

ELECTA LIVE API 2.0 DEVELOPER'S GUIDE

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www.e-lecta.com

What is this ELECTA LIVE API Designed For

The eLecta Live API is designed to link an existing web based system (LMS, SMS and CMS) with your eLecta Live hosted account.

With the API you can access your virtual classrooms directly from your website placing students and session moderators with one single authentication procedure – on your website.

Enabling and Disabling the API Access

The API access is enabled through the web based control panel. You must be logged in with an administrator account.

To enable the API click on the **HTML Integration and API** menu item available under the Primary Account menu group. Then click on “API Access” link.

On the following page you will find your numeric **Account Id**, **Application Key** and **Site Name**. They are needed to access the API.

The API is enabled when there is Application key specified. Click on the “**Generate a New Key**” link to generate an API key. Then click Apply to save the changes.

To disable the API access you have to clear the Application Key and save.

Important: Your Application Key must be kept secret. Please do not expose/transfer your application key to the client browser when accessing the API. Always use server-to-server communications when you have to call a function that requires an Application Key.

Follow the instructions in this manual. If your key gets compromised generate a new key.

API Namespaces

The API is divided into several namespaces designed to handle different operations.

Authentication Namespace – this is the most important namespace which authenticates all calls to the API through session tokens. This is the first call that has to be done before attempting any other calls to other namespaces.

Direct Classroom Access Namespace – this namespace is designed to launch a classroom directly from the client browser placing the attendee into the classroom.

Recorded Sessions Namespace- this namespace exposes functionality to extract recordings from the recorded session's library.

User Management Namespace (Not in this manual. To be updated later) – provides calls for managing and synchronizing user accounts.

Virtual Room Management Namespace (Not in this manual. To be updated later) – provides calls for creating and managing virtual rooms.

Reporting Namespace – this namespace implements calls that extract attendance log records for reporting purposes.

Authentication Namespace

Each API call, no matter what namespace it refers to takes an authentication token as a parameter. The authentication token is a character value which is generated by a call to the authentication namespace. This is the first call that has to be made before any other API calls are attempted as this will produce a session token needed for the other API calls.

The authentication system takes in the **Account ID** and the **Application Key** to authenticate the API call. It returns a **Session Token** that will be used for subsequent calls into the system.

The **Session Token** returned will expire within 20 minutes. This timeout is not configurable and is set to enforce a minimum level of security on sessions.

Not limited to authentication, all connections are suggested to be done over a secure channel.

As an additional security control, the API access is automatically locked for 15 minutes after 5 failed login attempts.

All calls for obtaining authentication tokens must be made on a server-to-server communication level, not client-to-server. **Do not pass the Application Key to the client browser.**

Authentication Namespace: </apps/token.asp>

Supported HTML Methods: GET / POST

Communications Level: Only Server-Server

Parameters:

Parameter Name	Data Type	Description	Optional
CID	Number	The Account Id available on the API Access page. <i>Sample Value: 12345</i>	Required
AppKey	Character	The Application Key set on the API Access page. <i>Sample Value: UO86CN11XY73SF72TT40PG18ZE76VV71</i>	Required
Result	Character	The response type to return. Accepted values: csv or xml If not specified an XML response type will be returned.	Optional

The Call Returns: An Integer **Response Code** and a character **Session Token**. If the call fails a non-zero response code is returned with an error description.

Sample Call

<http://mysite.e-lectazone.com/apps/token.asp?cid=123456&appkey=UO86CN11XY73SF72TT40PG18ZE76VV71&result=xml>

Sample Successful XML Result

```
<Response>
  <ResponseCode>0</ResponseCode>
  <ResponseData>9C467079-FE3B-45C5-8AA5-9726397081AA</ResponseData>
</Response>
```

Sample Unsuccessful XML Result

```
<Response>
  <ResponseCode>1</ResponseCode>
  <ResponseData>Invalid Account or Application Key</ResponseData>
</Response>
```

