Object

Name	Type	Optional	Comment
iInterfaceType	number		(Linked Type: AsnMgmtUserManagerInterfaceType)
settings	AsnMgmtUserManagerActiveDirectorySettings		

### 17.3.288 AsnMgmtGetUMSettingsResult

AsnMgmtGetUMSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnUserManagerSettings		

### 17.3.289 AsnMgmtSetUMSettingsArgument

AsnMgmtSetUMSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnUserManagerSettings		

### 17.3.290 AsnMgmtFeatureCountList

AsnMgmtFeatureCountList is an Array of AsnMgmtFeatureCount

AsnMgmtFeatureCount is an Object

Name	Type	Optional	Comment
feature	number		(Linked Type: AsnMgmtELICENSEFEATURE)
iCount	number		

### 17.3.291 AsnMgmtLicenseDetails

AsnMgmtLicenseDetails is an Object

Name	Type	Optional	Comment
featureCount	AsnMgmtFeatureCountList		
iProductID	number		
iBaseProductIDRequired	number		
iLicenseVersion	number		
bIsTrialFeatureLicense	boolean		
bIsUpgradeLicense	boolean		
bIsUpgradeLicenseAnyVersion	boolean		
iRequiredOldLicenseVersion	number		
bRequiresUpgradeLicense	boolean		

bIsTestLicense	boolean		
bIsNotForResale	boolean		
bRequiresHWBinding	boolean		
bIsHWBound	boolean		
bIsDynamicLicense	boolean		
u8sLicenseCode	string		
validTo	string		
contractEnd	string		
u8sDescription	string		
bIsExpired	boolean		
iCompromiseStatus	number	(Linked Type: AsnMgmtECOMPROMISESTATU S)	
iLicenseSerial	number		
iGenuineStatus	number		
genuineCheckTimeStamp	string		

### 17.3.292 AsnMgmtGetLicenseResult

AsnMgmtGetLicenseResult is an Object

Name	Type	Optional	Comment
details	AsnMgmtLicenseDetails		

### 17.3.293 AsnMgmtEUCWSStatus

AsnMgmtEUCWSStatus is an Object

Name	Type	Optional	Comment
u8sWCSID	string		
iStatus	number		
u8sURL	string		
u8sUCSID	string		
u8sLastError	string		
bUCConnect	boolean		

capabilities	AsnMgmtEUCWSCapabilities		
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### 17.3.294 AsnMgmtEUCWSStatusList

AsnMgmtEUCWSStatusList is an Array of AsnMgmtEUCWSStatus

AsnMgmtEUCWSStatus is an Object

Name	Type	Optional	Comment
u8sWCSID	string		
iStatus	number		
u8sURL	string		
u8sUCSID	string		
u8sLastError	string		
bUCConnect	boolean		
capabilities	AsnMgmtEUCWSCapabilities		

### 17.3.295 AsnMgmtEUCWebServicesStatus

AsnMgmtEUCWebServicesStatus is an Object

Name	Type	Optional	Comment
u8sUCSID	string		
ucConnectStatus	AsnMgmtEUCWSStatus		
ucwsStatusMap	AsnMgmtEUCWSStatusList		

### 17.3.296 AsnMgmtEUCWebServiceConfigList

AsnMgmtEUCWebServiceConfigList is an Array of AsnMgmtEUCWebServiceConfig

AsnMgmtEUCWebServiceConfig is an Object

Name	Type	Optional	Comment
u8sWCSID	string		
u8sUCSID	string		
u8sUCSPassword	string		
u8sServerAddress	string		

**17.3.297 AsnMgmtEUCWebServiceConfig4Admin**

AsnMgmtEUCWebServiceConfig4Admin is an Object

Name	Type	Optional	Comment
u8sServicesUser	string		
u8sServicesPassword	string		
configList	AsnMgmtEUCWebServiceConfigList		

**17.3.298 AsnMgmtGetLocalWebServiceConfig4AdminResult**

AsnMgmtGetLocalWebServiceConfig4AdminResult is an Object

Name	Type	Optional	Comment
configs	AsnMgmtEUCWebServiceConfigList		

**17.3.299 AsnMgmtUCCConnectSettings**

AsnMgmtUCCConnectSettings is an Object

Name	Type	Optional	Comment
iMobileAccessOption	number		(Linked Type: AsnMgmtMobileAccessOption)
u8sUCSID	string		
u8sControllerAddress	string		
u8sUCSPassword	string		
u8sAccountMail	string		
iTurnEnabled	number		
u8sPushServiceAddress	string		
iPushPolicyAccepted	number		
u8sPortalAddress	string		
webServiceExternalAccess	AsnMgmtWebServiceAccessParams		
bUseProxy	number		
u8sProxyServer	string		

u8sProxyUser	string		
u8sProxyPassword	string		
u8sBypassServer	string		

### 17.3.300 AsnMgmtGetDatabaseManagerSettingsResult

AsnMgmtGetDatabaseManagerSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnMgmtDatabaseManagerSettings		

### 17.3.301 AsnMgmtSetDatabaseManagerSettingsArgument

AsnMgmtSetDatabaseManagerSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnMgmtDatabaseManagerSettings		

### 17.3.302 AsnMgmtGetAvailableDatabasesArgument

AsnMgmtGetAvailableDatabasesArgument is an Object

Name	Type	Optional	Comment
settings	AsnMgmtDatabaseManagerSettings		

### 17.3.303 AsnListeningInterfaceList

AsnListeningInterfaceList is an Array of AsnListeningInterface

AsnListeningInterface is an Object

Name	Type	Optional	Comment
bEnabled	boolean		interface enabled/disabled
u8sInterfaceGUID	string		Eindeutige ID fÃ¼r dieses Interface
iInterfaceType	number		Dieses Interface ist fÃ¼r folgende Verbindungen (kann sich zur Laufzeit NICHT Ã¤ndern) (Linked Type: AsnInterfaceTypeEnum)
iProtocol	number		Protokoll welches verwendet wird (Linked Type: AsnInterfaceProtocolEnum)

u8sBindAddress	string		Bind Adresse
iPort	number		Port
blsDefault	boolean		Interface ist das Default Interface
u8sCertHash	string		Fingerprint des zu verwendenden Zertifikats
u8sCertContainerFile	string		Certificate Container File (.ecert)
u8sCertContainerContent	string		Certificate Container Content (only for Server->Admin->Server)
u8sDNSName	string		DNS Name unter dem das Interface erreichbar ist
u8sPublicIP	string		Äffentliche IP-Adresse/Port
iPublicPort	number		

### 17.3.304 AsnMgmtGetListeningInterfacesResult

AsnMgmtGetListeningInterfacesResult is an Object

Name	Type	Optional	Comment
listeningInterfaces	AsnListeningInterfaceList		
u8sServerNameFQDN	string		
iSupportedListenInterfaceTypes	number		

### 17.3.305 AsnMgmtSetListeningInterfacesArgument

AsnMgmtSetListeningInterfacesArgument is an Object

Name	Type	Optional	Comment
listeningInterfaces	AsnListeningInterfaceList		
bDisconnectClients	boolean		

### 17.3.306 AsnListeningInterfaceStatusList

AsnListeningInterfaceStatusList is an Array of AsnListeningInterfaceStatus

AsnListeningInterfaceStatus is an Object

Name	Type	Optional	Comment
u8sInterfaceGUID	string		Eindeutige ID fÄ¼r dieses Interface
iStatus	number		Status des Interfaces (Linked Type:

			AsnInterfaceStatusEnum)
iSocketServerIDs	SEQInteger		Liste der SocketServer SocketIDs zum Interface
iOpenConnections	number		Anzahl der aktuell verbundenen Clients

### 17.3.307 AsnMgmtGetListeningInterfaceStatusesResult

AsnMgmtGetListeningInterfaceStatusesResult is an Object

Name	Type	Optional	Comment
listeningInterfaceStatuses	AsnListeningInterfaceStatusList		

### 17.3.308 AsnMgmtOnListenInterfaceStatusesEventArgs

AsnMgmtOnListenInterfaceStatusesEventArgs is an Object

Name	Type	Optional	Comment
statuses	AsnListeningInterfaceStatusList		

### 17.3.309 AsnMgmtOnListenInterfaceStatusesChangedEventArgs

AsnMgmtOnListenInterfaceStatusesChangedEventArgs is an Object

Name	Type	Optional	Comment
statusesAdded	AsnListeningInterfaceStatusList		
statusesUpdated	AsnListeningInterfaceStatusList		
statusesRemoved	AsnListeningInterfaceStatusList		

### 17.3.310 AsnMgmtLogFileSettings

AsnMgmtLogFileSettings is an Object

Name	Type	Optional	Comment
iWindowsEventLogLevel	number		
iLogLevel	number		
iNumberOfLogfilesToKeep	number		
iMailToAdmin	number		
iLogFileSize	number		

u8sLogFilePath	string		
iPerformanceMonitoring	number		
mediaServerLogFileSettings	AsnMediaServerLogFile		

### 17.3.311 AsnMgmtGetLogFileSettingsResult

AsnMgmtGetLogFileSettingsResult is an Object

Name	Type	Optional	Comment
logfileSettings	AsnMgmtLogFileSettings		

### 17.3.312 AsnMgmtGetLogFileSettingsArgument

AsnMgmtGetLogFileSettingsArgument is an Object

Name	Type	Optional	Comment
logfileSettings	AsnMgmtLogFileSettings		

### 17.3.313 AsnNumberFormatRegExpressListMgmt

AsnNumberFormatRegExpressListMgmt is an Array of AsnNumberFormatRegExpressionMgmt

AsnNumberFormatRegExpressionMgmt is an Object

Name	Type	Optional	Comment
u8sSearch	string		
u8sReplace	string		
bMatchReplace	boolean		
bAutoCreatedRule	boolean		
u8sAutoRuleforLocation	string		

### 17.3.314 AsnNumberFormatRegExpressionsMgmt

AsnNumberFormatRegExpressionsMgmt is an Object

Name	Type	Optional	Comment
bIsReadOnlyFromFile	boolean		
formatRules	AsnNumberFormatRegExpressListMgmt		

**17.3.315 AsnRuleSoftphoneEmergencyMgmtListMgmt**

AsnRuleSoftphoneEmergencyMgmtListMgmt is an Array of AsnRuleSoftphoneEmergencyMgmt

AsnRuleSoftphoneEmergencyMgmt is an Object

Name	Type	Optional	Comment
u8sName	string		
u8sEmergencyNumber	string		
u8sPrefix	string		
u8sSubnetID	string		
iSubnetMaskLen	number		

**17.3.316 AsnELocalDialingRuleForeignPNALocalCallItemList**

AsnELocalDialingRuleForeignPNALocalCallItemList is an Array of  
AsnELocalDialingRuleForeignPNALocalCallItem

AsnELocalDialingRuleForeignPNALocalCallItem is an Object

Name	Type	Optional	Comment
u8sAreaCode	string		Wie vom TAPI-Treiber gemeldet
u8slistNXXPrefixList	UTF8StringList		Mit Standortinformationen erweitert

**17.3.317 AsnELCRProviderList**

AsnELCRProviderList is an Array of AsnELCRProvider

AsnELCRProvider is an Object

Name	Type	Optional	Comment
u8sProviderName	string		
u8sProviderNumber	string		
iProviderCOLOR	number		

**17.3.318 AsnELCRZoneList**

AsnELCRZoneList is an Array of AsnELCRZone

AsnELCRZone is an Object

Name	Type	Optional	Comment
u8sZoneName	string		
u8slistZonePrefixList	UTF8StringList		
u8sTimeToProviderWeekDay	string		Jeder dieser Strings enthält 48 Zeichen (48 Halbe Stunden) Jedes dieser Zeichen zeigt auf einen Provider Die Zeichen sind 0 - 9 und A - Z 0 bedeutet kein Provider
u8sTimeToProviderSaturday	string		
u8sTimeToProviderSunday	string		

### 17.3.319 AsnLocationInformationMgmt

AsnLocationInformationMgmt is an Object

Name	Type	Optional	Comment
u8sLocationCheckSum	string		Checksum Präsentiert die Summe der Änderungen um zu erkennen, ob Änderungen vorgenommen wurden.
iCountryID	number		Country
u8sCountryCode	string		Country code
u8sLocalPrefix	string		Wert aus ELocationCountryList gesetzt mit SetCountry
u8sNationalPrefix	string		Wert aus ELocationCountryList gesetzt mit SetCountry
u8sInternationalPrefix	string		Wert aus ELocationCountryList gesetzt mit SetCountry
u8sLocalDialingRule	string		Die Wahlregel für Ortsgespräche. Diese kann unwirksam werden, wenn LocalSpecial Dialing Rules definiert sind
u8sNationalDialingRule	string		Die Wahlregel für Ferngespräche
u8sInternationalDialingRule	string		Die Wahlregel für

		Internationale GesprÃ¤che
u8sLocalDialingRuleHomePNA Local	string	<p>WahlRegeln speziell Nord Amerika</p> <p>Dort existieren verschiedene Wahlregeln fÃ¼r kostenfreie und kostenpflichtige GesprÃ¤che</p> <p>Diese Wahlregeln sind in jeder Area (Vorwahl) unterschiedlich.</p> <p>Diese Wahlregeln werden aus den m_LocalDialingRuleMap gelesen bei der Konfiguration Selbe Vorwahl, kostenfreies GesprÃ¤ch (gleiche LATA) - ELOCALDIALINGRULE_HOME PNALOCAL</p>
u8sLocalDialingRuleHomePNA Toll	string	<p>Selbe Vorwahl, kostenpflichtiges GesprÃ¤ch (andere LATA) - ELOCALDIALINGRULE_HOME PNATOLL</p>
u8sLocalDialingRuleForeignP NALocal	string	<p>Andere Vorwahl, kostenfreies GesprÃ¤ch (gleiche LATA) - ELOCALDIALINGRULE_FOREIGNPNALOCAL</p>
iLanguage	number	<p>Sprache als LANG_id</p> <p>Verwendet Primary LANGID z.B. LANG_GERMAN und SUB LangID z.B. SUBLANG_DEFAULT</p>
u8sCityCodeNoPrefix	string	<p>Vorwahl immer ohne nationalen access code.</p> <p>Wenn es keine m_strNationalDialingRule gibt, ist der CityCode immer leer</p>
bNoLocalDialing	boolean	<p>Flag welches ermÃ¶glicht das auch im Ortsnetz mit Vorwahl gewÃ¤hlt wird</p>
u8sVanityNumbers	string	<p>Liste der Vanity Vorwahlen (, getrennt)</p>
bUseVanity	boolean	<p>Use Vanity?</p>
iRemoteTapiNumberFormat	number	<p>Remote Tapi Treiber Rufnummern Formatierung (Linked Type: AsnERemoteTapiNumberFormat)</p>

iRemoteTapiDialFormat	number	Remote Tapi Treiber Rufnummern Wahl Formatierung (Linked Type: AsnERemoteTapiDialFormat)
iRemoteTapiLineNames	number	MultiLine TAPI Treiber - Name der Leitungen (Linked Type: AsnERemoteTapiLineNames)
iDialingNumberFormat	number	Dialing Number Format (Linked Type: AsnETAPIDialNumberFormat )
bFixedNumberLenExtensionDTMFDialing	boolean	Automatische Nachwahl von Nebenstellennummern bei Ändern mit fixer Rufnummernlänge Bei Ändern mit fixer Rufnummernlänge werden Nebenstellennummern nach der Verbindungsherstellung automatisch nachgewählt
bMobileDeviceLocation	boolean	Dies ist ein Mobile Device Standort
bShowExtendedSettings	boolean	In dieser Location werden die erweiterten Einstellungen angezeigt damit sind alle Settings sichtbar, ansonsten nur elementar wichtige für 95% der Installationen
bMultiLocationSupport	boolean	Dieser Standort steht für den MultiLocationSupport bereit
bAutoCreateOtherLocationRules	boolean	Automatisch Regeln zum umformatieren kurzer Rufnummern in die Lange Notation erstellen
bAllowNumberSearchOtherLocations	boolean	Rufnummernauflösung über die Suche Standortübergreifend erlauben
bShortenOtherLocationSCNumbersForDialing	boolean	Superkanonische Rufnummern anderer Standorte bei der Wahl entsprechend verkürzen
bUseTkSystem	boolean	Telefonanlage wird benutzt

u8sTKAnschlussNr	string	Anschlussnummer bei Anlagenanschluss (z.B. 36856)
u8sDDIRangeBegin	string	Gesplitterter Bereich fÃ¼r Anschlussnummer (36856 [0-2]) In Deutschland kann ein Anlagenanschluss eingeschrÃ¤nkte Durchwahlbereiche haben. Die folgende Variablen schÃ¤rken den Bereich fÃ¼r die Anschlussnummer ein. Default ist leer (alle) Wir verwendet um festzustellen von welchen internen Rufnummern es externe ReprÃ¤sentierungen gibt
u8sDDIRangeEnd	string	
u8sTKLocalAccessCode	string	Amtskennziffer im Ort (z.B. 0)
u8sTKLongDistanceAccessCode	string	Amtskennziffer National (z.B. 0)
u8sTKInternationalAccessCode	string	Amtskennziffer International (z.B. 0)
u8sTKPrivateAccessCode	string	Amtskennziffer PrivatgesprÃ¤ch (z.B. 0) Kann ? und % als platzhalter fÃ¼r persÃ¶nliche PIN enthalten. ?: eine Ziffer %: n Ziffern
u8sTKForwardingAccessCode	string	Amtskennziffer fÃ¼r Rufumleitung setzen
iTKMinLenInternalNumbers	number	Minimale LÃ¶nge interner Nummern
iTKMaxLenInternalNumbers	number	Maximale LÃ¶nge interner Nummern
u8slistTAKzListRemoveIn	UTF8StringList	Amtskennziffer(n) bei ankommend gemeldeter Nummer abschneiden
u8slistTAKzListRemoveOut	UTF8StringList	Amtskennziffer(n) bei abgehend gemeldeter Nummer abschneiden
u8slistTAKzListRemoveForwa	UTF8StringList	Amtskennziffer(n) bei

rding		Meldung einer Rufumleitung abschneiden
iConnectedIDDealing	number	Spezielle Behandlung der ConnectedID, normal, formatieren, ignorieren (Linked Type: AsnEConnectedIdDealing)
u8slistTKAkzListRemoveConnectedIDIn	UTF8StringList	Amtskennziffer(n) bei abgehend gemeldeter Nummer ConnecteID
u8slistTKAkzListRemoveConnectedIDOut	UTF8StringList	Amtskennziffer(n) bei ankommende gemeldeter Nummer ConnecteID
numberFormatInternal	AsnNumberFormatRegExpressionsMgmt	Reguläre Ausdrücke zur erweiterten Erkennung interner Rufnummern Dient zur Erkennung interner Rufnummern, formatiert, sofern ein Replace Ausdruck hinterlegt ist, die Rufnummer automatisch um
numberFormatExternal	AsnNumberFormatRegExpressionsMgmt	Reguläre Ausdrücke zur erweiterten Erkennung externer Rufnummern Das sind meist wohl die selben wie SpecialNumbers. Allerdings nur dann, wenn man nicht selbige auch als interne Rufnummern hat. */ Dient zur Erkennung externer Rufnummern, formatiert, sofern ein Replace Ausdruck hinterlegt ist, die Rufnummer automatisch um
numberFormatAutomaticOtherLocationsDDItoSC	AsnNumberFormatRegExpressionsMgmt	Liste mit Ausdrücken zur automatischen Standortrufnummernmanipulation. Gefüllt wenn m_bMultiLocationEnabled && m_bAutoCreateOtherLocationRules gesetzt ist nach dem Laden aller Standorteinstellungen
numberFormatAutomaticOtherLocationsSCToDDI	AsnNumberFormatRegExpressionsMgmt	Liste mit Ausdrücken zur automatischen Standortrufnummernmanipulation.