Sample Successful CSV Result

```
0,EE5B4FCB-25D2-4267-AEB6-F10A1C9D0031
```

Sample Unsuccessful CSV Result

```
1,Invalid Account or Application Key
```

Obtaining a Session Token through PHP using CURL

```
<?
$Url = 'http://mysite.e-lectazone.com/apps/token.asp'.
      '?cid=123456&appkey=UO86CN11XY73SF72TT40PG18ZE76VV71&result=xml'

if (!function_exists('curl_init')){
    die('cURL is not installed!');
}
$ch = curl_init();
// Set URL to download and other parameters
curl_setopt($ch, CURLOPT_URL, $Url);
curl_setopt($ch, CURLOPT_HEADER, 0);
curl_setopt($ch, CURLOPT_RETURNTRANSFER, true);
curl_setopt($ch, CURLOPT_TIMEOUT, 60);
// Download the given URL, and return output
```

```
$output = curl_exec($ch);  
// Close the cURL resource, and free system resources  
curl_close($ch);  
?>
```

Sample ASP code snippet using WinHttp.WinHttpRequest

```
<%  
Dim objWinHttp  
Dim strHTML  
Set objWinHttp = Server.CreateObject("WinHttp.WinHttpRequest.5.1")  
  
SiteURL           = "http://mysite.e-lectazone.com"  
AccountId         = 11267192  
AppKey            = "UO86CN11XY73SF72TT40PG18ZE76VV71"  
Result            = "xml"  
  
AppRoot = SiteURL + "/apps/token.asp?cid=" & AccountId & "&appkey=" & AppKey &  
"&result=" & Result  
objWinHttp.Open "GET", AppRoot  
  
objWinHttp.Send  
  
strHTML = objWinHttp.ResponseText  
Set objWinHttp = Nothing  
  
Response.Write strHTML  
%>
```

Direct Classroom Access Namespace

With this API call you can place students and teachers into your eLecta Live virtual classrooms directly from your website.

The following prerequisites are needed to use this API call

1. Your system has its own student/teacher database.
2. Each individual user authenticates on your website with a personal username and password.
3. Your system has a class/event schedule for the live classes.
4. Your system can determine if it is time for a class to start, according to its own schedule.

The API also assumes that your system “knows” who will teach the class and respectively it can display an “Enter Class” button or link for each logged student or teacher if a class is about to start.

Authentication Namespace: </apps/launch.asp>

Supported HTML Methods: GET / POST from the client browser

Communications Level: Only Client-Server

Parameters:

Parameter Name	Description	Type
Token	A valid session token obtained from a previous server-to-server call to the authentication API. This is not your application key.	Required
CID	This is your company account ID provided by eLecta Live. The CID is located on the API access page of your web based control panel.	Required
RoomId	The identifier of the virtual classroom in which to place the user. Room numbers are available under your eLecta Live account. (See comments about room numbers below)	Required
ExternalName	A unique identifier of the user. This must be a value from your database for each user. This could be the user email address or some other alpha-numeric ID from your database.	Required
FirstName	The first name of the user as it should appear in the classroom	Required
Email	The student/teacher email address.	Optional
LastName	The last name of the user as it should appear in the classroom	Optional
Gender	The gender of the user. “M” for Male or “F” for Female. The default value if not specified is “M”	Optional
UserTypeId	The access level of the user. “0” – the user is a student, “1000” – the user is a teacher. The default value if not specified is 0	Optional

Result of the Call: Upon a successful call the client browser will be redirected to the classroom launching page and the virtual classroom will open placing inside the student (or moderator) with the specified name. If this is a first time user the classroom plug-in will be installed on the user computer.