		Gefüllt wenn m_bMultiLocationEnabled && m_bShortenOtherLocationS CNumbersForDialing gesetzt ist nach dem Laden aller Standorteinstellungen
numberFormatRegExpressList In	AsnNumberFormatRegExpress ionsMgmt	Rufnummern Formatierung (Reguläre Ausdrücke oder direktes Suchen Ersetzen (abhängig von internem Flag)
numberFormatRegExpressList Out	AsnNumberFormatRegExpress ionsMgmt	Rufnummern Formatierung (Reguläre Ausdrücke oder direktes Suchen Ersetzen (abhängig von internem Flag)
numberFormatRegExpressList Dial	AsnNumberFormatRegExpress ionsMgmt	Rufnummern Formatierung (Reguläre Ausdrücke oder direktes Suchen Ersetzen (abhängig von internem Flag)  Diese Liste wird verarbeitet, nachdem die Rufnummer superkanonisch gemacht wurde.  Hat das Ergebnis ein + am Anfang, wird weiterformatiert, sonst direkt gewählt
numberFormatRegExpressList FinalDial	AsnNumberFormatRegExpress ionsMgmt	Rufnummern Formatierung (Reguläre Ausdrücke oder direktes Suchen Ersetzen (abhängig von internem Flag)  Diese Liste wird verarbeitet, nachdem alle Formattierung abgeschlossen ist.  Diese Regel wird auch für die Remote Tapi Treiber angewendet
numberFormatRegExpressLin ePhoneNumbers	AsnNumberFormatRegExpress ionsMgmt	Reguläre Ausdrücke um eine Leitungsnummer zu formen.  Im Admin kann man hier in den erweiterten Einstellungen reguläre Ausdrücke hinterlegen nach denen Leitungsnummern formatiert werden

		Diese Ausdrücke müssen aus der Rufnummer eine superkanonische Rufnummer machen. Sobald ein Ausdruck hinterlegt ist wird in diesem Standort nur noch über diese Regeln Ausdrücke gearbeitet. Die Ausdrücke werden NUR für Leitungsrufnummer verwendet
u8sLocationID	string	Location Identifier (z.B. Default)
iLocalDialingRuleHomePNAFlag	number	Flag, welche Ausnahmen für die Eigene Vorwahl gilt. Alle im eigenen Ortsnetz sind kostenfrei Kostenfreie Konfigurieren (die anderen sind kostenpflichtig) Kostenpflichtige Konfigurieren (die anderen sind kostenfrei)
u8slistLocalDialingRulesHomePNALocalCalls	UTF8StringList	Liste der NXX Nummern in der eigenen Vorwahl, die als Local Call gelten
u8slistLocalDialingRulesHomePNATollCalls	UTF8StringList	Liste der NXX Nummern in der eigenen Vorwahl, die als Local Call gelten
iLocalDialingRuleForeignPNAFlag	number	Flag, welche Ausnahmen für fremde Vorwahlen gelten. Alle in anderen Ortsnetzen sind Ferngespräche Es gibt kostenfreie Gespräche
localDialingRuleForeignPNALocalCallItemList	AsnELocalDialingRuleForeignPNALocalCallItemList	Liste der Vorwahlen mit NXX Nummern aus anderen Vorwahlen, die als Local Call gelten
bUseAdvancedLCR	boolean	LeastCostRouting verwenden
ICRProviderVector	AsnELCRProviderList	Liste der Provider
ICRZoneList	AsnELCRZoneList	Liste der Provider
projectPINRules	AsnProjectPinRuleList	Projektkennziffern
bRulesSoftphoneEmergencyE	boolean	rules for emergency numbers

nabled			enabled
bRulesSoftphoneEmergencyClientWarningEnabled	boolean		Client Warnings enabled
rulesSoftphoneEmergency	AsnRuleSoftphoneEmergencyMgmtListMgmt		rules for emergency numbers dialed from softphone

### 17.3.320 AsnMgmtGetLocationInformationMgmtResult

AsnMgmtGetLocationInformationMgmtResult is an Object

Name	Type	Optional	Comment
asnLocationData	AsnLocationInformationMgmt		

### 17.3.321 AsnMgmtSetLocationInformationMgmtArgument

AsnMgmtSetLocationInformationMgmtArgument is an Object

Name	Type	Optional	Comment
asnLocationData	AsnLocationInformationMgmt		

### 17.3.322 AsnMgmtGetCSTASettingsResult

AsnMgmtGetCSTASettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnCSTASettings		

### 17.3.323 AsnMgmtSetCSTASettingsArgument

AsnMgmtSetCSTASettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnCSTASettings		

### 17.3.324 AsnAVStunOrTurnServerList

AsnAVStunOrTurnServerList is an Array of AsnAVStunOrTurnServer

AsnAVStunOrTurnServer is an Object

Name	Type	Optional	Comment
iType	number		Typ (Linked Type: AsnAVSTUNANDTURNSEVERTYPE)
u8sUsername	string		typ = TURN_USER_PASSWD: username; typ = TURN_SHARED_SECRET: Leer
u8sPassword	string		typ = TURN_USER_PASSWD: credential; typ = TURN_SHARED_SECRET: Shared Secret
iTTLSeconds	number		Config Value
u8slistStrUrIs	UTF8StringList		Liste der Turn Server URLs

### 17.3.325 AsnAVStunOrTurnSettings

AsnAVStunOrTurnSettings is an Object

Name	Type	Optional	Comment
iTurnProviderType	number		Provider Type (Linked Type: AsnAVSTUNANDTURNPROVIDERTYPE)
listOwnServers	AsnAVStunOrTurnServerList		List of own STUN and TURN Servers
u8sTURNProvider	string		Selected TURN Provider
u8spairlistProviderParams	AsnStringPairList		Config Params for TURN Provider

### 17.3.326 AsnMgmtGetSTUNandTURNSettingsResult

AsnMgmtGetSTUNandTURNSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnAVStunOrTurnSettings		

### 17.3.327 AsnMgmtSetSTUNandTURNSettingsArgument

AsnMgmtSetSTUNandTURNSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnAVStunOrTurnSettings		

**17.3.328 AsnMgmtGetSTUNandTURNConsumerConfigArgument**

AsnMgmtGetSTUNandTURNConsumerConfigArgument is an Object

Name	Type	Optional	Comment
settings	AsnAVStunOrTurnSettings		

**17.3.329 AsnMgmtGetDBManSettingsResult**

AsnMgmtGetDBManSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnMgmtDBManSettings		

**17.3.330 AsnMgmtGetDBManSettingsArgument**

AsnMgmtGetDBManSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnMgmtDBManSettings		

**17.3.331 AsnMgmtGetXmppSettingsResult**

AsnMgmtGetXmppSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnXMPPSettings		

**17.3.332 AsnMgmtSetXmppSettingsArgument**

AsnMgmtSetXmppSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnXMPPSettings		

**17.3.333 AsnListenInterfaceDescriptionList**

AsnListenInterfaceDescriptionList is an Array of AsnListenInterfaceDescription

AsnListenInterfaceDescription is an Object

Name	Type	Optional	Comment
bEnabled	boolean		
u8sIPAddress	string		
iPort	number		
iProtocol	number		
iService	number		
u8sGUID	string		
iStaticRouteRefCount	number		

### 17.3.334 AsnSIPFEDSettings

AsnSIPFEDSettings is an Object

Name	Type	Optional	Comment
u8sFederationServiceURL	string		Common
iNetworkInterfacesEnabled	number		Network listen Interfaces enabled
networkInterfaces	AsnListenInterfaceDescriptionList		Network listen Interfaces
iUsePublicIP	number		Public IP enabled
iPublicPort	number		Public Port
u8sPublicIP	string		Public IP
iFederationEnabled	number		Federation enabled
u8sFederationBindAddress	string		Network bind address for federation
iProxyEnabled	number		Federation proxy enabled
u8sProxyUsername	string		PCE-2391: Direct federation service username
u8sProxyPassword	string		Direct federation service password
iEdgeServerEnabled	number		Edge server enabled
iEdgeServerPort	number		Edge server port
iEdgeServerProtocol	number		Edge server transport protocol

u8sEdgeServerCertificate	string		Edge server certificate hash
u8sEdgeServerUsername	string		PCE-2391: Edge server username
u8sEdgeServerAddress	string		Edge server ip address
u8sEdgeServerPassword	string		Edge server register password
iOpenFederationEnabled	number		Open Federation enabled
iStaticRoutesEnabled	number		Static routes enabled
u8slistStaticRoutes	UTF8StringList		Static routings formatted string list
u8slistDomainsAllow	UTF8StringList		Domain allow formatted string list
iGlobalAllow	number		Allow global federation
iGlobalAllowPresenceLevel	number		Allow global presence level
u8slistDomainsDeny	UTF8StringList		Domain deny string list
iRegistrarEnabled	number		Registrar enabled
u8sSipServerCertHash	string		PCE-2361: Auswahl Zertifikat/Hash unter 'SIP/SIP-Server'
bServerRestartRequiredFlag	boolean		PCE-2668: Indicates whether a server restart is required or not

### 17.3.335 AsnMgmtGetSIPFEDSettingsResult

AsnMgmtGetSIPFEDSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnSIPFEDSettings		

### 17.3.336 AsnMgmtSetSIPFEDSettingsArgument

AsnMgmtSetSIPFEDSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnSIPFEDSettings		

### 17.3.337 AsnSIPGatewaySettingsRegisteredUserList

AsnSIPGatewaySettingsRegisteredUserList is an Array of AsnSIPGatewaySettingsRegisteredUser

AsnSIPGatewaySettingsRegisteredUser is an Object

Name	Type	Optional	Comment
u8sUserName	string		I.d.R. die Leitungsnummer. Wird als UserPart in der SIP-Adresse verwendet.
u8sListenUserName	string		Scheint Ã¼berall im Code ein "*" zu sein. Wird das wirklich benÃ¶tigt?
u8sDisplayName	string		Anzeigename (Benutzername) -> das was dann typischerweise im Telefondisplay angezeigt wird.
u8sAuthUserName	string		Entspricht normalerweise der Leitungsnummer. Damit wird sich angemeldet.
u8sAuthPassword	string		Passwort zum Anmelden.
u8sManualNumber	string		um die rufnummer bis zum CreateLine durchzuschleifen. Ist bei manchen Anlagen nicht der UserName.
bMainTrunkUser	boolean	yes	PROCALL-2289: SIP-Trunk flag for the User that holds the Register, optional wegen kompatibilitaet

### 17.3.338 AsnSIPGatewayUASettings

AsnSIPGatewayUASettings is an Object

Name	Type	Optional	Comment
iGatewayModel	number		Gateway-Model (Linked Type: AsnGatewayModelEnum)
iGatewayType	number		Gateway-Typ (Linked Type: AsnGatewayTypesEnum)
registeredUsers	AsnSIPGatewaySettingsRegisteredUserList		Map der registrierten Benutzer. Der SchlÃ¼ssel ist typischerweise der Username. wird ignoriert, wenn diese Struktur mit asnMgmtSetSIPGatewaySettingsV2 gesendet wird
bTrunkRegistration	boolean		TRUNK-Registrierung Wenn gesetzt, wird nur ein Register fÃ¼r alle Leitungen

		durchgefÃ¼hrt. Als AuthUserName und AuthPasswort wird das des "MainTrunkUser" verwendet.
u8sRegistrar	string	Registrar oder Proxy.
iRegistrarPort	number	Registrar- oder Proxy-Port.
u8sSTUNServer	string	Angabe des STUN-/TURN-Servers. Wird momentan nicht verwendet.
u8sDomainRealm	string	Domain-Part der Anmeldeadresse (entspricht i.d.R. der Registrar-Adresse).
iRegisterInterval	number	Zeitdauer bis zum nÃ¤chsten Reregister.
iConnectionType	number	Verbindungstyp, i.d.R. ESIP_UDP. (Linked Type: AsnSIPConnectionTypeEnum)
u8sLocalInterfaceGUID	string	Die GUID der zu verwendenden Netzwerkschnittstelle.
u8sLineGroupName	string	Leitungsgruppenname der Konfiguration (Klartextname), wird zur Bildung der Leitungsadresse benutzt.
bDoRegister	boolean	muss auf true gesetzt sein, sonst registriert sich nicht der User
u8sMediaGatewayName	string	Eindeutiger Name des Gateways. Erscheint so in der UI.
iMediaMode	number	Media Mode Im Zusammenhang mit Kurento wird zunÃ¤chst immer webrtc gesprochen
ilistAudioCodecs	SEQInteger	UnterstÃ¼tzte Audio-Codecs (Linked Type: AsnAudioCodesEnum)
iPBXProperties	number	PBX Eigenschaften
iPCAPTrace	number	Gateway Trace global
u8slistPCAPTraceLines	UTF8StringList	Gateway Trace lines

objFeatureCodes	AsnMgmtCtiFeatureCodeList		Vom Admin definierte Feature Codes, die im ME Bereich der SipAV-line gezeigt werden.
customProps	AsnStringPairList		Custom Properties for individual Line groups Property strings are defined as ELINEPROP_XXX ies */
iRegisterDelay	number		average delay between SIP Registrations
iPBXTransferProperties	number		PBX Transfer Eigenschaften
iRegisterNatRefreshInterval	number		Zeitdauer bis zum naechsten NAT Refresh.
iProvider	number		Handelt es sich um einen SIP-Provider?
iMinPorts	number		min Media Ports (e.g. Softphone)
iMaxPorts	number		max Media Ports (e.g. Softphone)
iNoEarlyMedia	number		Wurde Early Media deaktiviert?
bRegisteredUsersSendChanges	boolean	yes	true: Geaenderte User in registeredUsersAdded, registeredUsersChanged, registeredUsersRemoved. false: Alle vorhandenen User in registeredUser default beim Empfaenger (falls Wert nicht gesetzt): false
registeredUsersAdded	AsnSIPGatewaySettingsRegisteredUserList	yes	Liste der hinzugefuegten registeredUser. Der Schlüssel ist typischerweise der Username.
registeredUsersChanged	AsnSIPGatewaySettingsRegisteredUserList	yes	Liste der geaenderten registeredUser. Der Schlüssel ist typischerweise der Username.
registeredUsersRemoved	UTF8StringList	yes	Liste der entfernten registeredUser. Aufgelistet sind die Usernamen.
u8sLineGroupNameOld	string	yes	Leitungsgruppenname vor

		dem Umbenennen der Leitungsgruppe.
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### 17.3.339 AsnSIPGatewayUASettingsList

AsnSIPGatewayUASettingsList is an Array of AsnSIPGatewayUASettings

AsnSIPGatewayUASettings is an Object

Name	Type	Optional	Comment
iGatewayModel	number		Gateway-Model (Linked Type: AsnGatewayModelEnum)
iGatewayType	number		Gateway-Typ (Linked Type: AsnGatewayTypesEnum)
registeredUsers	AsnSIPGatewaySettingsRegisteredUserList		Map der registrierten Benutzer. Der Schlüssel ist typischerweise der Username. wird ignoriert, wenn diese Struktur mit asnMgmtSetSIPGatewaySettingsV2 gesendet wird
bTrunkRegistration	boolean		TRUNK-Registrierung Wenn gesetzt, wird nur ein Register für alle Leitungen durchgeführt. Als AuthUserName und AuthPasswort wird das des "MainTrunkUser" verwendet.
u8sRegistrar	string		Registrar oder Proxy.
iRegistrarPort	number		Registrar- oder Proxy-Port.
u8sSTUNServer	string		Angabe des STUN-/TURN-Servers. Wird momentan nicht verwendet.
u8sDomainRealm	string		Domain-Part der Anmeldeadresse (entspricht i.d.R. der Registrar-Adresse).
iRegisterInterval	number		Zeitdauer bis zum nächsten Reregister.
iConnectionType	number		Verbindungstyp, i.d.R. ESIP_UDP. (Linked Type: AsnSIPConnectionTypeEnum)

		m)
u8sLocalInterfaceGUID	string	Die GUID der zu verwendenden Netzwerkschnittstelle.
u8sLineGroupName	string	Leitungsgruppenname der Konfiguration (Klartextname), wird zur Bildung der Leitungsadresse benutzt.
bDoRegister	boolean	muss auf true gesetzt sein, sonst registriert sich nicht der User
u8sMediaGatewayName	string	Eindeutiger Name des Gateways. Erscheint so in der UI.
iMediaMode	number	Media Mode Im Zusammenhang mit Kurento wird zunächst immer webrtc gesprochen
ilistAudioCodecs	SEQInteger	Untersttzte Audio-Codecs (Linked Type: AsnAudioCodesEnum)
iPBXProperties	number	PBX Eigenschaften
iPCAPTrace	number	Gateway Trace global
u8slistPCAPTraceLines	UTF8StringList	Gateway Trace lines
objFeatureCodes	AsnMgmtCtiFeatureCodeList	Vom Admin definierte Feature Codes, die im ME Bereich der SipAV-line gezeigt werden.
customProps	AsnStringPairList	Custom Properties for individual Line groups Property strings are defined as ELINEPROP_XXX ies */
iRegisterDelay	number	average delay between SIP Registrations
iPBXTransferProperties	number	PBX Transfer Eigenschaften
iRegisterNatRefreshInterval	number	Zeitdauer bis zum naechsten NAT Refresh.
iProvider	number	Handelt es sich um einen SIP-Provider?
iMinPorts	number	min Media Ports (e.g. Softphone)

iMaxPorts	number		max Media Ports (e.g. Softphone)
iNoEarlyMedia	number		Wurde Early Media deaktiviert?
bRegisteredUsersSendChanges	boolean	yes	true: Geänderte User in registeredUsersAdded, registeredUsersChanged, registeredUsersRemoved. false: Alle vorhandenen User in registeredUser default beim Empfänger (falls Wert nicht gesetzt): false
registeredUsersAdded	AsnSIPGatewaySettingsRegisteredUserList	yes	Liste der hinzugefügten registeredUser. Der Schlüssel ist typischerweise der Username.
registeredUsersChanged	AsnSIPGatewaySettingsRegisteredUserList	yes	Liste der geänderten registeredUser. Der Schlüssel ist typischerweise der Username.
registeredUsersRemoved	UTF8StringList	yes	Liste der entfernten registeredUser. Aufgelistet sind die Usernamen.
u8sLineGroupNameOld	string	yes	Leitungsgruppenname vor dem Umbenennen der Leitungsgruppe.

### 17.3.340 AsnMgmtGetSIPGatewaySettingsResult

AsnMgmtGetSIPGatewaySettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnSIPGatewayUASettingsList		
iNetworkInterfacesEnabled	number	yes	Network listen Interfaces enabled
networkInterfaces	AsnListenInterfaceDescriptionList	yes	Network listen Interfaces
iUsePublicIP	number	yes	Public IP enabled
iPublicPort	number	yes	Public Port
u8sPublicIP	string	yes	Public IP

iRegistrarEnabled	number	yes	Registrar enabled
u8sSipServerCertHash	string	yes	Auswahl Zertifikat/Hash

### 17.3.341 AsnMgmtSetSIPGatewaySettingsArgument

falls settingsOld gesetzt ist, wird das Delta von settingsNew gegenueber settingsOld in die im Server aktuellen settings uebernommen.  
sonst werden die aktuellen settings durch settingsNew komplett ersetzt.

AsnMgmtSetSIPGatewaySettingsArgument is an Object

Name	Type	Optional	Comment
settingsNew	AsnSIPGatewayUASettingsList		die Liste nach den Aenderungen
settingsOld	AsnSIPGatewayUASettingsList	yes	die Liste vor den Aenderungen
iNetworkInterfacesEnabled	number	yes	Network listen Interfaces enabled
networkInterfaces	AsnListenInterfaceDescriptionList	yes	Network listen Interfaces
iUsePublicIP	number	yes	Public IP enabled
iPublicPort	number	yes	Public Port
u8sPublicIP	string	yes	Public IP
iRegistrarEnabled	number	yes	Registrar enabled
u8sSipServerCertHash	string	yes	Auswahl Zertifikat/Hash

### 17.3.342 AsnMgmtSetSIPGatewaySettingsV2Argument

in contrast to AsnMgmtSetSIPGatewaySettingsArgument only the changes are sent

AsnMgmtSetSIPGatewaySettingsV2Argument is an Object

Name	Type	Optional	Comment
uaSettingsAdded	AsnSIPGatewayUASettingsList	yes	Liste der hinzugefügten SIP Gateways inkl. Registered User
uaSettingsChanged	AsnSIPGatewayUASettingsList	yes	Liste der geänderten SIP Gateways inkl. Änderungen an Registered Users
uaSettingsRemoved	UTF8StringList	yes	Liste der Namen

			(u8sLineGroupName) der gelÃ¶schten SIP Gateways
iNetworkInterfacesEnabled	number	yes	Network listen Interfaces enabled
networkInterfaces	AsnListenInterfaceDescriptionList	yes	Network listen Interfaces
iUsePublicIP	number	yes	Public IP enabled
iPublicPort	number	yes	Public Port
u8sPublicIP	string	yes	Public IP
iRegistrarEnabled	number	yes	Registrar enabled
u8sSipServerCertHash	string	yes	Auswahl Zertifikat/Hash

### 17.3.343 AsnMgmtSetCallRecorderSettingsArgument

AsnMgmtSetCallRecorderSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnCallRecorderSettings		

### 17.3.344 AsnMgmtGetCallRecorderSettingsResult

AsnMgmtGetCallRecorderSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnCallRecorderSettings		

### 17.3.345 AsnMgmtServerStatistics4AdminList

AsnMgmtServerStatistics4AdminList is an Array of AsnMgmtServerStatistics4Admin

AsnMgmtServerStatistics4Admin is an Object

Name	Type	Optional	Comment
u8sService	string		Statistics Categories (STATCAT_PROCALLUSERS, ...)
u8sServiceUIName	string		Service UI Name
iServiceState	number		Stat (ESERVERSTATSTATE_UNKNOWN, ...)
u8sActive	string		active/consumed/used Licenses/Calls/Interfaces

u8sCount	string	Diverse of Interfaces Status/IP/Port (eg 'Port:7222', 'active')
u8sLicenses	string	Number of available licenses

### 17.3.346 AsnMgmtMonGetServerStatisticsResult

AsnMgmtMonGetServerStatisticsResult is an Object

Name	Type	Optional	Comment
serverStatistics	AsnMgmtServerStatistics4AdminList		

### 17.3.347 AsnMgmtGetCtiServerTypeResult

AsnMgmtGetCtiServerTypeResult is an Object

Name	Type	Optional	Comment
iServerType	AsnMgmtUCServerType		The type of server we are connected to
iServerFeatures	number		The features this server is offering as bitmask (Linked Type: AsnMgmtUCServerFeatures)

### 17.3.348 AsnMgmtNotificationSettings

AsnMgmtNotificationSettings is an Object

Name	Type	Optional	Comment
iUnansweredCallEMailNotification	number		Optionen fÃ¼r unbeantwortete Rufe als E-Mail verschicken
bEMailNotificationUseCallerMailAddress	boolean		
bEMailNotificationSendEMailsClientSide	boolean		
bEMailNotificationAttacheVCard	boolean		
bEMailNotificationSendEMailsThirdPartyPickup	boolean		PCE-2378
bEMailNotificationUseTelephonyLinkPrefix	boolean		
emailNotificationExclusions	AsnMgmtNotificationSettingsExclusions		

iUnansweredCallSMSNotification	number		Optionen fÃ¼r unbeantwortete Rufe als SMS verschicken
bSMSNotificationUseCallerNumberAsOriginator	boolean		
objSMSNotificationExclusions	AsnMgmtNotificationSettingsExclusions		
iLanguage	number		Sprache fÃ¼r die Nachrichten
u8sUserDefinedTelephonyLinkPrefix	string		PCE-2378

### 17.3.349 AsnMgmtGetNotificationSettingsResult

AsnMgmtGetNotificationSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnMgmtNotificationSettings		

### 17.3.350 AsnMgmtSetNotificationSettingsArgument

AsnMgmtSetNotificationSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnMgmtNotificationSettings		

### 17.3.351 AsnSSLCertificateDetailsList

AsnSSLCertificateDetailsList is an Array of AsnSSLCertificateDetails

AsnSSLCertificateDetails is an Object

Name	Type	Optional	Comment
u8sCertHash	string		
u8sIssuedTo	string		
u8sIssuer	string		
timValidFrom	string		

timValidTo	string		
u8sListAlternateNames	UTF8StringList		
bPrivateKeyAvail	boolean		

### 17.3.352 AsnMgmtGetAvailableCertificatesResult

AsnMgmtGetAvailableCertificatesResult is an Object

Name	Type	Optional	Comment
certificateDetailsList	AsnSSLCertificateDetailsList		

### 17.3.353 AsnMgmtCtiForwardEntryList

AsnMgmtCtiForwardEntryList is an Array of AsnMgmtCtiForwardEntry

AsnMgmtCtiForwardEntry is an Object

Name	Type	Optional	Comment
iInternalID	number		Identifier dieses Eintrags in der Liste
iForwardController	number		Ist es eine Rufumleitung in der PBX oder im TapiServer (Linked Type: AsnMgmtForwardControllerEnum)
iForwardMode	number		Forward Mode (Linked Type: AsnMgmtForwardMode)
iBackEndSpecific	number		Backend specific Forwarding (used if m_dwForwardMode = ICTI_BACKENDSPECIFIC) Bei Tapi enthält das die eLINEFORWARDMODE_konstanten (Linked Type: AsnMgmtLineForwardModeEnum)
iNoAnswerTime	number		Zeit (Sekunden) für Umleitung bei NoAnswer (Wenn 0 wird die default Zeit verwendet)
u8sDestinationSC	string		Destination Rufnummer
u8slistCallerIDs	UTF8StringList		Liste der Anrufer CallerIDs (superkanonisch, lang), falls es sich um eine spezifische Umleitung handelt

### 17.3.354 AsnMgmtGetLineForwardingResult

AsnMgmtGetLineForwardingResult is an Object

Name	Type	Optional	Comment
iEnabled	number		

entryList	AsnMgmtCtiForwardEntryList		
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### 17.3.355 AsnMgmtSetLineForwardingArgument

AsnMgmtSetLineForwardingArgument is an Object

Name	Type	Optional	Comment
iFWController	number		
u8sLineID	string		
iEnabled	number		
entryList	AsnMgmtCtiForwardEntryList		

### 17.3.356 AsnMgmtAvailableLanguageList

AsnMgmtAvailableLanguageList is an Array of AsnMgmtAvailableLanguage

AsnMgmtAvailableLanguage is an Object

Name	Type	Optional	Comment
iLanguage	number		
mapTranslatedStrings	AsnStringIntegerPairList		
mapTranslatedStringToString	AsnStringPairList		

### 17.3.357 AsnMgmtGetXMLAvailableLanguagesResult

AsnMgmtGetXMLAvailableLanguagesResult is an Object

Name	Type	Optional	Comment
availLanguages	AsnMgmtAvailableLanguageList		

### 17.3.358 AsnMgmtPushServiceDevicePropsList

AsnMgmtPushServiceDevicePropsList is an Array of AsnMgmtPushServiceDeviceProps

AsnMgmtPushServiceDeviceProps is an Object

Name	Type	Optional	Comment
u8sDeviceID	string		DeviceID (vom Client generiert muss eindeutig sein)
u8sDeviceName	string		DeviceName (vom Client übermittelt, Freitext -

			Normalerweise Gerätename)
u8sContactID	string		UserName (Login Name)
u8sPushID	string		Push Device Token
u8sPushChannel	string		Push Channel (z.b. ios.estos.procall.6)
iOnlineState	number		Ist dieses Device gerade online?
timlastRegisterTime	string		Letzter Register Aufruf (windows utc)
iMessageTypes	number		Für welche Arten von Messages ist dieses Device angemeldet Dieser Member wird normalerweise über SetNewMessageTypes gesetzt, dann werden die Handler auch aktualisiert
iEncryptionMode	number		Encryption Mode for push messages

### 17.3.359 AsnMgmtPushServiceDevicesResultArgument

AsnMgmtPushServiceDevicesResultArgument is an Object

Name	Type	Optional	Comment
listPushDevices	AsnMgmtPushServiceDevicePropsList		List of Devices (max 50 in one segment)
u8sCrossRefID	string		CrossrefID from AsnMgmtGetPushServiceDevicesResult.
bLastSegment	boolean		last Segment for this u8sCrossRefID, TRUE, wenn dieses Segment das Ende der Liste ist.

### 17.3.360 AsnMgmtPushServiceDeviceChangedEventArgs

AsnMgmtPushServiceDeviceChangedEventArgs is an Object

Name	Type	Optional	Comment
iWhat	number		What about the list
deviceProps	AsnMgmtPushServiceDeviceProps		List of Devices (max 50 in one segment)

### 17.3.361 AsnMgmtGetPhoneJournalSettingsResult

AsnMgmtGetPhoneJournalSettingsResult is an Object

Name	Type	Optional	Comment
phoneJournalSettings	AsnMgmtPhoneJournalSettings		

### 17.3.362 AsnMgmtSetPhoneJournalSettingsArgument

AsnMgmtSetPhoneJournalSettingsArgument is an Object

Name	Type	Optional	Comment
phoneJournalSettings	AsnMgmtPhoneJournalSettings		

### 17.3.363 AsnMgmtMeshNodeConfigs

A List of mesh nodes

AsnMgmtMeshNodeConfigs is an Array of AsnMgmtMeshNodeConfig

AsnMgmtMeshNodeConfig is an Object

Name	Type	Optional	Comment
u8sComputerNameFQDN	string		The nodes FQDN DNS name
iPort	number		the node port
bForceTLS	boolean		force TLS?
u8sMeshNodeID	string		The mesh node id
blsDynamicMode	boolean		is not configured but dynamically found?
bNodeEnabled	boolean		This node is enabled (we try to contact the node, the node is allowed to contact us)

### 17.3.364 AsnMgmtSetMeshNodeConfigsArgument

AsnMgmtSetMeshNodeConfigsArgument is an Object

Name	Type	Optional	Comment
configs	AsnMgmtMeshNodeConfigs		

### 17.3.365 AsnMgmtGetMeshNodeConfigsResult

AsnMgmtGetMeshNodeConfigsResult is an Object

Name	Type	Optional	Comment

configs	AsnMgmtMeshNodeConfigs		
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### 17.3.366 AsnMgmtMeshNodeStatus

Status of a node

AsnMgmtMeshNodeStatus is an Object

Name	Type	Optional	Comment
u8sMeshNodeID	string		The mesh node id
iStatus	number		(Linked Type: AsnMgmtMeshNodeConnectionStatusEnum)
timeLastConnected	string		time_t last successful connect
timeLastStatusUpdate	string		time_t last status change
u8sServerVersion	string		ucserver version of the node
u8sIPAddress	string		IP Adress of the server
bOutbound	boolean		true if connection outbound
tlsStatus	AsnMgmtMeshNodeStatus TLS		details of the tls status of the connection

### 17.3.367 AsnMgmtMeshNodeStatuses

A List of mesh satatuses

AsnMgmtMeshNodeStatuses is an Array of AsnMgmtMeshNodeStatus

AsnMgmtMeshNodeStatus is an Object

Name	Type	Optional	Comment
u8sMeshNodeID	string		The mesh node id
iStatus	number		(Linked Type: AsnMgmtMeshNodeConnectionStatusEnum)
timeLastConnected	string		time_t last successful connect
timeLastStatusUpdate	string		time_t last status change

u8sServerVersion	string		ucserver version of the node
u8sIPAddress	string		IP Adress of the server
bOutbound	boolean		true if connection outbound
tlsStatus	AsnMgmtMeshNodeStatus TLS		details of the tls status of the connection

### 17.3.368 AsnMgmtGetMeshNodeStatusesResult

AsnMgmtGetMeshNodeStatusesResult is an Object

Name	Type	Optional	Comment
statuses	AsnMgmtMeshNodeStatuses		

### 17.3.369 AsnMgmtConnectionInformationChangedArgument

AsnMgmtConnectionInformationChangedArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID this information belongs to
conInfo	AsnMgmtClientConnectionInformation		Connection info (always contains the full list of connections, (no dedicated add remove notify))

### 17.3.370 AsnMgmtConnectionOptions

AsnMgmtConnectionOptions is an Array of AsnMgmtConnectionOption

AsnMgmtConnectionOption is an Object

Name	Type	Optional	Comment
u8sHostOrIP	string		Konfigurierte Serveradresse, dies kann ein Name oder eine Adresse sein
iPort	number		Zielport
bIsFromDNSRecords	boolean		Diese Option wurde aus dem DNS System gelesen
iDNSWeight	number		Wenn der Eintrag aus dem DNS Kommt ein mÃ¶gliches Gewicht dieses Eintrages

**17.3.371 AsnMgmtGetConnectionOptionsDNSResult**

AsnMgmtGetConnectionOptionsDNSResult is an Object

Name	Type	Optional	Comment
listConnectionOptions	AsnMgmtConnectionOptions		

**17.3.372 AsnMgmtGetConfigurationManagerSettingsResult**

AsnMgmtGetConfigurationManagerSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnMgmtConfigurationManagerSettings		

**17.3.373 AsnMgmtSetConfigurationManagerSettingsArgument**

AsnMgmtSetConfigurationManagerSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnMgmtConfigurationManagerSettings		

**17.3.374 AsnMgmt GetUserManagerConnectionStatusResult**

AsnMgmt GetUserManagerConnectionStatusResult is an Object

Name	Type	Optional	Comment
status	AsnMgmtUserManagerConnectionStatus		

**17.3.375 AsnMgmtUserManagerConnectionStatusChangedEventArgs**

AsnMgmtUserManagerConnectionStatusChangedEventArgs is an Object

Name	Type	Optional	Comment
status	AsnMgmtUserManagerConnectionStatus		

**17.3.376 AsnMgmtGetConfigurationManagerStatusResult**

AsnMgmtGetConfigurationManagerStatusResult is an Object

Name	Type	Optional	Comment

status	AsnMgmtConfigurationManagerStatus		
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### 17.3.377 AsnMgmtConfigurationManagerStatusChangedEventArgs

AsnMgmtConfigurationManagerStatusChangedEventArgs is an Object

Name	Type	Optional	Comment
status	AsnMgmtConfigurationManagerStatus		

### 17.3.378 AsnMgmtConfigurationManagerServerList

AsnMgmtConfigurationManagerServerList is an Array of AsnMgmtConfigurationManagerServerListItem

AsnMgmtConfigurationManagerServerListItem is an Object

Name	Type	Optional	Comment
serverListItem	string		Name of server
bRedisHeartbeat	boolean		Heartbeat in Redis? (i.e. connected to Redis?)

### 17.3.379 AsnMgmtGetConfigurationManagerServerListResult

AsnMgmtGetConfigurationManagerServerListResult is an Object

Name	Type	Optional	Comment
serverList	AsnMgmtConfigurationManagerServerList		

### 17.3.380 AsnMgmtConfigurationManagerServerListChangedEventArgs

AsnMgmtConfigurationManagerServerListChangedEventArgs is an Object

Name	Type	Optional	Comment
serverList	AsnMgmtConfigurationManagerServerList		

### 17.3.381 AsnMgmtGetAdminUserManagerSettingsResult

AsnMgmtGetAdminUserManagerSettingsResult is an Object

Name	Type	Optional	Comment
settings	AsnMgmtAdminUserManagerSettings		

iLastErrorCode	number		
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### 17.3.382 AsnMgmtSetAdminUserManagerSettingsArgument

AsnMgmtSetAdminUserManagerSettingsArgument is an Object

Name	Type	Optional	Comment
settings	AsnMgmtAdminUserManagerSettings		

### 17.3.383 AsnMgmtAdminUserRightChoice

AsnMgmtAdminUserRightChoice is a Choice

Name	Type	Comment
readwrite	AsnMgmtAdminUserRightStateReadWrite	
execute	AsnMgmtAdminUserRightStateExecute	

### 17.3.384 AsnMgmtAdminUserRight

The mapping right enum to details what i am allowed to do

AsnMgmtAdminUserRight is an Object

Name	Type	Optional	Comment
right	AsnMgmtAdminUserRightEnum		
state	AsnMgmtAdminUserRightChoice		

### 17.3.385 AsnMgmtAdminUserRights

AsnMgmtAdminUserRights is an Array of AsnMgmtAdminUserRight

AsnMgmtAdminUserRight is an Object

Name	Type	Optional	Comment
right	AsnMgmtAdminUserRightEnum		
state	AsnMgmtAdminUserRightChoice		

### 17.3.386 AsnMgmtGetAdminUserRightsResult

AsnMgmtGetAdminUserRightsResult is an Object

Name	Type	Optional	Comment
rights	AsnMgmtAdminUserRights		

### 17.3.387 AsnMgmtComputerFoundEventArgs

AsnMgmtComputerFoundEventArgs is an Object

Name	Type	Optional	Comment
computerProfile	AsnComputerProfile		
softwareStatusComputer	AsnMgmtSoftwareStatusComputer		
clientInstallProfileData	AsnMgmtClientInstallProfileData		

### 17.3.388 AsnMgmtGetLineStatesEventArgs

AsnMgmtGetLineStatesEventArgs is an Object

Name	Type	Optional	Comment
iDumpMessage	number		
iDumpType	number		
u8sLineID	string		
iOpenState	number		(Linked Type: AsnCtiLineOpenStatus)
iNumCalls	number		
iSipResponseCode	number		
u8sReasonPhrase	string		
u8sEffectiveHomeServer	string	yes	ProCall DataCenter only. This is the effective home server identification of the UCServer that (currently) provides this line. For SIPAV lines and TAPI lines not enabled by the "use lines automatically" feature, this is usually the same as the home server in the line's configuration. However, when moving a line between two servers, this may differ for a short period of time. For TAPI lines that are enabled by the "use lines automatically" feature this might (temporarily) contain multiple

			servers in the format (2)server1.domain.de;server2.domain.d e Important: The format "(count)server1;server2;servern" is only a temporary workaround. do not try to parse!
lineStatusList	AsnMgmtLineStatusList	yes	ProCall DataCenter only: List of line status from several servers

### 17.3.389 AsnMgmtOnLineGroupAddedArgument

AsnMgmtOnLineGroupAddedArgument is an Object

Name	Type	Optional	Comment
config	AsnMgmtTapiLineGroupConfiguration		

### 17.3.390 AsnMgmtOnLineGroupChangedEventArgs

AsnMgmtOnLineGroupChangedEventArgs is an Object

Name	Type	Optional	Comment
config	AsnMgmtTapiLineGroupConfiguration		

### 17.3.391 AsnMgmtGetUsersEventArgs

AsnMgmtGetUsersEventArgs is an Object

Name	Type	Optional	Comment
userProfile	AsnUserProfile		
clientConnectionInfo	AsnMgmtClientConnectionInformation		

### 17.3.392 AsnMgmtUserManagerConnectionStatusList

AsnMgmtUserManagerConnectionStatusList is an Array of AsnMgmtUserManagerConnectionStatus

AsnMgmtUserManagerConnectionStatus is an Object

Name	Type	Optional	Comment
bADConnected	boolean		

**17.3.393 AsnMgmtConfigurationManagerStatusList**

AsnMgmtConfigurationManagerStatusList is an Array of AsnMgmtConfigurationManagerStatus

AsnMgmtConfigurationManagerStatus is an Object

Name	Type	Optional	Comment
bRemoteDBEnabled	boolean		
bRemoteDBConnected	boolean		
bRemoteDBInitiallyFullSynced	boolean		
bRemoteDBEmpty	boolean		
u8sRemoteDBLastError	string		

## 18 PresenceV2

Presence interface (Version 2)

### Module description

This module defines structures and operations for the presence V2 interface.