Sample Calls Using an HTML GET

<http://YourSiteName.train-zone.com/apps/launch.asp?token=9C467079-FE3B-45C5-8AA5-9726397081AA&cid=1234567&roomid=1233&usertypeid=0&firstname=John&externalname=john@someemail.com>

<http://YourSiteName.train-zone.com/apps/launch.asp?token=9C467079-FE3B-45C5-8AA5-9726397081AA&cid=1234567&roomid=1233&usertypeid=1000&firstname=Mary%20Ann&externalname=maryann@someemail.com>

Sample Calls Using and HTML POST

The parameters here are the same and have the same meaning as in the “GET” approach. Embed the following HTML form into your web page:

```
<form target="_blank" method=post
action="http://yoursitename.e-lectazone.com/apps/launch.asp">
  <INPUT TYPE="hidden" name="token" value="9C467079-FE3B-45C5-8AA5-9726397081AA">
  <INPUT TYPE="hidden" name="cid" value="77981">
  <INPUT TYPE="hidden" name="roomid" value="1234">
  <INPUT TYPE="hidden" name="usertypeid" value="0">
  <INPUT TYPE="hidden" name="gender" value="M">
  <INPUT TYPE="hidden" name="firstname" value="George">
  <INPUT TYPE="hidden" name="lastname" value="Edwards">
  <INPUT TYPE="hidden" name="email" value="myeamil@email.com">
  <INPUT TYPE="hidden" name="externalname" value="unique_id_for_GerorgeEdwrds">
  <INPUT TYPE="submit" value="Enter">
</form>
```

This form will display an “Enter” button. When clicked, the user will be placed into the classroom.

Comments

None of the examples requires that you pre-set users in eLecta Control panel. THIS IS NOT NEEDED. The only thing needed is to fill in the parameters as explained.

Your system has to control the access to these links and buttons. For example – shows them when the class is about to starts... in other words the links (buttons) should be visible when the user is allowed (or supposed) to enter the classroom.

The “CID” parameter for your account is provided upon purchasing our services.

The “RoomID” parameter is available under your account (see Manage Virtual Rooms Menu). You may have to store that room # also in your schedule if you could modify the respective tables.

eLecta Live Professional supports multiple rooms. A common practice is to keep the room numbers in your database along with each event.

Alternatively you may use the Room Management API to create rooms on the fly. The room management API is only available for eLecta Live Professional.

Restrictions Apply

eLecta Live Easy Meeting does not support this API.

eLecta Live Tutor supports the API but does not support users of type 1000 (moderator/teacher). Since this is a single tutor account the only teacher is supposed to enter the class using the eLecta Live Control Panel.

eLecta Live Training Center+ and **eLecta Live Professional** do not have the above restrictions.

Encoding

If you submit non Latin letters for the students' names – for example Arabic or Cyrillic please do not forget to use the UTF-8 encoding in the HTTP headers of the pages which contain the above code.

Recordings Namespace

The recordings namespace provides functionality to extract recorded sessions from the online library.

Authentication Namespace: </apps/recordings.asp>

Supported HTML Methods: GET / POST

Communications Level: Server-Server or Client-Server

Parameters:

Parameter Name	Description	Type
Token	A valid session token obtained from a previous server-to-server call to the authentication namespace. This is not your application key.	Required
CID	This is your company account ID provided by eLecta Live. The CID is located on the API access page of your web based control panel.	Required
RoomId	The identifier of the virtual classroom in which to place the user. Room numbers are available under your eLecta Live account. (See comments about room numbers below)	Required
From	The start date/time of the time frame	Optional
To	The end date/time of the time frame	Optional
Separator	The separator to use in case of a CSV result set. Does not apply for XML result sets.	Optional
Quote	0 – values are unquoted; 1 – values are placed inside “ ”	Optional
LT	The type of the link to return; 0 – returns “playable” links, 1 – returns “download” links. This parameter applies only for csv result sets (see below). If xml is used both a playable and a download links are returned.	Optional
Exptime	The expiry interval in seconds of the links. The default Exp time is 300 seconds. The max value accepted is 1576800000 (50 years)	Optional
Result	The type of response to return. “xml” will return a xml result set. “csv” will return a comma separated value list with #13#10 at the end of each line. If not specified “xml” will be used.	Optional

Result of the Call: The response is either an XML or a CSV containing information about recordings that match the specified criteria.

If both the “from” and “to” parameters are omitted the system will return all recordings available for the given virtual room. If only “from” is specified the result will contain only recordings with dates later than

Sample Calls Using an HTML GET

```
http://youraccounturl.e-lectazone.com/apps/recordings.asp?token=A3B32D3F-CEA6-4EEC-BC9D-0508929B869C&cid=12321&roomid=1093&from=7/1/2010 13:00&to=11/1/2010 22:00
```

```
http://youraccounturl.e-lectazone.com/apps/recordings.asp?token=CEC91808-06A3-4554-AEEB-55735652A7E0&cid=1&roomid=1093&from=7/1/2010 12:00&to=11/1/2010&result=csv&lt=1
```

Sample XML result

```
<?xml version='1.0' encoding='UTF-8'?>
<Recordings>
  <Count>10</Count>
  <CompanyId>12321</CompanyId>
  <UTCFromDateTime>7/1/2010 12:00</UTCFromDateTime>
  <UTCToDateTime>11/1/2010</UTCToDateTime>
  <Items>
    <Item>
      <Id>31388</Id>
      <Name>New Recording</Name>
      <UTCCreateDateTime>7/14/2010 4:48:48 PM</UTCCreateDateTime>
      <DurationSeconds>3</DurationSeconds>
      <FileSizeBytes>29699</FileSizeBytes>
      <RoomID>1093</RoomID>
      <RecorderUserId>1000</RecorderUserId>
      <UTCLinkExpires>6/28/2011 1:35:21 PM</UTCLinkExpires>
      <PlayBackURL>http://www.e-lectazone.com/tools/play\_uni.asp?url=http://node5.nirvanix.com/h2Eek6zq~zYPFhjVxtA~mWuyZlTT~Rds4SECW1v~48fqBCQ/1-Planet/C62459-2/ELECTA/Server/06DB/RecordedSessions/U220002R1093S928379062.e17</PlayBackURL>
      <DownloadURL>http://node5.nirvanix.com/h2Eek6zq~zYPFhjVxtA~mWuyZlTT~Rds4SECW1v~48fqBCQ/1-Planet/C62459-2/ELECTA/Server/06DB/RecordedSessions/U220002R1093S928379062.e17&disposition=attachment</DownloadURL>
    </Item>
    <Item>
      <Id>36634</Id>
      <Name>New Recording</Name>
      <UTCCreateDateTime>10/8/2010 11:54:27 AM</UTCCreateDateTime>
      <DurationSeconds>70</DurationSeconds>
      <FileSizeBytes>205665</FileSizeBytes>
      <RoomID>1093</RoomID>
      <RecorderUserId>138598</RecorderUserId>
      <UTCLinkExpires>6/28/2011 1:35:21 PM</UTCLinkExpires>
      <PlayBackURL>http://www.e-lectazone.com/tools/play\_uni.asp?url=http://node5.nirvanix.com/eya9F67a~BuL2E63XAx~x5-DASx7~WtokyQcuj9~V\_pnDnM/1-Planet/C62459-2/ELECTA/Server/05DB/RecordedSessions/U242345R1093S1747387000.e17</PlayBackURL>
    </Item>
  </Items>
</Recordings>
```

```

    <DownloadURL>http://node5.nirvanix.com/eya9F67a~BuL2E63XAx~x5-DASx7~WtokyQcuJ9~V\_pnDnM/1-Planet/C62459-2/ELECTA/Server/05DB/RecordedSessions/U242345R1093S1747387000.el7&disposition=attachment/DownloadURL
  </Item>