A version 2 of the presence interface was necessary to improve the amount of contact and service data.

The presence shows at any time the current availability of the person you wish to communicate with. For a detailed description see the help of the UCClient.

The following presence states are available:

- Available (green)
- Busy (red)
- Absent (yellow)
- Inactive (green/yellow)
- Don't disturb (red with a white stripe)
- Offline (gray)

Additionally the API delivers information in form of contact data, service states and much more.

With all these informations, it is possible to create an application, which give user the ability to see a detailed picture of a contact enriched with live state changes.

The live changes are results of the different services the UCServer combines the presence state of the user:

- Telephone (via CTI)
- Calendar
- Audio/Video
- Softphone
- Bluetooth device (locally attached to a client of the user).
- Manual input of the user

### Prerequisite for using the interface

- The client needs a socket for secure data transmission between client-server and vice versa.
- Installation of ProCall Software in advance
- Then create a user for testing purposes
- login in this user name and check the functionality of this interface practically

### Functionalities

- The status for client will be driven from various sources like:
- Digital Telephone, Mobile, Calender(ms outlook), Audio/Video Chat, Manually changing Status and Computer system(login/logout).
- The user has the permission to manually change the status
- The user can set a user-defined status (ex: Coffee Break)
- The user can set a couple of notices (ex: listing the daily appointments)
- The user can change status and notice
- The user can remove status and notice

### Events

The Events that the client receives from the server are:

- **asnUpdatePresence(V2)** :

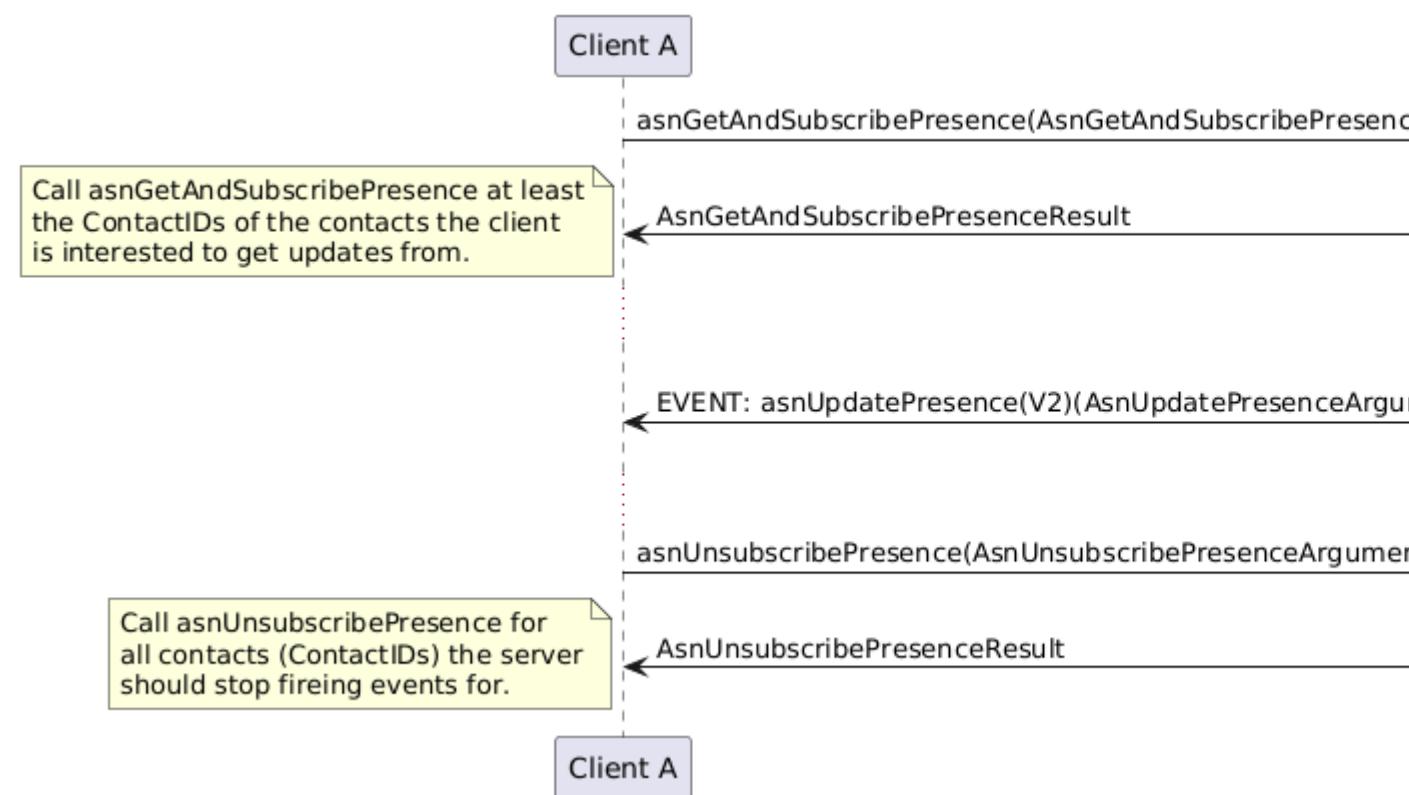
- It delivers the responses from Server to Client as per Client request
- The Server receives the specific request like asnCustomNote from Client
- The Client reciprocally receives an asnUpdatePresence(V2) from Server
- The Update-Event will also be sent to those clients who are in touch with this client in the same Server
- It receives the Event from server in two forms whether an Argument or an Error
- As Argument: It handles the **Presence** and **iChangedFlags** events
  - Presence : it shows updated data of the present-contact.
  - iChangedFlags : it indicates that which area triggers the event and it's included because later on the server fills the fields
- \* check the AsnPresence(Active details) for more details

- **asnRemovePresence** :

- It needs a contact id to remove the presence state
- It has an optionalParams for further implementation

## How the API works

Here is a very simple diagram of how the presence API works



### 18.1 PresenceV2 Operations

#### 18.1.1 `asnGetAndSubscribePresenceV2`

Operation to retrieve contact data and to subscribe to events when these data will change.

If a client is interested in monitoring the presence and data of its own and other contacts, this operation gives the possibility to get data about a contact, its used services (lines, appointments, chat etc.) and his calculated presence. See `AsnGetAndSubscribePresenceArgument` for more information.

To unsubscribe from contacts, call `asnUnsubscribePresence`. This is highly recommended before closing the connection to the ucserver.

If the operation fails it will return `AsnRequestError`

If the operation is successful at least on some given contacts, it will return `AsnGetAndSubscribePresenceResult`.

### **ArgumentType: AsnGetAndSubscribePresenceArgument**

`AsnGetAndSubscribePresenceArgument` is an Object

Name	Type	Optional	Comment
<code>seqContactIDs</code>	<code>UTF8StringList</code>		List of strings containing the contact ID of the requested contact (e.g. 'sip:tester@test.com')
<code>iEventFlagsToSubscribe</code>	<code>number</code>	<code>yes</code>	<code>AsnPresenceSubscriptionFlags</code> - which events does the client wants to receive from the server.
<code>iContactDetailsReturnFilter</code>	<code>number</code>	<code>yes</code>	<code>AsnPresenceSubscriptionFlags</code> - which return values are needed from the ucserver.
<code>bOpenOnlyInternalContacts</code>	<code>boolean</code>	<code>yes</code>	
<code>bDontRequestPermissions</code>	<code>boolean</code>	<code>yes</code>	Keine Berechtigungsanfrage starten

### **ResultType: AsnGetAndSubscribePresenceV2Result**

`AsnGetAndSubscribePresenceV2Result` is an Object

Name	Type	Optional	Comment
<code>seqSubscribedPresence</code>	<code>AsnPresenceV2List</code>		Kontakte die angefordert wurden

### **ErrorType: AsnRequestError**

`AsnRequestError` is an Object

Name	Type	Optional	Comment
<code>iErrorDetail</code>	<code>number</code>		A number representing the error
<code>u8sErrorMessage</code>	<code>string</code>		A string representing the error

### 18.1.2 asnUnsubscribePresence

Operation to end subscriptions on contacts on the ucserver.

To stop getting events from contacts on the ucserver this operation is called with the list contact IDs of these contacts.

If the operation is executes successful, it will return the result AsnUnsubscribePresenceResult

If an error occured, AsnRequestError will be returned.

#### ArgumentType: AsnUnsubscribePresenceArgument

AsnUnsubscribePresenceArgument is an Object

Name	Type	Optional	Comment
seqContactIDs	UTF8StringList		List of contact IDs to unsubscribe from (e.g. 'sip:tester@test.com').

#### ResultType: AsnUnsubscribePresenceResult

AsnUnsubscribePresenceResult is an Object

Name	Type	Optional	Comment
iResult	number		

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### 18.1.3 asnSetDynamicRights

Operation to set access rights for another contact on contact data and contcat service information.

This operation is used to grant access rights (or changing them) to other users (contacts) on contact informations and service states of this contact.

**Note:** The access rights in the ucserver are always a sum of the global, group and personal right lists and what they grant. So removing specific rights with this operation has no effect if the same rights are granted through global or group rights.

If the operation was executed successfully the result AsnSetDynamicRightsResult is returned.

If an error occurred, AsnRequestError is returned.

### The access rights list

If a client wants to receive contact data, its logged in contact (= user) has to have access rights granted by the other user to him.

Each user of the ucserver has a list of access rights she gives other users. If someone is in this list, he can see contact data and/or service states of the user depending on the rights level granted.

The list can be modified by asnSetDynamicRights and asnRemoveDynamicRights

### Contact rights challenge

In conjunction with the access rights list is the mechanic of the "contact rights challenge".

To get on the access list of another user, the user must request such rights from him or will get them through administrative configuration.

If there is no administrative configuration the other user will be "challenged" to grant or deny rights to the user.

This process is started as soon as a user (challenger) requests the ucserver by calling asnGetAndSubscribePresence on another users ContactID (challengee).

The ucserver checks if there are already given rights and if not, the challenged user gets a new entry in his challenge request list, which then will be dispatched to all of his clients. These clients should now prompt the user to accept or deny the request and the result will be saved in his access rights list.

On the other side, the challenger will get data and service status after some time or not. There is no extra notification if the challenge was answered or not.

### ArgumentType: AsnSetDynamicRightsArgument

AsnSetDynamicRightsArgument is an Object

Name	Type	Optional	Comment
u8sOwnerContactID	string		ContactID of the contact who grants/changes the rights.
u8sRemoteContactID	string		ContactID of the contact to give to/change the rights.
iDynamicRights	number		Valid values are (taken from AsnPresenceRightsFlags): <ul style="list-style-type: none"> <li>• eBlocked (0)</li> <li>• ePublic (65536, 0x0001 0000)</li> <li>• eCompany (131072, 0x0002 0000)</li> <li>• eTeam (262144, 0x0004 0000)</li> <li>• ePersonal (524288, 0x0008 0000)</li> </ul>
dynamicRights	AsnUserDynamicRights	yes	Only use this member to give access rights, which are not part of the predefined patterns.

			<p><b>This is not recommended</b>, so you can leave this optional parameter unset.</p> <p>If these rights are set, the parameters u8sOwnerContactID a iDynamicRights are ignored.</p>
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**ResultType: AsnSetDynamicRightsResult**

AsnSetDynamicRightsResult is an Object

Name	Type	Optional	Comment
iResult	number		Should always be 0 (NO_ERROR).
dynamicRights	AsnUserDynamicRights		The resulting rights in the rights list of the contact which rightslist had to be changed. This includes NOT the rights granted by global or group rights!

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**18.1.4 asnRemoveDynamicRights**

This operation is used for removing access rights to contact data and service states between contacts.

If a client wants to remove access rights to contact data and service states between contacts, `asnRemoveDynamicRights` has to be called.

Removing access rights will remove an entry in the access rights list of the contact who grants the rights. This means, that

'remote contact' (see. `AsnRemoveDynamicRightsArgument`) has the chance to request new rights again.

In order to prevent the 'remote contact' to request new rights, the contact should be blocked (setting user right 'blocked'). See `asnSetDynamicRights` for more details.

**ArgumentType: AsnRemoveDynamicRightsArgument**

`AsnRemoveDynamicRightsArgument` is an Object

Name	Type	Optional	Comment
u8sOwnerContactID	string		ContactID - owner of the access list which will be changed
u8sRemoteContactID	string		ContactID - Contact which will be removed from the access list.

### **ResultType: AsnRemoveDynamicRightsResult**

AsnRemoveDynamicRightsResult is an Object

Name	Type	Optional	Comment
iResult	number		Rückgabewert ob das geklappt hat, wenn nicht != 0

### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### **18.1.5 asnRequestLargeProfileImage**

Request an large image of a contact.

With the operation `asnRequestLargeProfileImage` can request a large image of a contact. The large image can be optionally configured by the administrator additionally to the 'normal' small image in order to provide a higher resolution image of the contact for special purposes (like LiveChat client). Like with `asnRequestContactImage`, this operation is used to get or check the image from the server and the server can determine the need to provide a new image to the client using the given hash value.

### **ArgumentType: AsnRequestLargeProfileImageArgument**

AsnRequestLargeProfileImageArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID of the contact to get or check the image
u8sKnownHash	string		If the client has an image already, it sends its hash so the server can determine if the image has changed.

netDatabaseContactID	AsnNetDatabaseContactID	yes	Alternatively to u8sContactID one can use the AsnNetDatabaseContactID to identify the contact.
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**ResultType: AsnRequestLargeProfileImageResult**

AsnRequestLargeProfileImageResult is an Object

Name	Type	Optional	Comment
iResult	number		EnumRequestImageResult - result of the call, if there is a new image, no image at all or the image hash has not changed.
sImageData	string	yes	If an image is send to the client, this field contains the binary data of the image.
u8sImageHash	string	yes	If an image is send to the client, this field contains the corresponding hash value for that image.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**18.1.6 asnRequestContactImage**

Request an image of a contact

This operation requests the normal (or 'small') Image of a contact. The caller sends a known hash of an already existing image to the server, so that the server can determine that the client get the stored image (the hash is not equal) or responds to the client, that the image has not changed (hash is equal).

If there is no image, no image is returned.

**ArgumentType: AsnRequestContactImageArgument**

AsnRequestContactImageArgument is an Object

Name	Type	Optional	Comment
netDatabaseContactID	AsnNetDatabaseContactID		The contact identity of the contact of which the client wants to check or get the image of.
u8sKnownHash	string		If the client has an image already, it

			sends its hash so the server can determine if the image has changed.
--	--	--	--

**ResultType: AsnRequestContactImageResult**

AsnRequestContactImageResult is an Object

Name	Type	Optional	Comment
iResult	number		EnumRequestImageResult - result of the call, if there is a new image, no image at all or the image hash has not changed.
slImageData	string	yes	If an image is send to the client, this field contains the binary data of the image.
u8sImageHash	string	yes	If an image is send to the client, this field contains the corresponding hash value for that image.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**18.2 PresenceV2 Events****18.2.1 asnUpdatePresenceV2**

Event from the server to the client about presence updates

This event is fired from the server if the client has subscribed by `asnGetAndSubscribePresence` on a contact (=user).

It contains the new presence state and other data which has changed.

**ArgumentType: AsnUpdatePresenceV2Argument**

AsnUpdatePresenceV2Argument is an Object

Name	Type	Optional	Comment
presence	AsnPresenceV2		Updated data and service states of the contact. See <code>AsnPresence</code> for more details.
iChangedFlags	number		Flags indicating which data sections of the contact have triggered the event. @linked <code>AsnPresenceSubscriptionFlags</code>

## 18.2.2 asnRemovePresence

Event from the server tthat the contact has been removed from the presence system.

This event will be sent to clients when a contact is removed from the presence system of the ucserver. Mostly by removing or deactivating the contact in the user management system.

### ArgumentType: AsnRemovePresenceArgument

AsnRemovePresenceArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID of the contact removed.

## 18.3 PresenceV2 Types

### 18.3.1 AsnPresenceSubscriptionFlags

This enum is for selecting the events and direct return values in which the client is interested when it calls asnGetAndSubscribePresence.

This enum describes the bit values used by iEventFlagsToSubscribe and iContactDetailsReturnFilter of AsnGetAndSubscribePresenceArgument in which the caller can select in which events and result value he is interested in.

AsnPresenceSubscriptionFlags is an Enumeration

Name	Type	Value	Comment
ePresenceSubscriptionPresence	number	1	Send the calculated contact presence value (default: on)
ePresenceSubscriptionData	number	2	Send the complete, static contact data (name, adress, etc.) (default: on)
ePresenceSubscriptionDataIncludeImage	number	4	Send the complete contact image (if there is one) not only the hash value (default: on)
ePresenceSubscriptionConfiguration	number	8	Send information about the contact configuration (changes about access rights etc.) (default: on)
ePresenceSubscriptionAbsentstate	number	16	Send information about the actual absent state. This is

				manual set presence, not the calculated one, which includes not only the absent state. (default: on)
ePresenceSubscriptionNote	number	32		Send information about the note of the contact (default: on)
ePresenceSubscriptionAppointments	number	64		Send information about appointments (default: on)
ePresenceSubscriptionPhoneLines	number	128		Send information about the phone lines of the contact (default: on)
ePresenceSubscriptionPhoneCalls	number	256		Send information about the calls on the phone lines of the contact (default: on)
ePresenceSubscriptionPhoneForwards	number	512		Send information about the forward states on the phone lines of the contact (default: on)
ePresenceSubscriptionMyChallengeUpdates	number	1024		Send information about the contact right challenges if some contact requests new contact rights
ePresenceSubscriptionDynamicRightsUpdate	number	2048		Send information about changes to the own authorization list = 0x00000800,
ePresenceSubscriptionDynamicGroupRightsUpdate	number	4096		Send information about changes to an authorization list on a group the logged in user is member of = 0x00001000,
ePresenceSubscriptionDynamicGlobalRightsUpdate	number	8192		Send informations about changes to the global authorisation list = 0x00002000,

ePresenceSubscriptionAgentStatus	number	32768	Send agent state events of other users. This is not part of the default value! = 0x00008000,
ePresenceSubSCRIPTIONMonitorGroupingAttribute	number	65536	Send events by changes on the monitor grouping attributes. This is not part of the default value! = 0x00010000

### 18.3.2 AsnSetDynamicRightsErrorEnum

This enumeration describes the possible iErrorDetail values of AsnRequestError if an error occurred in the operation asnSetDynamicRights

This enumeration describes the possible iErrorDetail values of AsnRequestError if an error occurred in the operation asnSetDynamicRights

AsnSetDynamicRightsErrorEnum is an Enumeration

Name	Type	Value	Comment
general	number	0	
permissiondenied	number	1	
writeprofiledenied	number	2	
unknownrights	number	3	

### 18.3.3 AsnRemoveDynamicRightsErrorEnum

This enumeration describes possible values returning from the server calling asnRemoveDynamicRights

This enumeration describes the values returned from the server in case the a call of asnRemoveDynamicRights fails.

The values are part of the then returned AsnRequestError

AsnRemoveDynamicRightsErrorEnum is an Enumeration

Name	Type	Value	Comment
general	number	0	
permissiondenied	number	1	

writeprofiledenied	number	2	
unknownrights	number	3	

#### 18.3.4 EnumRequestImageResult

This enumeration describes the values possible returned by asnRequestContactImage and asnRequestLargeProfileImage

This are the possible returning values from getting an image from the server and the call was successful. The values represent that the result contains an image, the image has not changed and therefore there is no image data sent or there is no image for the given contact.

EnumRequestImageResult is an Enumeration

Name	Type	Value	Comment
eIMAGEATTACHED	number	0	The requested image is attached in the result.
eIMAGEHASHNOTCHANGED	number	1	The image has not changed according to the given hash and therefore there is no image in the result.
eNOIMAGEFOUND	number	2	There is no image for the given contact.

#### 18.3.5 AsnPresenceLine

The structure is used to describe a phone line of a contact.

The structure is used to describe a phone line of a contact, including its state, their number and URI, forwards on the line currently set.

AsnPresenceLine is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		LineURI
u8sLineNumber	string		Lesbare Nummer der Leitung (extrahiert aus der LineURI)
iState	number		Line State
iDoNotDisturb	number		Line is on DoNotDisturb (1) or not (0)
iForwardFeaturesPBX	number		What kind of forwarding this line supports

#### 18.3.6 AsnPresenceCallV2

This structure describes the information about a call on a phone line.

This structure describes the information about a call on a phone line of a contact including the last action taken by the call (added, removed, changed), the current call state, features/functions available on the call, call type and if available the remote contact.

AsnPresenceCallV2 is an Object

Name	Type	Optional	Comment
iAction	number		add/remove/change
u8sConnectionID	string		the connectionID of the call
u8sLinePhoneNumber	string		the lineURI of the device that holds the call
u8sLineNumber	string		the readable number from the lineURI
u8sCurrentNumberSC	string		the number of the current remote side (in and outbound) in full qualified supercanonic notation
u8sTrackerID	string		the id of the call tracker the associates multiple calls to one scenario
eCallState	EAsnCallState		The state of the call
iFeatures	number		Was darf der Eventempfänger mit dem Call machen
bOutbound	boolean		true outbound, false inbound
bInternal	boolean		true internal conversation partner
eCallType	EAsnCallType		The type of call
eJournalCallType	EAsnJournalCallType		the journal call type
remoteContact	AsnNetDatabaseContact	yes	Das nächstgelegene über den Anrufer soweit bekannt

### 18.3.7 AsnPresenceForward

This structure describes the phone forward state of a phone line.

A phone line can be set to forward call automatically to other endpoints. This structure describes the different forward states.

AsnPresenceForward is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		LineURI der betroffenen Leitung

u8sLineNumber	string		Lesbare Nummer der Leitung (extrahiert aus der LineURI)
iInternalID	number		Interne ID des Forwards
u8sDestination	string		Ziel der Umleitung
iForwardMode	number		Art der Umleitung
iNoAnswerTime	number	yes	nach wie vielen sekunden bei noAns weitergeleitet wird

### 18.3.8 AsnActualUserDynamicRights

Structure for AsnPresence to give the client a hint, whcih access rights are effective to set on an contact.

Minimum and maximum of the user dynamic rights which can be set to a contact. See more details in AsnPresence .

AsnActualUserDynamicRights is an Object

Name	Type	Optional	Comment
asnMinPossibleRights	AsnUserDynamicRights		The minimum of possible rights to set.
asnMaxPossibleRights	AsnUserDynamicRights		The maximum of possible rights to set.
asnCurrentRights	AsnUserDynamicRights	yes	If not set, there are no rights set already.

### 18.3.9 AsnAgentState

Struture for AsnPresence of the actual agent state of the contact

To reflect the actual agent state of a contact which is a PBX or LiveChat Agent, this struture contains the state and agentgroup list of the contact.

AsnAgentState is an Object

Name	Type	Optional	Comment
dwState	number		AsnAgentStateEnum - the current agent state of the contact.
mapDetails	AsnStringIntegerPairList	yes	To be Documented - Agent Group List with states?

### 18.3.10AsnRemovePresenceArgument

Argument for the event asnRemovePresence

The argument contains only the ContactID if the contact whcih has been removed.

AsnRemovePresenceArgument is an Object

Name	Type	Optional	Comment
u8sContactID	string		ContactID of the contact removed.

### 18.3.11 AsnGetAndSubscribePresenceArgument

Call this operation to get information about and events of another contact.

This operation enables the client to request informations and events about another contact. The minimal parameter is a list of contact IDs (e.g. 'sip:tester@test.com'). These contacts will be searched in the ucserver and the service will return contact data back in the result and send events about changes from there on.

The data returned and events which will be send are depending on access rights and accessibility on the contact data.

Which events and return values are necessary for the client can be adjusted by the iEventFlagsToSubscribe and iContactDetailsReturnFilter members.

**Note:** Federation contacts (contgacts managed on another server as the connected one) may not return most of the data even the bits are set. This is because the ucserver has to contact the appropriate server first and this can take some time. To prevent long response times, the data which will be eventually given by the appropriate server will be send back via event.

If the client wants to prevent SIP or XMPP fedeation contacts, it can set bOpenOnlyInternalContacts to true.

If the client wants to prevent requesting new contact rights on the contact it can set bDontRequestPermissions to true.

AsnGetAndSubscribePresenceArgument is an Object

Name	Type	Optional	Comment
seqContactIDs	UTF8StringList		List of strings containing the contact ID of the requestet contact (e.g. 'sip:tester@test.com')
iEventFlagsToSubscribe	number	yes	AsnPresenceSubscriptionFlags - which events does the client wants to receive from the server.
iContactDetailsReturnFilter	number	yes	AsnPresenceSubscriptionFlags - which return values are needed from the ucserver.
bOpenOnlyInternalContacts	boolean	yes	
bDontRequestPermissions	boolean	yes	Keine Berechtigungsanfrage starten

### 18.3.12 AsnUnsubscribePresenceArgument

Argument for stopping contact subscriptions on the ucserver.

To stop getting contact events from the ucserver with the operation asnUnsubscribePresence this sequence contains the list of contact IDs to unsubscribe from.

AsnUnsubscribePresenceArgument is an Object

Name	Type	Optional	Comment
seqContactIDs	UTF8StringList		List of contact IDs to unsubscribe from (e.g. 'sip:tester@test.com').

### 18.3.13 AsnUnsubscribePresenceResult

Result of asnUnsubscribePresence if the operation was executed successfully

This result sequence is send by the server if the unsubscribe wents successfull. iResult should always be 0.

AsnUnsubscribePresenceResult is an Object

Name	Type	Optional	Comment
iResult	number		

### 18.3.14 AsnSetDynamicRightsArgument

Argument for asnSetDynamicRights to set/change access rights to contact data and its service informations

The argument must contain the contact ID of the contact which access rights list has to be modified, the contact ID of the contact which gets/loses the rights and the rights itself.

The rights can be set with a constant value (iDynamicRights) or more specialized with the optional AsnUserDynamicRights member (not recommended, only use it for very special edge cases).

The values for iDynamicRights are part of AsnPresenceRightsFlags in the general module. The valid values are:

- eBlocked (0)
- ePublic (65536, 0x0001 0000)
- eCompany (131072, 0x0002 0000)
- eTeam (262144, 0x0004 0000)
- ePersonal (524288, 0x0008 0000)

AsnSetDynamicRightsArgument is an Object

Name	Type	Optional	Comment
u8sOwnerContactID	string		ContactID of the contact who grants/changes the rights.
u8sRemoteContactID	string		ContactID of the contact to give to/change the rights.
iDynamicRights	number		<p>Valid values are (taken from AsnPresenceRightsFlags):</p> <ul style="list-style-type: none"> <li>• eBlocked (0)</li> <li>• ePublic (65536, 0x0001 0000)</li> <li>• eCompany (131072, 0x0002 0000)</li> <li>• eTeam (262144, 0x0004 0000)</li> <li>• ePersonal (524288, 0x0008 0000)</li> </ul>
dynamicRights	AsnUserDynamicRights	yes	<p>Only use this member to give access rights, which are not part of the predefined patterns.</p> <p><b>This is not recommended</b>, so you can leave this optional parameter unset.</p> <p>If these rights are set, the parameters u8sOwnerContactID a iDynamicRights are ignored.</p>

### 18.3.15 AsnSetDynamicRightsResult

Result of asnSetDynamicRights if the operation was successful.

If asnSetDynamicRights was executed successful, this result will be returned and it will contain the resulting access rights list.

AsnSetDynamicRightsResult is an Object

Name	Type	Optional	Comment
iResult	number		Should always be 0 (NO_ERROR).
dynamicRights	AsnUserDynamicRights		The resulting rights in the rights list of the contact which rightslist had to be changed. This includes NOT the rights granted by global or group rights!

### 18.3.16 AsnRemoveDynamicRightsArgument

Argument for asnRemoveDynamicRights

The operation `asnRemoveDynamicRights` get only two parameters in its argument. `u8sOwnerContactID` of the contact which access list will be changed and `u8sRemoteContactID` of the contact which will be removed from the list.

`AsnRemoveDynamicRightsArgument` is an Object

Name	Type	Optional	Comment
<code>u8sOwnerContactID</code>	string		ContactID - owner of the access list whoich will be changed
<code>u8sRemoteContactID</code>	string		ContactID - Contact which will be removed from the access list.

### 18.3.17AsnRemoveDynamicRightsResult

Result of `asnRemoveDynamicRights`

The operation `asnRemoveDynamicRights` returns this result, if removing the dynmaic rights from the list was successful.

`AsnRemoveDynamicRightsResult` is an Object

Name	Type	Optional	Comment
<code>iResult</code>	number		RÃ¼ckgabewert ob das geklappt hat, wenn nicht != 0

### 18.3.18AsnRequestLargeProfileImageArgument

Argument for `asnRequestLargeProfileImage`

To get or check an large image of a contact, the client calls `asnRequestContactImage` with the `ContactID` (e.g. 'tester@test.com') or the `AsnNetDatabaseContactID` of the contact and the known image hash the client already has. If the client has no hash, an empty string will indicate the server that the client does not have an image yet.

`AsnRequestLargeProfileImageArgument` is an Object

Name	Type	Optional	Comment
<code>u8sContactID</code>	string		ContactID of the contact to get or check the image
<code>u8sKnownHash</code>	string		If the client has an image already, it sends its hash so the server can determine if the image has changed.
<code>netDatabaseContactID</code>	<code>AsnNetDatabaseContactID</code>	yes	Alternatively to <code>u8sContactID</code> one can use the <code>AsnNetDatabaseContactID</code> to identify the contact.

### 18.3.19 AsnRequestLargeProfileImageResult

Result of asnRequestLargeProfileImage

If the operation asnRequestLargeProfileImage was executed successfully, this result will be send back to the client.

If there is no image or the image has not changed according the hash value given in the argument, iResult will contain the corresponding value from EnumRequestImageResult

If the server will send back an image, sImageData will contain the binary data of the image and u8sImageHash the corresponding new hash value for that image.

AsnRequestLargeProfileImageResult is an Object

Name	Type	Optional	Comment
iResult	number		EnumRequestImageResult - result of the call, if there is a new image, no image at all or the image hash has not changed.
sImageData	string	yes	If an image is send to the client, this field contains the binary data of the image.
u8sImageHash	string	yes	If an image is send to the client, this field contains the corresponding hash value for that image.

### 18.3.20 AsnRequestContactImageArgument

Argument for asnRequestContactImage

To get or check an image of a contact, the client calls asnRequestContactImage with the AspNetDatabaseContactID of the contact and the known image hash the client already has. If the client has no hash, an empty string will indicate the server that the client does not have an image yet.

AsnRequestContactImageArgument is an Object

Name	Type	Optional	Comment
netDatabaseContactID	AspNetDatabaseContactID		The contact identity of the contact of which the client wants to check or get the image of.
u8sKnownHash	string		If the client has an image already, it sends its hash so the server can determine if the image has changed.

### 18.3.21 AsnRequestContactImageResult

Result of asnRequestContactImage

If the operation `asnRequestContactImage` was executed successfully, this result will be send back to the client.

If there is no image or the image has not changed according the hash value given in the argument, `iResult` will contain the corresponding value from `EnumRequestImageResult`

If the server will send back an image, `sImageData` will contain the binary data of the image and `u8sImageHash` the corresponding new hash value for that image.

`AsnRequestContactImageResult` is an Object

Name	Type	Optional	Comment
<code>iResult</code>	number		<code>EnumRequestImageResult</code> - result of the call, if there is a new image, no image at all or the image hash has not changed.
<code>sImageData</code>	string	yes	If an image is send to the client, this field contains the binary data of the image.
<code>u8sImageHash</code>	string	yes	If an image is send to the client, this field contains the corresponding hash value for that image.

### 18.3.22 AsnMonitorGroupingAttribute

Future use

`AsnMonitorGroupingAttribute` is an Object

Name	Type	Optional	Comment
<code>u8sAttributeGUID</code>	string	yes	Identification of grouping attribute set if it is defined by administration
<code>u8sAttributeShort</code>	string	yes	Short or abbreviation of the attribute
<code>u8sAttributeLong</code>	string	yes	Attribute or "Main" attribute
<code>u8sAdditionalText</code>	string	yes	Additional text or "secondary" attribute

### 18.3.23 AsnPresenceLines

List of `AsnPresenceLine` structures.

List of `AsnPresenceLine` structures.

`AsnPresenceLines` is an Array of `AsnPresenceLine`

`AsnPresenceLine` is an Object

Name	Type	Optional	Comment
<code>u8sLinePhoneNumber</code>	string		<code>LineURI</code>

u8sLineNumber	string		Lesbare Nummer der Leitung (extrahiert aus der LineURI)
iState	number		Line State
iDoNotDisturb	number		Line is on DoNotDisturb (1) or not (0)
iForwardFeaturesPBX	number		What kind of forwarding this line supports

### 18.3.24 AsnPresenceCallsV2

List of AsnPresenceCallV2 structures.

List of AsnPresenceCall structures.

AsnPresenceCallsV2 is an Array of AsnPresenceCallV2

AsnPresenceCallV2 is an Object

Name	Type	Optional	Comment
iAction	number		add/remove/change
u8sConnectionID	string		the connectionID of the call
u8sLinePhoneNumber	string		the lineURI of the device that holds the call
u8sLineNumber	string		the readable number from the lineURI
u8sCurrentNumberSC	string		the number of the current remote side (in and outbound) in full qualified supercanonic notation
u8sTrackerID	string		the id of the call tracker the associates multiple calls to one scenario
eCallState	EAsnCallState		The state of the call
iFeatures	number		Was darf der Eventempfänger mit dem Call machen
bOutbound	boolean		true outbound, false inbound
bInternal	boolean		true internal conversation partner
eCallType	EAsnCallType		The type of call
eJournalCallType	EAsnJournalCallType		the journal call type
remoteContact	AsnNetDatabaseContact	yes	Das nächstgelegene Älterer den Anrufer soweit bekannt

### 18.3.25 AsnPresenceForwards

List of AsnPresenceForward structures.

List of AsnPresenceForward structures.

AsnPresenceForwards is an Array of AsnPresenceForward

AsnPresenceForward is an Object

Name	Type	Optional	Comment
u8sLinePhoneNumber	string		LineURI der betroffenen Leitung
u8sLineNumber	string		Lesbare Nummer der Leitung (extrahiert aus der LineURI)
iInternalID	number		Interne ID des Forwards
u8sDestination	string		Ziel der Umleitung
iForwardMode	number		Art der Umleitung
iNoAnswerTime	number	yes	nach wie vielen sekunden bei noAns weitergeleitet wird

### 18.3.26AsnPresenceV2

This sequence contains the data and service states of a contact, called its 'presence'.

AsnPresence contains all the data and service states which represents the 'presence' of a contact.

A client subscribing to the presence of a contact (via `asnGetAndSubscribePresence` ), will get back this structure filled according to his needs and access rights given.

This structure is also used for update events ( `asnUpdatePresence(V2)` ) and in this case only the changed values or sections will be enclosed.