```

```

</Items>
</Recordings>

```

Sample CSV Result Set

```

31388,New Recording,7/14/2010 4:48:48 PM,0,29,http://node5.nirvanix.com/aGZMP3Mb~8dGfvfCOKm~Lekm48bj~PpXU3nrJyn~nl8XUq8/1-Planet/C62459-2/ELECTA/Server/06DB/RecordedSessions/U220002R1093S928379062.el7&disposition=attachment 36634,New Recording,10/8/2010 11:54:27 AM,1,201,http://node5.nirvanix.com/aytZ6rD0~-hGcDwkTeB~g8lplbtr~7WpbY3OSPQ~68Q02jE/1-Planet/C62459-2/ELECTA/Server/05DB/RecordedSessions/U242345R1093S1747387000.el7&disposition=attachment 36806,New Recording,10/11/2010 3:54:11 PM,0,7,http://node5.nirvanix.com/dHiyKEyW~UmowO024oa~yh5ItQ-r~vkz3Z3Mkh8~u9GOQgY/1-Planet/C62459-2/ELECTA/Server/05DB/RecordedSessions/U242823R1093S2020973343.el7&disposition=attachment 37039,New Recording,10/14/2010 4:36:48 PM,0,6,http://node5.nirvanix.com/erL_Mc39~ssP9k-fQqH~Z0Z3dv_b~71AGVUx5_S~4qZSpUM/1-Planet/C62459-2/ELECTA/Server/06DB/RecordedSessions/U244015R1093S1083435734.el7&disposition=attachment 37040,New Recording,10/14/2010 4:50:26 PM,0,6,http://el05.e-lecta.com/userdatabase/recordedsessions/u244023r1093s6600187.el7 37044,New Recording,10/14/2010 5:13:02 PM,0,7,http://el05.e-lecta.com/userdatabase/recordedsessions/u244044r1093s7955703.el7 37047,New Recording,10/14/2010 5:20:17 PM,0,7,http://el05.e-lecta.com/userdatabase/recordedsessions/u244048r1093s8390437.el7 37048,New Recording,10/14/2010 5:20:31 PM,0,7,http://el05.e-lecta.com/userdatabase/recordedsessions/u244049r1093s8404812.el7 37134,New Recording,10/16/2010 6:39:27 AM,2,6,http://node5.nirvanix.com/JKAXtHL~dCl4ywp_gi~QVSM2oTh~HNTpirBMIP~VxKDMcc/1-Planet/C62459-2/ELECTA/Server/06DB/RecordedSessions/U244512R1093S1220410687.el7&disposition=attachment 37135,New Recording,10/16/2010 6:41:16 AM,0,6,http://node5.nirvanix.com/MJNXxRQb~ch0w9coQwL~vEvp1YFu~g8e7TcsbXO~OFzko4U/1-Planet/C62459-2/ELECTA/Server/06DB/RecordedSessions/U244513R1093S1220519375.el7&disposition=attachment

```

Fields in the CSV Result Set

The result set returned is a clear text response. Each line ends with the **#13#10** characters. Each line contains data about one single recording. The returned values are as follows:

Position	Description	Sample Value
0	Numeric unique identifier of the recorded session	12389
1	The name of the recording as specified in your control panel.	Jenny's Math Class
2	The UTC date/time the recording was started.	1/14/2011 8:34:31 AM
3	Session duration in seconds	7380
4	Session size in bytes	6815744
5	The recording URL. This is the URL of the recorded sessions. It can be a "playable URL" or a "Download URL" as specified by the LT parameter	<i>See sample result above</i>

The "CID" parameter for your account is provided upon purchasing our services.

The "RoomID" parameter is available under your account (see Manage Virtual Rooms Menu). You may have to store that room # also in your schedule if you could modify the respective tables.

It is recommended to call the API only from your web server (and not from the client browser). The parsing of the results should take place on your server.

The LT=0 returns links that open the eLecta Live player. The LT=1 returns links that bring up a download dialog.

The expiry time starts counting as soon as the result set is generated. Please have in mind that it may take some time before you get the result at your site. After the time expires the links will become inactive. A 403 result will be returned.

Reporting Namespace

This namespace provides an API call that returns log history records. The results are always returned in XML format.