AsnPresenceV2 is an Object

Name	Type	Optional	Comment
u8sContactId	string		ContactID of the contact which is responsible for this data
iPresenceState	number	yes	Calculated presence of the contact. This is the over all presence of all the services which have an influence on the current presence state of the contact (line, appointments, absent state a.s.o.)
asnRemoteContact	AsnNetDatabaseContact	yes	The contact data of the contact
asnUserPropertyBag	AsnUserPropertyBag	yes	If the contact is an ucserver user, this may contain additional

			information about the user filtered by access rights.
iContactFeatureSet	number	yes	Feature set on the contact. Bitfield with flags, which actions are possible on the contact (like "set forwards").
iStaticRights	number	yes	Access rights on the contact.
iMonitorAccessRights	number	yes	Access rights on the probably configured, additional lines of the contact.
asnAbsentState	AsnAbsentStateV2	yes	Actual set absent state.
asnCustomNote	AsnCustomNote	yes	Actual set note.
seqActualAppointments	SEQAppointmentList	yes	Actual appointments of the contact.
asnNextAppointment	AsnAppointmentEntry	yes	First appointment in the future of the contact in a given time frame of 30 days.
seqPhoneLines	AsnPresenceLines	yes	The phone lines of the contact.
seqCalls	AsnPresenceCallsV2	yes	The current calls of the contact.
seqLineForwards	AsnPresenceForwards	yes	The currently set phone forwards of the contact.
asnContactCapabilitiesEx	AsnClientCapabilitiesV2	yes	Capabilities in a simpler to expand format of the connected clients of the contact (audio, video, calendar replication etc.)
asnCurrentUserDynamicRights	AsnActualUserDynamicRights	yes	Minimum and maximum of the user dynamic rights which can be set to the contact.  If there are administrative contact rights set, the client can only modify it in a such a way, that he can grant additional rights. This field helps the client to show the user the

			remaining options.
iStaticRights2	number	yes	Additional static user rights. See AsnUserStaticRights2.
asnAgentState	AsnAgentState	yes	Actual state of the user if he is an agent (via PBX/ACD or LiveChat-Modules)
asnMonitorGroupingAttribute	AsnMonitorGroupingAttribute	yes	Future use - If the user has a monitor grouping attribute set, it will be delivered here.
asnNextAppointments	SEQAppointmentList	yes	The next appointments of this user

### 18.3.27 AsnPresenceV2List

List of AsnPresenceEx sequences

AsnPresenceV2List is an Array of AsnPresenceV2

AsnPresenceV2 is an Object

Name	Type	Optional	Comment
u8sContactId	string		ContactID of the contact which is responsible for this data
iPresenceState	number	yes	Calculated presence of the contact. This is the over all presence of all the services which have an influence on the current presence state of the contact (line, appointments, absent state a.s.o.)
asnRemoteContact	AsnNetDatabaseContact	yes	The contact data of the contact
asnUserPropertyBag	AsnUserPropertyBag	yes	If the contact is an ucserver user, this may contain additional information about the user filtered by access rights.
iContactFeatureSet	number	yes	Feature set on the contact. Bitfield with flags, which

			actions are possible on the contact (like "set forwards").
iStaticRights	number	yes	Access rights on the contact.
iMonitorAccessRights	number	yes	Access rights on the probably configured, additional lines of the contact.
asnAbsentState	AsnAbsentStateV2	yes	Actual set absent state.
asnCustomNote	AsnCustomNote	yes	Actual set note.
seqActualAppointments	SEQAppointmentList	yes	Actual appointments of the contact.
asnNextAppointment	AsnAppointmentEntry	yes	First appointment in the future of the contact in a given time frame of 30 days.
seqPhoneLines	AsnPresenceLines	yes	The phone lines of the contact.
seqCalls	AsnPresenceCallsV2	yes	The current calls of the contact.
seqLineForwards	AsnPresenceForwards	yes	The currently set phone forwards of the contact.
asnContactCapabilitiesEx	AsnClientCapabilitiesV2	yes	Capabilities in a simpler to expand format of the connected clients of the contact (audio, video, calendar replication etc.)
asnCurrentUserDynamicRights	AsnActualUserDynamicRights	yes	Minimum and maximum of the user dynamic rights which can be set to the contact.  If there are administrative contact rights set, the client can only modify it in a such a way, that he can grant additional rights. This field helps the client to show the user the remaining options.
iStaticRights2	number	yes	Additional static user rights. See AsnUserStaticRights2.

asnAgentState	AsnAgentState	yes	Actual state of the user if he is an agent (via PBX/ACD or LiveChat-Modules)
asnMonitorGroupingAttribute	AsnMonitorGroupingAttribute	yes	Future use - If the user has a monitor grouping attribute set, it will be delivered here.
asnNextAppointments	SEQAppointmentList	yes	The next appointments of this user

### 18.3.28 AsnUpdatePresenceV2Argument

Argument of asnUpdatePresence

This argument contains the changes which triggered the event on the server and the new presence state of the corresponding contact.

AsnUpdatePresenceV2Argument is an Object

Name	Type	Optional	Comment
presence	AsnPresenceV2		Updated data and service states of the contact. See AsnPresence for more details.
iChangedFlags	number		Flags indicating which data sections of the contact have triggered the event. @linked AsnPresenceSubscriptionFlags

### 18.3.29 AsnGetAndSubscribePresenceV2Result

Result of asnGetAndSubscribePresence with the list of successfully subscribed contacts.

If the operation was successfully executed this result contains the list of successfully subscribed contacts, containing all requested data (if available).

AsnGetAndSubscribePresenceV2Result is an Object

Name	Type	Optional	Comment
seqSubscribedPresence	AsnPresenceV2List		Kontakte die angefordert wurden

## 19 Ranking

Ranking interface

### Module description

This module defines structures and operations for the ranking of agents of a group.

#### 19.1 Ranking Types

##### 19.1.1 AsnRankingAgentPublicPresenceEnum

Äffentliche Präsenz eines Agenten

Die Äffentliche Präsenz eines Agenten ermittelt sich aus der aktuellen Präsenz des ActiveContact sowie dem jeweiligen Agentenstatus innerhalb der Agenten-Gruppe.

AsnRankingAgentPublicPresenceEnum is an Enumeration

Name	Type	Value	Comment
offline	number	0	Agent ist offline / abgemeldet
uncontrolled	number	1	ggf. kein Agent?
available	number	2	Agent ist angemeldet und verfügbar
notavailable	number	3	Agent ist angemeldet aber beschäftigt

## 20 AgentServices

API for Server to Server Agents functionality

### Module description

This module defines structures and operations for a agent functionality backend other than UCServer or PBX.

### Prerequisite for using the interface

- The other service needs a socket for secure data Transmission between client-server and vise versa.
- Installation of ProCall Software in advance at the client side
- Login the other service at the UCServer
- Provide IDs (full canonical telephone numbers or user IDs) of the User, which should use the agnet functionality
- Attach to Events for the user commands (like logon or logoff)
- Provide state changes of the agent with its IDas event to the UCServer
- While closing the connection, detach from events first, unregister IDs and close socket connection to the UCServer.

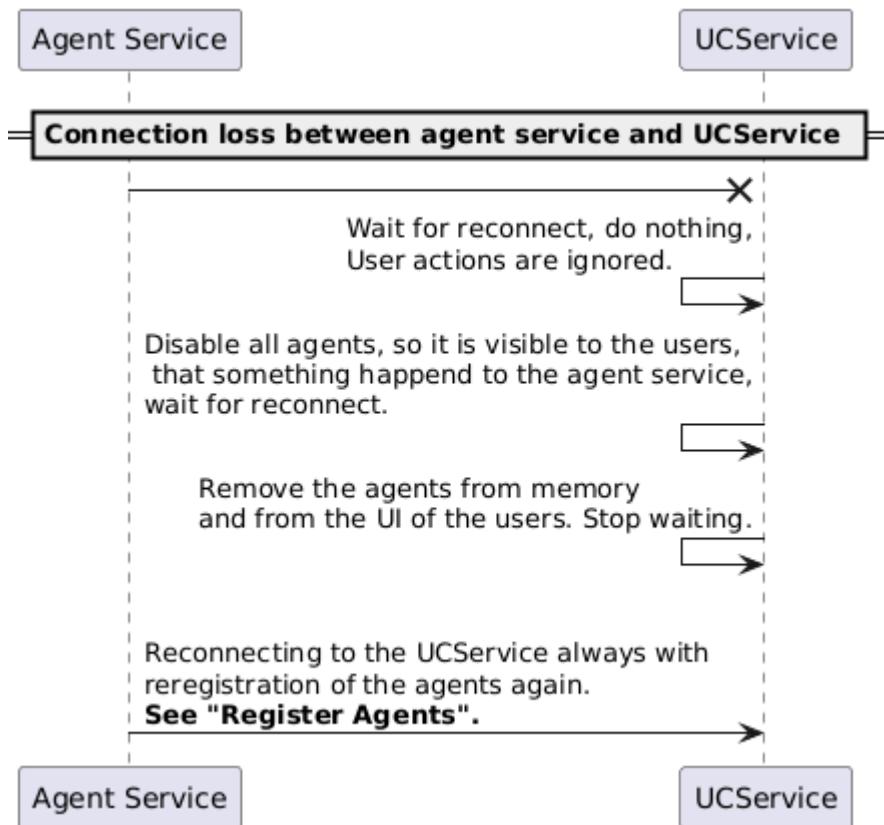
### Functionalities

- If the user can be recognized as agnet user oft the other server it will gain the client UI for agnet state changes
- User commands according state changes of the user will be provided to the other service
- State changes from the other service will be provided to the corresponding clients

### Sequence diagram

"Call": Like a RPC Call, expect results or errors as an answer.

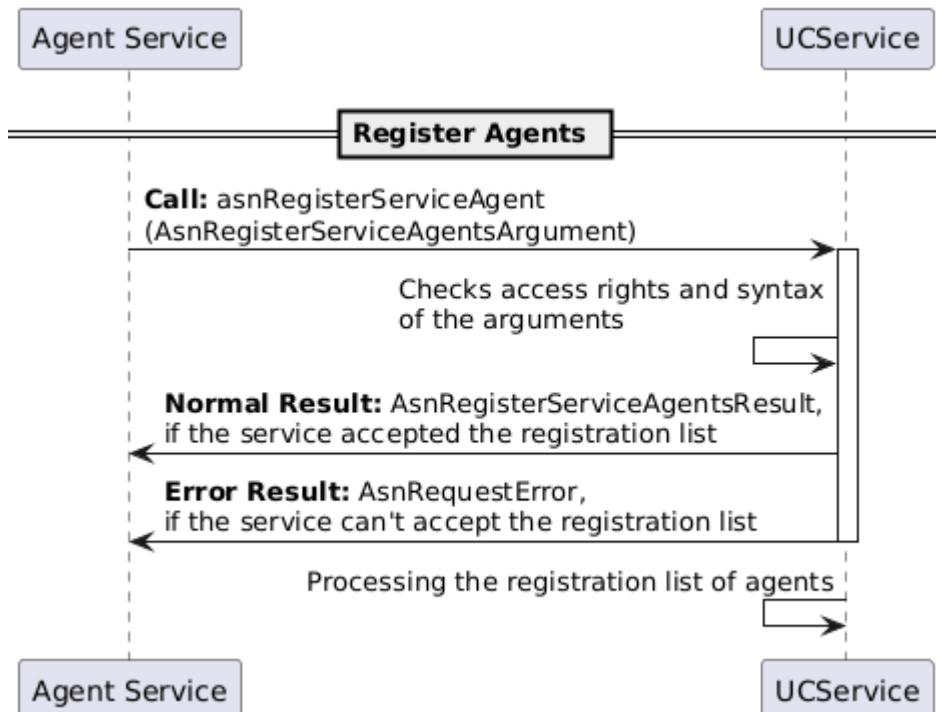
"Event": Behaviour is like an event it is named, this call will not have any results sent back.



## 20.1 AgentServices Operations

### **20.1.1 asnRegisterServiceAgents**

register agents to the service



#### **ArgumentType: AsnRegisterServiceAgentsArgument**

AsnRegisterServiceAgentsArgument is an Object

Name	Type	Optional	Comment
u8sServiceID	string		ID of the Service to distinguish the agents from different services. To us a unique string like GUID is recommended. The ID is used to attach to the right Agents after a connection loss to the UCServer for example.
listAgents	AsnServiceAgentList		List of agents with the needed information to register and the initial agent state.
bClearExistingAgents	boolean	yes	If given and set to true, pre-existing Agents of this Service will be removed from UCServer memory and replaced with the given list of agents.

### ResultType: AsnRegisterServiceAgentsResult

AsnRegisterServiceAgentsResult is an Object

Name	Type	Optional	Comment
u8sServiceID	string		The unique ID of the Service the agents will be registered to on the UCServer.
bSuccess	boolean		true if the call was successful. If the call fails, the AsnRequestError structure will contain the details.

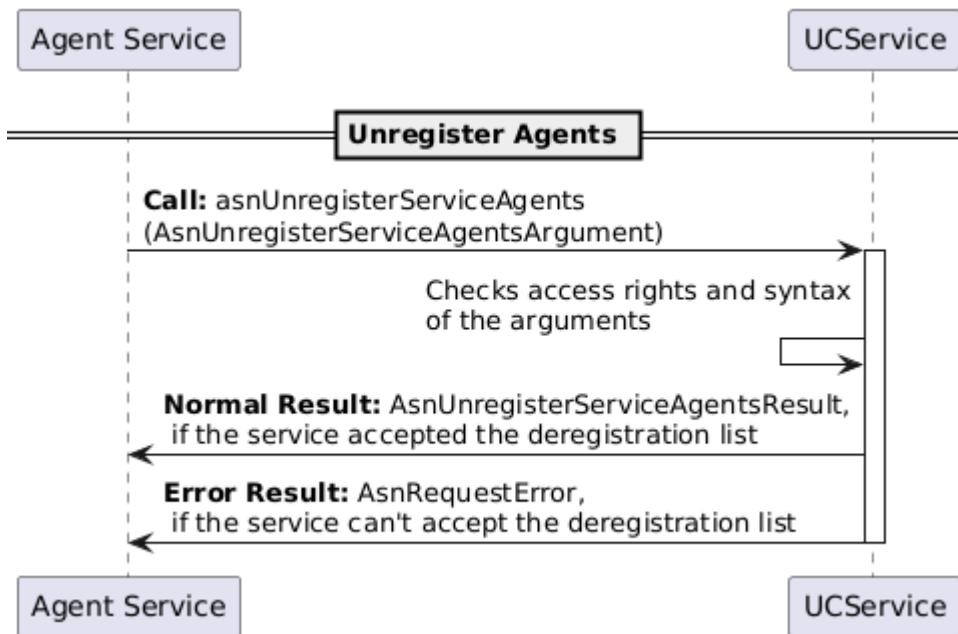
### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### 20.1.2 asnUnregisterServiceAgents

unregister agents from the service



### ArgumentType: AsnUnregisterServiceAgentsArgument

AsnUnregisterServiceAgentsArgument is an Object

Name	Type	Optional	Comment
u8sServiceID	string		The unique ID of the Service the agents will be unregistered from the UCService.
listAgents	AsnServiceAgentList		List of agents with the needed information to unregister from the UCService.
bClearExistingAgents	boolean	yes	If given and set to true, all agents will be removed, the AsnServiceAgentList can be left empty then.

### ResultType: AsnUnregisterServiceAgentsResult

AsnUnregisterServiceAgentsResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true if the call was successful. If the call fails, the AsnRequestError structure will contain the details.

### ErrorType: AsnRequestError

AsnRequestError is an Object

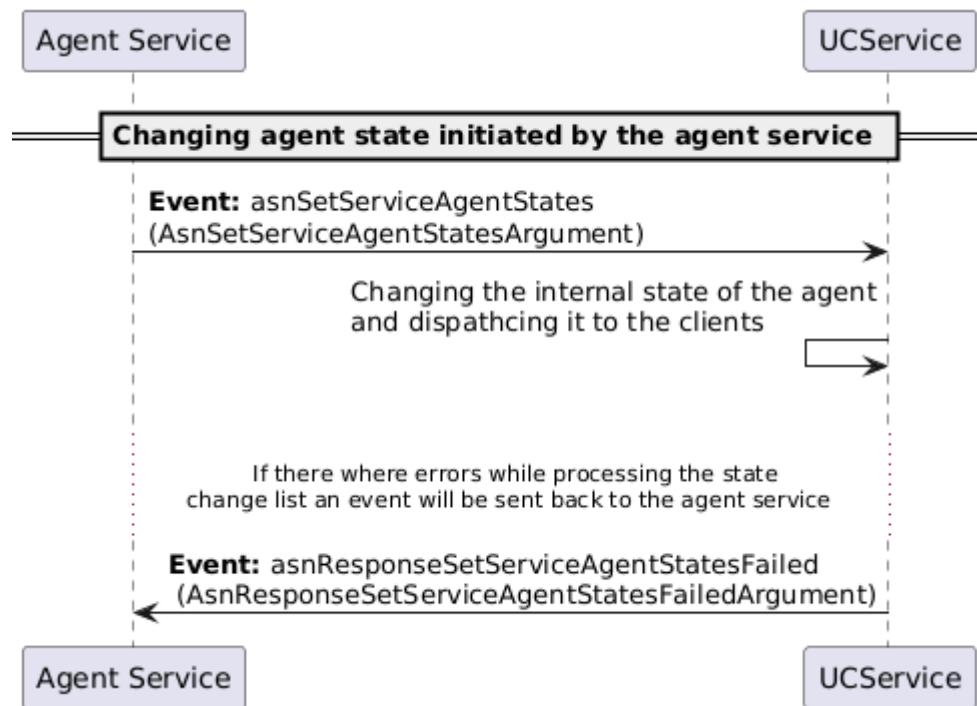
Name	Type	Optional	Comment

iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 20.2 AgentServices Events

### 20.2.1 asnSetServiceAgentStates

Event to set the state of agent(s). There is no answer to this event.



#### ArgumentType: AsnSetServiceAgentStatesArgument

AsnSetServiceAgentStatesArgument is an Object

Name	Type	Optional	Comment
listServiceAgentStates	AsnServiceAgentList		List of service agents with their new state.

### 20.2.2 asnResponseSetServiceAgentStatesFailed

Event to for agent states that the UCServer was unable to set

If the UCServer was unable to set agent states while processing asnSetServiceAgentStates, it will send back this event with the failed agent states.

#### ArgumentType: AsnResponseSetServiceAgentStatesFailedArgument

AsnResponseSetServiceAgentStatesFailedArgument is an Object

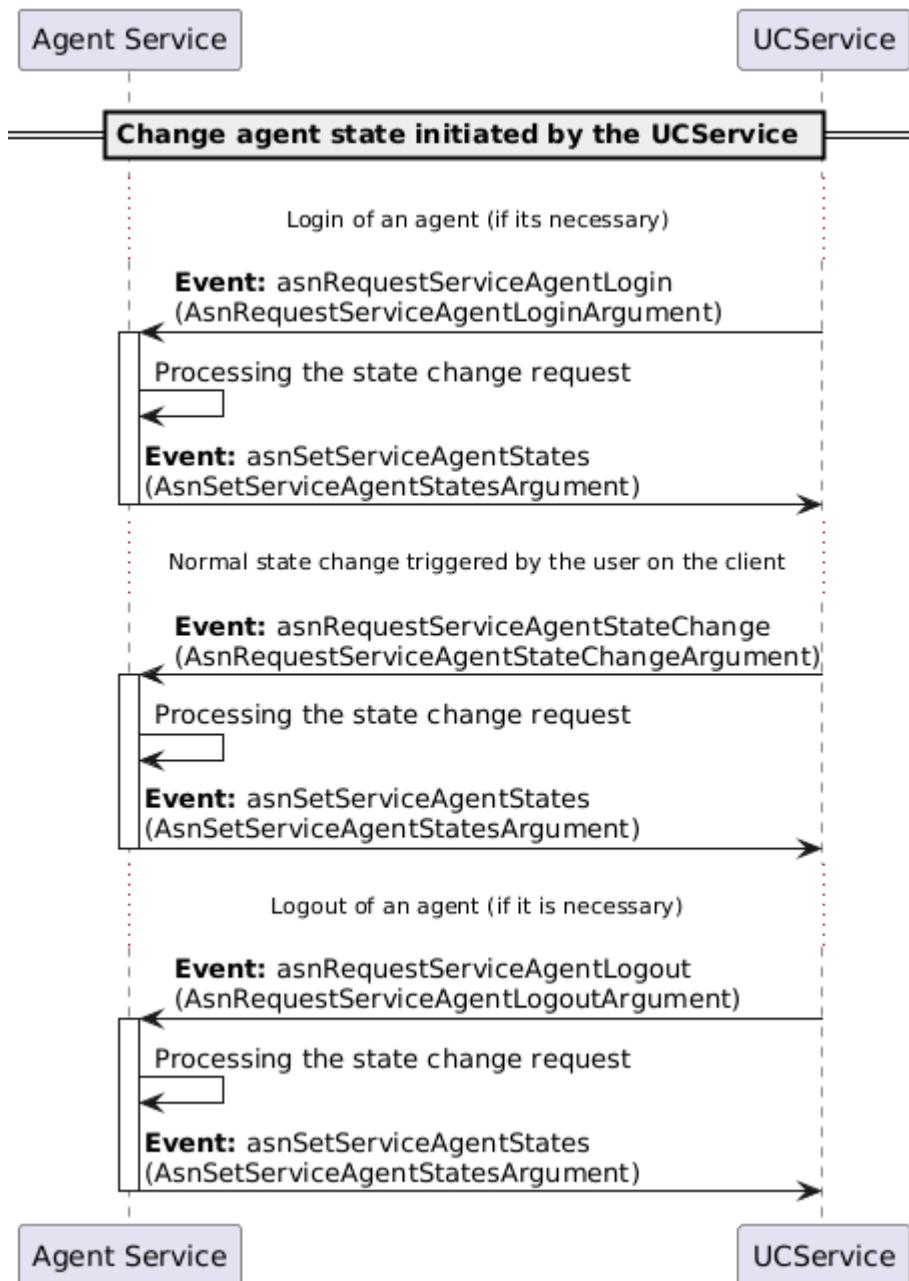
Name	Type	Optional	Comment
listServiceAgentStates	AsnServiceAgentStateFailedReasonList		List of AsnServiceAgentStateFailedReason.

### 20.2.3 asnRequestServiceAgentStateChange

The state of a agent should be changed

This event will be sent by the UCServer when the user wants to change his agent state (button in the UI). The connected service should change the agents satte accordingly and send an update of the resulting agent state back to the UCServer.

The UCServer by itself will not cache or predict the agent state resulting, so it will only change the internal state only the service send the update.



#### ArgumentType: AsnRequestServiceAgentStateChangeArgument

AsnRequestServiceAgentStateChangeArgument is an Object

Name	Type	Optional	Comment
serviceAgentState	AsnServiceAgent		Agent and its state

#### 20.2.4 asnRequestServiceAgentLogin

The agent should be logged in

This event will be sent by the UCServer when the user wants to login.  
The connected service should change the agents state accordingly and send an update of the resulting agent state back to the UCServer.

The UCServer by itself will not cache or predict the agent state resulting, so it will only change the internal state only the service send the update.

#### **ArgumentType: AsnRequestServiceAgentLoginArgument**

AsnRequestServiceAgentLoginArgument is an Object

Name	Type	Optional	Comment
serviceAgentState	AsnServiceAgent		Agent and its state
loginParameter	AsnAgentACDLoginData		Required login information

#### **20.2.5 asnRequestServiceAgentLogout**

The agent request a logout

This event will be sent by the UCServer when the user wants to logout.  
The connected service should change the agents state accordingly and send an update of the resulting agent state () back to the UCServer.

The UCServer by itself will not cache or predict the agent state resulting, so it will only change the internal state only the service send the update.

#### **ArgumentType: AsnRequestServiceAgentLogoutArgument**

AsnRequestServiceAgentLogoutArgument is an Object

Name	Type	Optional	Comment
serviceAgentState	AsnServiceAgent		Agent and its state
u8sLogoutData	string		If needed for the service, additional logout password (PIN) is provided here

#### **20.2.6 asnRequestServiceAgentsStatusUpdate**

The connected service should update the state of the given agents or all agents

#### **ArgumentType: AsnRequestServiceAgentsStatusUpdateArgument**

AsnRequestServiceAgentsStatusUpdateArgument is an Object

Name	Type	Optional	Comment

listServiceAgents	AsnServiceAgentList		List of AgentIDs which states should be updated on the UCServer.
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## 20.3 AgentServices Types

### 20.3.1 AspNetServicesAgentsErrors

Error return codes used in the API

AspNetServicesAgentsErrors is an Enumeration

Name	Type	Value	Comment
noerror	number	0	all went fine
accessdenied	number	1	access to interface denied, maybe not logged in or with wrong account
agentidmissing	number	2	missing agent id where it is needed
groupidmissing	number	3	missing group id where it is needed
agentstatemissing	number	4	missing agent state where it is needed
agentcapabilitiesmissing	number	5	capabilities missing where needed
serviceidmissing	number	6	service id missing where it is needed
wrongserviceid	number	7	the service id given was not correct
servicealreadyconnected	number	8	the service given has already a running connection
serviceallocationfailed	number	9	the service cannot be allocated in the ucserver
noagentsregistered	number	10	the service has no registered agents
noagentsgiven	number	11	the agent list expected was empty

### 20.3.2 AsnServiceAgentStateFailedReasonEnum

AsnServiceAgentStateFailedReasonEnum is an Enumeration

Name	Type	Value	Comment
eUNKNOWNAGENT	number	0	The AgenID is unknown

eUNKNOWNSTATE	number	1	The state to set is not one of AsnAgentStateEnum
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### 20.3.3 AsnAgentACDLoginData

Additional data that may be required to login/monitor ACD groups of a PBX.

AsnAgentACDLoginData is an Object

Name	Type	Optional	Comment
u8sAgentID	string		The agent ID on the PBX (PIN); this probably has to be requested by the user
u8sGroupID	string		The group ID on the PBX
u8sPassword	string		A password may also be required to log in
u8sDeviceID	string		[TODO: what is "DeviceID" for? It is possible as a parameter in the system]

### 20.3.4 AsnServiceAgent

Structure with the agent information needed which is exchanged between the agent service and the UCServer.

AsnServiceAgent is an Object

Name	Type	Optional	Comment
u8sGroupID	string		ID of the agent group the agent or line number is member of. The combination of AgentID and GroupID is treated as unique for a service. Groups are used to combine different Agents into one controlling UI component. So it is possible to combine different phone lines of a user into one Agent-UI component for this user. If different Agents should have an "own" Button in the UCClient, they should have different GroupIDs or vice versa.
u8sAgentID	string		ID of the Agent; should be a phone number like +498151368560 or a UserID like sip:sam.test@estos.de, which corresponds with the identity of the UCServer User. Internally the Agent will be identified with /@, so this combination has to be unique on the UCService.
u8sAgentDisplayName	string	yes	A displayable name of the Agent to show in the UI

			<p>of the UCClient. If not given, the above AgnentID will be shown.</p> <p>This field is used while registration to give the agent a more readable name for the user interface.</p> <p>For deregistering the agent, you can leave this field unset;</p>
iAgentState	number	yes	<p>While registration of the agent this field contains the initial agent state. Should be 0 if not known. Value can be one of AsnAgentStateEnum.</p> <p>This field is also used for changing the state of the agent.</p> <p>For deregistering the agent, you can leave this field unset;</p>
iPossibleAgentStates	number	yes	<p>The service defines in this bitfield, which agent states are supported/can be requested using the Bit enumeration AsnSupportedAgentStatesEnum.</p> <ul style="list-style-type: none"> <li>eAGENTSTATELOGGEDOUT(1) - "log out"</li> <li>eAGENTSTATELOGGEDINNOTREADY(2), - "not ready"</li> <li>eAGENTSTATELOGGEDINREADY(4), - "ready"</li> <li>eAGENTSTATELOGGEDINBUSY(8), - "busy"</li> <li>eAGENTSTATELOGGEDINWORKINGAFTERCALL(16) - "working after call"</li> </ul> <p>For deregistering the agent, you can leave this field unset;</p>
iRequiredLoginLogoutParams	number	yes	<p>The Bitfield is set while registration of the agent and supports the following values from AsnAgentLoginRequiredParametersEnum:</p> <ul style="list-style-type: none"> <li>eAGENTLOGINREQUIRESAGENTID(1), - AgentID Required (for example, the PIN)</li> <li>eAGENTLOGINREQUIRESGROUPID(2), - GroupID Required - not yet supported by ucclient</li> <li>eAGENTLOGINREQUIRESPASSWORD(4), - Password Required - not yet supported by ucclient</li> <li>eAGENTLOGINREQUIRESDEVICEID(8) - DeviceID Required - not yet supported by ucclient</li> <li>eAGENTLOGOUTREQUIRESPASSWORD(256) - Logout requires password - not yet supported by ucclient</li> </ul> <p>For deregistering the agent, you can leave this field unset;</p>

### 20.3.5 AsnRegisterServiceAgentsResult

Result of asnRegisterAgents

AsnRegisterServiceAgentsResult is an Object

Name	Type	Optional	Comment
u8sServiceID	string		The unique ID of the Service the agents will be registered to on the UCServer.
bSuccess	boolean		true if the call was successful. If the call fails, the AsnRequestError structure will contain the details.

### 20.3.6 AsnUnregisterServiceAgentsResult

Result of asnUnregisterServiceAgents

AsnUnregisterServiceAgentsResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true if the call was successful. If the call fails, the AsnRequestError structure will contain the details.

### 20.3.7 AsnServiceAgentStateFailedReason

AsnServiceAgentStateFailedReason is an Object

Name	Type	Optional	Comment
u8sServiceAgentID	string		ID of the agent to set the state for. It is the same which was given with asnRegisterServiceAgents.
iFailedReason	number		The desired state of the agent as described in AsnServiceAgentStateFailedReasonEnum.

### 20.3.8 AsnServiceAgentList

List of AsnServiceAgent strutures

AsnServiceAgentList is an Array of AsnServiceAgent

AsnServiceAgent is an Object

Name	Type	Optional	Comment
u8sGroupID	string		ID of the agent group the agent or line number is member of. The combination of AgentID and GroupID is treated as unique for a service. Groups are used to combine different Agents into one controlling UI component.

			<p>So it is possible to combine different phone lines of a user into one Agent-UI component for this user.</p> <p>If different Agents should have an "own" Button in the UCClient, they should have different GroupIDs or vice versa.</p>
u8sAgentID	string		<p>ID of the Agent; should be a phone number like +498151368560 or a UserID like sip:sam.test@estos.de, which corresponds with the identity of the UCServer User.</p> <p>Internally the Agent will be identified with /@, so this combination has to be unique on the UCService.</p>
u8sAgentDisplayName	string	yes	<p>A displayable name of the Agent to show in the UI of the UCClient. If not given, the above AgentID will be shown.</p> <p>This field is used while registration to give the agent a more readable name for the user interface.</p> <p>For deregistering the agent, you can leave this field unset;</p>
iAgentState	number	yes	<p>While registration of the agent this field contains the initial agent state. Should be 0 if not known. Value can be one of AsnAgentStateEnum.</p> <p>This field is also used for changing the state of the agent.</p> <p>For deregistering the agent, you can leave this field unset;</p>
iPossibleAgentStates	number	yes	<p>The service defines in this bitfield, which agent states are supported/can be requested using the Bit enumeration AsnSupportedAgentStatesEnum.</p> <ul style="list-style-type: none"> <li>eAGENTSTATELOGGEDOUT(1) - "log out"</li> <li>eAGENTSTATELOGGEDINNOTREADY(2), - "not ready"</li> <li>eAGENTSTATELOGGEDINREADY(4), - "ready"</li> <li>eAGENTSTATELOGGEDINBUSY(8), - "busy"</li> <li>eAGENTSTATELOGGEDINWORKINGAFTERCALL(16) - "working after call"</li> </ul> <p>For deregistering the agent, you can leave this field unset;</p>
iRequiredLoginLogoutParams	number	yes	<p>The Bitfield is set while registration of the agent and supports the following values from AsnAgentLoginRequiredParametersEnum:</p> <ul style="list-style-type: none"> <li>eAGENTLOGINREQUIRESAGENTID(1), - AgentID Required (for example, the PIN)</li> <li>eAGENTLOGINREQUIRESGROUPID(2), - GroupID Required - not yet supported by ucclient</li> <li>eAGENTLOGINREQUIRESPASSWORD(4), -</li> </ul>

			<p>Password Required - not yet supported by ucclient  eAGENTLOGINREQUIRESDEVICEID(8) - DeviceID Required - not yet supported by ucclient  eAGENTLOGOUTREQUIRESPASSWORD(256) - Logout requires password - not yet supported by ucclient</p> <p>For deregistering the agent, you can leave this field unset;</p>
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### 20.3.9 AsnRegisterServiceAgentsArgument

Argument for asnRegisterServiceAgents

AsnRegisterServiceAgentsArgument is an Object

Name	Type	Optional	Comment
u8sServiceID	string		<p>ID of the Service to distinguish the agents from different services. To use a unique string like GUID is recommended.</p> <p>The ID is used to attach to the right Agents after a connection loss to the UCServer for example.</p>
listAgents	AsnServiceAgentList		List of agents with the needed information to register and the initial agent state.
bClearExistingAgents	boolean	yes	If given and set to true, pre-existing Agents of this Service will be removed from UCServer memory and replaced with the given list of agents.

### 20.3.10 AsnUnregisterServiceAgentsArgument

Argument for asnUnregisterServiceAgents

AsnUnregisterServiceAgentsArgument is an Object

Name	Type	Optional	Comment
u8sServiceID	string		The unique ID of the Service the agents will be unregistered from the UCService.
listAgents	AsnServiceAgentList		List of agents with the needed information to unregister from the UCService.
bClearExistingAgents	boolean	yes	If given and set to true, all agents will be removed, the AsnServiceAgentList can be left empty then.

### 20.3.11AsnSetServiceAgentStatesArgument

Argument for asnSetAgentStates

AsnSetServiceAgentStatesArgument is an Object

Name	Type	Optional	Comment
listServiceAgentStates	AsnServiceAgentList		List of service agents with their new state.

### 20.3.12AsnServiceAgentStateFailedReasonList

AsnServiceAgentStateFailedReasonList is an Array of AsnServiceAgentStateFailedReason

AsnServiceAgentStateFailedReason is an Object

Name	Type	Optional	Comment
u8sServiceAgentID	string		ID of the agent to set the state for. It is the same which was given with asnRegisterServiceAgents.
iFailedReason	number		The desired state of the agent as described in AsnServiceAgentStateFailedReasonEnum.

### 20.3.13AsnResponseSetServiceAgentStatesFailedArgument

Argument for AsnResponseSetServiceAgentStatesFailed

AsnResponseSetServiceAgentStatesFailedArgument is an Object

Name	Type	Optional	Comment
listServiceAgentStates	AsnServiceAgentStateFailedReasonList		List of AsnServiceAgentStateFailedReason.

### 20.3.14AsnRequestServiceAgentStateChangeArgument

Argument for asnEventServiceAgentStateChanged

AsnRequestServiceAgentStateChangeArgument is an Object

Name	Type	Optional	Comment
serviceAgentState	AsnServiceAgent		Agent and its state

### 20.3.15AsnRequestServiceAgentLoginArgument

Argument for asnEventServiceAgentStateChanged

AsnRequestServiceAgentLoginArgument is an Object

Name	Type	Optional	Comment
serviceAgentState	AsnServiceAgent		Agent and its state
loginParameter	AsnAgentACDLoginData		Required login information

### 20.3.16AsnRequestServiceAgentLogoutArgument

Argument for asnEventServiceAgentStateChanged

AsnRequestServiceAgentLogoutArgument is an Object

Name	Type	Optional	Comment
serviceAgentState	AsnServiceAgent		Agent and its state
u8sLogoutData	string		If needed for the service, additional logout password (PIN) is provided here

### 20.3.17AsnRequestServiceAgentsStatusUpdateArgument

Argument for asnRequestServiceAgentsStatusUpdate

The UCServer needs an update of the current state of the given agents. If the list is empty, the service should update all agents which are connected to the agent service.

AsnRequestServiceAgentsStatusUpdateArgument is an Object

Name	Type	Optional	Comment
listServiceAgents	AsnServiceAgentList		List of AgentIDs which states should be updated on the UCServer.

## 21 Tasks

Task management interface

### Module description

This module defines structures and operations for the task management in the UCServer.

#### 21.1 Tasks Operations

##### 21.1.1 asnTaskGetEntriesV2

###### **ArgumentType: AsnTaskGetEntriesV2Argument**

AsnTaskGetEntriesV2Argument is an Object

Name	Type	Optional	Comment
findOptions	AsnNetDatabaseTaskFindOptionsV2		

###### **ResultType: AsnTaskGetEntriesResult**

AsnTaskGetEntriesResult is an Object

Name	Type	Optional	Comment
listTasks	AsnNetDatabaseTaskList		

###### **ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

##### 21.1.2 asnTaskGetEntryCount

###### **ArgumentType: AsnTaskGetEntryCountArgument**

AsnTaskGetEntryCountArgument is an Object

Name	Type	Optional	Comment
findOptions	AsnNetDatabaseTaskFindOptionsV2		

**ResultType: AsnTaskGetEntryCountResult**

AsnTaskGetEntryCountResult is an Object

Name	Type	Optional	Comment
iCount	number		Anzahl der beschriebenen Entries

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**21.1.3 asnTaskAddEntry****ArgumentType: AsnTaskAddEntryArgument**

AsnTaskAddEntryArgument is an Object

Name	Type	Optional	Comment
taskEntry	AspNetDatabaseTask		Eintrag der der Datenbank hinzugefügt werden soll

**ResultType: AsnTaskAddEntryResult**

AsnTaskAddEntryResult is an Object

Name	Type	Optional	Comment
iResult	number		Erfolgreich: 0, sonst != 0
u8sAddedTaskID	string		Wenn erfolgreich, dann steht hier die neu erzeugte TaskID drin.