Authentication Namespace: </apps/logs.asp>

Supported HTML Methods: GET / POST from the client browser

Communications Level: Server-Server or Client-Server

Parameters:

Parameter Name	Description	Type
Token	A valid session token obtained from a previous server-to-server call to the authentication namespace. This is not your application key.	Required
CID	This is your company account ID provided by eLecta Live. The CID is located on the API access page of your web based control panel.	Required
RoomId	The room number to extract attendance records from. This parameter is optional. If not specified UserId must be provided.	At least one of these parameters is required
UserId	The ID of the user to for which attendance records are to be extracted. This parameter is optional but if not provided RoomId must be specified.	
From *	The start date/time of the requested time frame. If this parameter is not provided the current date will be used. Time part will be considered 00:00:00 UTC	Optional
To *	The end date/time of the time frame. If this parameter is not provided the current date with 23:59:59 time value will be used.	Optional

* The maximum time frame specified by the "to" - "from" parameters may not exceed 7 days.

Sample Calls Using an HTML GET

```
http://youraccounturl.e-lectazone.com/apps/logs.asp?token=A3B32D3F-CEA6-4EEC-BC9D-0508929B869C&cid=12321&roomid=1093&from=7/1/2010 13:00&to=7/4/2010 22:13
```

Sample XML result

```
<?xml version='1.0' encoding='UTF-8'?>
<Logs>
  <Count>4</Count>
  <CompanyId>1</CompanyId>
  <UTCFromDateTime>1/1/2010</UTCFromDateTime>
```

```

<UTCToDateTime>1/8/2010</UTCToDateTime>
<Items>
  <Item>
    <UserId>138598</UserId>
    <RoomId>1093</RoomId>
    <DisplayName>yana s.</DisplayName>
    <UTCIn>1/7/2010 1:51:34 PM</UTCIn>
    <UTCOut>1/7/2010 2:29:08 PM</UTCOut>
    <IP>217.79.69.111</IP>
    <AccessLevel>MDR</AccessLevel>
  </Item>
  <Item>
    <UserId>1000</UserId>
    <RoomId>1093</RoomId>
    <DisplayName>Chris Richards</DisplayName>
    <UTCIn>1/7/2010 2:27:54 PM</UTCIn>
    <UTCOut>1/7/2010 2:29:13 PM</UTCOut>
    <IP>217.79.69.111</IP>
    <AccessLevel>ADM</AccessLevel>
  </Item>
  <Item>
    <UserId>1000</UserId>
    <RoomId>1093</RoomId>
    <DisplayName> Chris Richards </DisplayName>
    <UTCIn>1/7/2010 2:30:32 PM</UTCIn>
    <UTCOut>1/7/2010 2:31:50 PM</UTCOut>
    <IP>217.79.69.111</IP>
    <AccessLevel>ADM</AccessLevel>
  </Item>
  <Item>
    <UserId>138598</UserId>
    <RoomId>1093</RoomId>
    <DisplayName>yana s.</DisplayName>
    <UTCIn>1/7/2010 2:30:55 PM</UTCIn>
    <UTCOut>1/7/2010 2:31:43 PM</UTCOut>
    <IP>217.79.69.111</IP>
    <AccessLevel>MDR</AccessLevel>
  </Item>
</Items>
</Logs>

```

Fields in the CSV Result Set

The result set returned is a clear text response. Each line ends with the #13#10 characters. Each line contains data about one single recording. The returned values are as follows:

Node	Description	Sample Value
Count	The number of entries returned in the result set.	123
CompanyId	The ID of the company as specified by the cid parameter	123456
UTCFromDateTime	The UTC starting date/time the time frame.	1/14/2011 8:34:31 AM

UTCtoDateTime	The UTC ending date/time the time frame.	1/17/2011 10:21:31 AM
UserId	The numeric user id	12341211
RoomId	The room number	8010
DisplayName	The name that showed up in the attendees' list.	Example: T. J. Richardson
UTCIn	The time when the user entered the session. UTC offset.	1/14/2011 11:21:31 PM
UTCOut	The time when the user left the session. UTC offset. If the user is still in the session an empty string will be returned.	
IP	The IPv4 address of the user.	127.0.0.1
AccessLevel	The access level the user had in the session. The following values may be returned: STD – student MDR – session moderator/teacher ADM - Administrator	STD

This API is under development. For any additional information or help please send your requests to support@e-lecta.com