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error

u8sErrorString	string		A string representing the error
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#### 21.1.4 asnTaskRemoveEntries

##### ArgumentType: AsnTaskRemoveEntriesArgument

AsnTaskRemoveEntriesArgument is an Object

Name	Type	Optional	Comment
u8slistTaskID	UTF8StringList		ID des Tasks der gelöscht werden soll

##### ResultType: AsnTaskRemoveEntriesResult

AsnTaskRemoveEntriesResult is an Object

Name	Type	Optional	Comment
dummy	Object		

##### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

#### 21.1.5 asnTaskModifyEntries

##### ArgumentType: AsnTaskModifyEntriesArgument

AsnTaskModifyEntriesArgument is an Object

Name	Type	Optional	Comment
listTasks	AsnNetDatabaseTaskList		Liste der Tasks die geändert werden sollen

##### ResultType: AsnTaskModifyEntriesResult

AsnTaskModifyEntriesResult is an Object

Name	Type	Optional	Comment

dummy	Object		
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**21.1.6 asnTaskSetEntriesState****ArgumentType: AsnTaskSetEntriesStateArgument**

AsnTaskSetEntriesStateArgument is an Object

Name	Type	Optional	Comment
eState	AsnTaskState		Status auf den die Taskentries gesetzt werden sollen
u8slistTaskIDs	UTF8StringList		Liste der TaskIDs, deren Tasks auf erledigt gesetzt werden sollen

**ResultType: AsnTaskSetEntriesStateResult**

AsnTaskSetEntriesStateResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

**21.1.7 asnTaskDelegateEntries****ArgumentType: AsnTaskDelegateEntriesArgument**

AsnTaskDelegateEntriesArgument is an Object

Name	Type	Optional	Comment
u8slistTaskIDs	UTF8StringList		Liste der TaskIDs, deren Bearbeiter gesetzt werden sollen
u8slistOwners	UTF8StringList		Liste der Kontakte, die der Task zugewiesen werden soll

**ResultType: AsnTaskDelegateEntriesResult**

AsnTaskDelegateEntriesResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**21.1.8 asnTaskSetEntriesReminder****ArgumentType: AsnTaskSetEntriesReminderArgument**

AsnTaskSetEntriesReminderArgument is an Object

Name	Type	Optional	Comment
u8slistTaskIDs	UTF8StringList		Liste der TaskIDs, deren Bearbeiter gesetzt werden sollen
bReminderActive	boolean		Reminder will appear if true
stReminderTime	string		Date and Time for Reminder

**ResultType: AsnTaskSetEntriesReminderResult**

AsnTaskSetEntriesReminderResult is an Object

Name	Type	Optional	Comment
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**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

## 21.2 Tasks Events

### 21.2.1 asnTaskItemsModified

#### ArgumentType: AsnTaskItemsModifiedArgument

AsnTaskItemsModifiedArgument is an Object

Name	Type	Optional	Comment
listTasks	AsnNetDatabaseTaskList		Die Modifizierten Tasks

### 21.2.2 asnTaskItemsAdded

#### ArgumentType: AsnTaskItemsAddedArgument

AsnTaskItemsAddedArgument is an Object

Name	Type	Optional	Comment
listTasks	AsnNetDatabaseTaskList		Die hinzugefügten Tasks

### 21.2.3 asnTaskItemsRemoved

#### ArgumentType: AsnTaskItemsRemovedArgument

AsnTaskItemsRemovedArgument is an Object

Name	Type	Optional	Comment
u8slistTaskIDs	UTF8StringList		Die IDs der gelöschten Tasks

### 21.2.4 asnTasksReload

#### ArgumentType: AsnTasksReloadArgument

AsnTasksReloadArgument is an Object

Name	Type	Optional	Comment

## 21.3 Tasks Types

### 21.3.1 AsnTaskState

AsnTaskState is an Enumeration

Name	Type	Value	Comment
notstarted	number	0	
inprogress	number	1	
waitingforothers	number	2	
deferred	number	3	
done	number	4	

### 21.3.2 AsnTaskPriority

AsnTaskPriority is an Enumeration

Name	Type	Value	Comment
low	number	0	
normal	number	1	
high	number	2	

### 21.3.3 AsnTaskPrivacy

AsnTaskPrivacy is an Enumeration

Name	Type	Value	Comment
normal	number	0	
personal	number	1	
private1	number	2	
confidential	number	3	

### 21.3.4 AsnTaskDelegationState

AsnTaskDelegationState is an Enumeration

Name	Type	Value	Comment
accepted	number	0	
waiting	number	1	
declined	number	2	

### 21.3.5 AspNetDatabaseTaskFindFlagsV2

Filter flags to retrieve tasks from the server

AspNetDatabaseTaskFindFlagsV2 is an Enumeration

Name	Type	Value	Comment
onlywithstartdate	number	1	0x00000001 - Nur die Tasks, die ein Startdatum haben
onlywithoutstartdate	number	2	0x00000002 - Nur die Tasks, die kein Startdatum haben
onlynotfinished	number	4	0x00000004 - Nur die Tasks, die noch nicht erledigt sind
onlynotstarted	number	8	0x00000008 - Nur die Tasks, die noch nicht begonnen wurden
allnormal	number	16	0x00000010 - Alle Tasks, die Privacy Normal haben
delegateaccepted	number	32	0x00000020 - Delegate status accepted
delegatedeclined	number	64	0x00000040 - Delegate status declined
delegatewaiting	number	128	0x00000080 - Delegate status waiting

### 21.3.6 AspNetDatabaseTaskFindOptionsV2

AspNetDatabaseTaskFindOptionsV2 is an Object

Name	Type	Optional	Comment
eFlags	number		Bitfeld mit weiteren Filtern (Linked Type: AspNetDatabaseTaskFindFlagsV2)

iMaxNumEntries	number		Maximale Anzahl der Datensätze
stUTCStartDateFrom	string		Filter auf "StartDate", von
stUTCStartDateTo	string		Filter auf "StartDate", bis.
u8slistOwnerNames	UTF8StringList		NICHT IMPLEMENTIERT Die CTI-Benutzernamen, deren Tasks geholt werden sollen

### 21.3.7 AsnTaskGetEntryCountResult

Result of the asnGetTaskEntryCount and asnTaskGetEntryCount operation

AsnTaskGetEntryCountResult is an Object

Name	Type	Optional	Comment
iCount	number		Anzahl der beschriebenen Entries

### 21.3.8 AsnTaskAddEntryResult

AsnTaskAddEntryResult is an Object

Name	Type	Optional	Comment
iResult	number		Erfolgreich: 0, sonst != 0
u8sAddedTaskID	string		Wenn erfolgreich, dann steht hier die neu erzeugte TaskID drin.

### 21.3.9 AsnTaskRemoveEntriesArgument

AsnTaskRemoveEntriesArgument is an Object

Name	Type	Optional	Comment
u8slistTaskID	UTF8StringList		ID des Tasks der gelöscht werden soll

### 21.3.10 AsnTaskRemoveEntriesResult

AsnTaskRemoveEntriesResult is an Object

Name	Type	Optional	Comment
dummy	Object		

### 21.3.11AsnTaskModifyEntriesResult

AsnTaskModifyEntriesResult is an Object

Name	Type	Optional	Comment
dummy	Object		

### 21.3.12AsnTaskSetEntriesStateResult

AsnTaskSetEntriesStateResult is an Object

Name	Type	Optional	Comment

### 21.3.13AsnTaskDelegateEntriesArgument

NICHT IMPLEMENTIERT

AsnTaskDelegateEntriesArgument is an Object

Name	Type	Optional	Comment
u8slistTaskIDs	UTF8StringList		Liste der TaskIDs, deren Bearbeiter gesetzt werden sollen
u8slistOwners	UTF8StringList		Liste der Kontakte, die der Task zugewiesen werden soll

### 21.3.14AsnTaskDelegateEntriesResult

AsnTaskDelegateEntriesResult is an Object

Name	Type	Optional	Comment

### 21.3.15AsnTaskSetEntriesReminderArgument

AsnTaskSetEntriesReminderArgument is an Object

Name	Type	Optional	Comment
u8slistTaskIDs	UTF8StringList		Liste der TaskIDs, deren Bearbeiter gesetzt werden sollen
bReminderActive	boolean		Reminder will appear if true
stReminderTime	string		Date and Time for Reminder

### 21.3.16 AsnTaskSetEntriesReminderResult

AsnTaskSetEntriesReminderResult is an Object

Name	Type	Optional	Comment
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### 21.3.17 AsnTaskItemsRemovedArgument

AsnTaskItemsRemovedArgument is an Object

Name	Type	Optional	Comment
u8slistTaskIDs	UTF8StringList		Die IDs der gelöschten Tasks

### 21.3.18 AsnTasksReloadArgument

AsnTasksReloadArgument is an Object

Name	Type	Optional	Comment
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### 21.3.19 AsnNetDatabaseTask

AsnNetDatabaseTask is an Object

Name	Type	Optional	Comment
u8sTaskID	string		ID of the Taskentry
u8sSubject	string		Subject of the Task
contactData	AsnNetDatabaseContact		NetDatabaseContact Information of the Contact to call
u8sCallNumber	string		Number to call
projectPinRule	AsnProjectPinRule		Projekt informationen
stUTCStartDate	string		Starttime of the Task
stUTCDueDate	string		Deadline for the Task
eState	AsnTaskState		State of the Task
ePriority	AsnTaskPriority		Priority of the Task
eDelegationState	AsnTaskDelegationState		State of the Delegation (if needed)
bReminderActive	boolean		Reminder will appear if true
stUTCReminderTime	string		Date and Time for Reminder

u8sReminderFile	string		Soundfilename for Reminder
u8sListOwners	UTF8StringList		Name(s) of responsible Contact(s)
u8sCreator	string		Creator of the Task
stUTCCreationTime	string		Creation Timestamp of the Task
u8sBody	string		Bodytext of the Task
stUTCDateCompleted	string		Timestamp for State "Done"
u8sCompletedFrom	string		Contact who finished the Task
ePrivacy	AsnTaskPrivacy		Privacy Level of the Task
optionalParams	AsnOptionalParameters	yes	optionalParams Name "OwnersWhoDeletedTheTask" Value String

### 21.3.20 AsnNetDatabaseTaskList

AsnNetDatabaseTaskList is an Array of AsnNetDatabaseTask

AsnNetDatabaseTask is an Object

Name	Type	Optional	Comment
u8sTaskID	string		ID of the Taskentry
u8sSubject	string		Subject of the Task
contactData	AsnNetDatabaseContact		NetDatabaseContact Information of the Contact to call
u8sCallNumber	string		Number to call
projectPinRule	AsnProjectPinRule		Projekt informationen
stUTCStartDate	string		Starttime of the Task
stUTCDueDate	string		Deadline for the Task
eState	AsnTaskState		State of the Task
ePriority	AsnTaskPriority		Priority of the Task
eDelegationState	AsnTaskDelegationState		State of the Delegation (if needed)
bReminderActive	boolean		Reminder will appear if true
stUTCReminderTime	string		Date and Time for Reminder
u8sReminderFile	string		Soundfilename for Reminder
u8sListOwners	UTF8StringList		Name(s) of responsible Contact(s)

u8sCreator	string		Creator of the Task
stUTCCreationTime	string		Creation Timestamp of the Task
u8sBody	string		Bodytext of the Task
stUTCDateCompleted	string		Timestamp for State "Done"
u8sCompletedFrom	string		Contact who finished the Task
ePrivacy	AsnTaskPrivacy		Privacy Level of the Task
optionalParams	AsnOptionalParameters	yes	optionalParams Name "OwnersWhoDeletedTheTask" Value String

### 21.3.21AsnTaskGetEntriesResult

Result of the asnTaskGetEntries and asnTaskGetEntriesV2 operation

AsnTaskGetEntriesResult is an Object

Name	Type	Optional	Comment
listTasks	AsnNetDatabaseTaskList		

### 21.3.22AsnTaskGetEntriesV2Argument

AsnTaskGetEntriesV2Argument is an Object

Name	Type	Optional	Comment
findOptions	AsnNetDatabaseTaskFindOptionsV2		

### 21.3.23AsnTaskGetEntryCountArgument

AsnTaskGetEntryCountArgument is an Object

Name	Type	Optional	Comment
findOptions	AsnNetDatabaseTaskFindOptionsV2		

### 21.3.24AsnTaskAddEntryArgument

AsnTaskAddEntryArgument is an Object

Name	Type	Optional	Comment
taskEntry	AsnNetDatabaseTask		Eintrag der der Datenbank hinzugefÃ¼gt werden soll

### 21.3.25AsnTaskModifyEntriesArgument

AsnTaskModifyEntriesArgument is an Object

Name	Type	Optional	Comment
listTasks	AsnNetDatabaseTaskList		Liste der Tasks die geÄndert werden sollen

### 21.3.26AsnTaskSetEntriesStateArgument

AsnTaskSetEntriesStateArgument is an Object

Name	Type	Optional	Comment
eState	AsnTaskState		Status auf den die Taskentries gesetzt werden sollen
u8slistTaskIDs	UTF8StringList		Liste der TaskIDs, deren Tasks auf erledigt gesetzt werden sollen

### 21.3.27AsnTaskItemsModifiedArgument

AsnTaskItemsModifiedArgument is an Object

Name	Type	Optional	Comment
listTasks	AsnNetDatabaseTaskList		Die Modifizierten Tasks

### 21.3.28AsnTaskItemsAddedArgument

AsnTaskItemsAddedArgument is an Object

Name	Type	Optional	Comment
listTasks	AsnNetDatabaseTaskList		Die hinzugefÄ¼gten Tasks

## 22 Transport

Transport layer interface

### Module description

The module defines operations on the transport layer of the business logic. This includes asnStartTLS which activates TLS on a already existing TCP connection and additional operations for running multiplexed connections to the UCServer (several sessions of different users on one TCP connection; creating, deleting them and user authentication).

#### 22.1 Transport Operations

##### 22.1.1 asnStartTLS

Start TLS Handshake on existing connection

Client should use this function immediately after establishing the connection. After calling this function, the UCServer switches to TLS mode and expects a regular TLS handshake from the client.

##### ArgumentType: AsnStartTLSArgument

AsnStartTLSArgument is an Object

Name	Type	Optional	Comment

##### ResultType: AsnStartTLSResult

AsnStartTLSResult is an Object

Name	Type	Optional	Comment

##### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

##### 22.1.2 asnTokenVerifyV2

This function allows an external Server to check if a User token is valid

**ArgumentType: AsnTokenVerifyV2Argument**

AsnTokenVerifyV2Argument is an Object

Name	Type	Optional	Comment
u8sToken	string		JWT Token

**ResultType: AsnTokenVerifyResult**

AsnTokenVerifyResult is an Object

Name	Type	Optional	Comment
stValidTo	string		valid until
iType	number		Type of token (AsnUserTokenType: eUserTokenExternal or eUserTokenLogin)
u8sDNPath	string		
u8sUserName	string		
u8sSIPURI	string		
u8sobjectGUID	string		
u8sPhoneNumber	string		
u8sPhoneSecondary	string		
u8sCallRecordingNumber	string		
u8sMailboxNumber	string		
u8sHomeServer	string		
iUserStaticRights	number		
asnUserContact	AsnNetDatabaseContact		
asnUserPropertyBag	AsnUserPropertyBag		

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

### 22.1.3 asnCheckConnection

This function allows to check if the connection to the server is functional (Mobiler Zugang überprüfung)

#### ArgumentType: AsnCheckConnectionArgument

AsnCheckConnectionArgument is an Object

Name	Type	Optional	Comment
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#### ResultType: AsnCheckConnectionResult

AsnCheckConnectionResult is an Object

Name	Type	Optional	Comment
u8sServerVersion	string		Server Version "5.1.30.35169"
u8sProductVersion	string		Product Version "5.1.30.35169"
iProtocolVersion	number		Protocol Version (60)
iOEMID	number		estos : 0
u8sCookie	string		Cookie, das der Server vom Admin bekommt, um zu schauen, ob er das ist.

#### ErrorType: AsnRequestError

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorString	string		A string representing the error

### 22.1.4 asnCreateAuthToken

Create a auth token in the UCServer

#### ArgumentType: AsnCreateAuthTokenArgument

AsnCreateAuthTokenArgument is an Object

Name	Type	Optional	Comment
login	AsnLoginV2Argument		login data

u8sUCSID	string		
role	EAsnAuthRoles	yes	the role you want to login with (if not defined than normal user)

**ResultType: AsnCreateAuthTokenResult**

AsnCreateAuthTokenResult is an Object

Name	Type	Optional	Comment
loginResult	AsnLoginV2Result		Result of the login
u8sAuthSessionID	string		auth session for subsequent requests (ntlm, digest, ...)

**ErrorType: AsnRequestError**

AsnRequestError is an Object

Name	Type	Optional	Comment
iErrorDetail	number		A number representing the error
u8sErrorMessage	string		A string representing the error

**22.2 Transport Events****22.2.1 asnTransportKeepAlive****ArgumentType: AsnTransportKeepAliveArgument**

AsnTransportKeepAliveArgument is an Object

Name	Type	Optional	Comment
dummy	Object		

**22.3 Transport Types****22.3.1 EAsnAuthRoles**

EAsnAuthRoles is an Enumeration

Name	Type	Value	Comment
user	number	0	
mgmt	number	1	

### 22.3.2 AsnStartTLSArgument

AsnStartTLSArgument is an Object

Name	Type	Optional	Comment

### 22.3.3 AsnStartTLSResult

AsnStartTLSResult is an Object

Name	Type	Optional	Comment

### 22.3.4 AsnTransportKeepAliveArgument

AsnTransportKeepAliveArgument is an Object

Name	Type	Optional	Comment
dummy	Object		

### 22.3.5 AsnTokenVerifyResult

AsnTokenVerifyResult is an Object

Name	Type	Optional	Comment
stValidTo	string		valid until
iType	number		Type of token (AsnUserTokenType: eUserTokenExternal or eUserTokenLogin)
u8sDNPath	string		
u8sUserName	string		
u8sSIPURI	string		
u8sobjectGUID	string		
u8sPhoneNumber	string		
u8sPhoneSecondary	string		
u8sCallRecordingNumber	string		
u8sMailboxNumber	string		
u8sHomeServer	string		

iUserStaticRights	number		
asnUserContact	AsnNetDatabaseContact		
asnUserPropertyBag	AsnUserPropertyBag		

### 22.3.6 AsnTokenVerifyV2Argument

AsnTokenVerifyV2Argument is an Object

Name	Type	Optional	Comment
u8sToken	string		JWT Token

### 22.3.7 AsnCheckConnectionArgument

AsnCheckConnectionArgument is an Object

Name	Type	Optional	Comment

### 22.3.8 AsnCheckConnectionResult

AsnCheckConnectionResult is an Object

Name	Type	Optional	Comment
u8sServerVersion	string		Server Version "5.1.30.35169"
u8sProductVersion	string		Product Version "5.1.30.35169"
iProtocolVersion	number		Protocol Version (60)
iOEMID	number		estos : 0
u8sCookie	string		Cookie, das der Server vom Admin bekommt, um zu schauen, ob er das ist.

### 22.3.9 AsnCreateAuthTokenResult

AsnCreateAuthTokenResult is an Object

Name	Type	Optional	Comment
loginResult	AsnLoginV2Result		Result of the login
u8sAuthSessionID	string		auth session for subsequent requests (ntlm, digest, ...)

### 22.3.10 AsnCreateAuthTokenArgument

AsnCreateAuthTokenArgument is an Object

Name	Type	Optional	Comment
login	AsnLoginV2Argument		login data
u8sUCSID	string		
role	EAsnAuthRoles	yes	the role you want to login with (if not defined than normal user)

### 22.3.11 AsnNegotiateInterfaceVersionArgument

AsnNegotiateInterfaceVersionArgument is an Object

Name	Type	Optional	Comment
u8sMinInterfaceVer	string		Requested minimum interface version, usually this should be a .0.0
u8sMaxInterfaceVer	string		Requested maximum interface version, usually this will be the interface version the client has been built with

### 22.3.12 AsnNegotiateInterfaceVersionResult

AsnNegotiateInterfaceVersionResult is an Object

Name	Type	Optional	Comment
bSuccess	boolean		true if the requested version is considered compatible, false otherwise
u8sServerInterfaceVer	string		The interface version the server has been built with