

EchoSystem 5.5 Schedule API

Reference Guide

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1. Introduction

This document covers the Scheduling API supported by EchoSystem 5.5. The API enables programmatic EchoSystem scheduling via a RESTful interface. The EchoSystem Server is the central component of the EchoSystem platform. It stores all data for capture schedules, manages user access to data contained within the system, as well as controls the capturing and processing activities performed by the related capture devices and media processors.

Some of the data contained within the EchoSystem Server is also contained within other systems in the university environment. Similarly, some of the data contained within the EchoSystem Server is often related to information contained within other systems. For this reason, it may be desirable to more closely integrate the EchoSystem Server with these related systems.

The API is an extension to the EchoSystem Server application that provides external systems direct access to query, create, update and delete the data contained within the EchoSystem Server.

Example Use Cases:

1. Integration with a third party timetabling system to automate the scheduling process within the EchoSystem server. Room booking is extracted from the third party system and would automatically create the required entities in the EchoSystem to populate schedules.
2. Creation of an online booking form that enables Faculty/Academics to request their lectures to be captured. Such a web form might have a backend that integrates with the EchoSystem Server to add the capture schedules dynamically.
3. Automating the process of creating users, courses, and sections between the Student Information System (SIS) and the EchoSystem server.
4. The Basics

This section provides detailed documentation for all of the actions made available by the EchoSystem schedule API.

## Common Symbols

**Curly Braces { }:** This document encloses symbolic variables within curly braces. The API user will substitute the variable with a concrete value. For example: "GET /buildings/{building-id}/rooms/{room-id}" indicates the caller should provide a concrete Building ID and Room ID when issuing the stated HTTP GET.

**Square Brackets [ ]:** Items enclosed in square brackets indicate optional parameters. For example: " GET /buildings/{building-id}/rooms[?term="{name-pattern}"] " indicates that the list rooms query supports an option parameters called "term" which takes a name pattern value.

**{base-uri}:** Within this document, the {base-uri} symbol represents the common or root HTTP URL used by all API requests.

The actual base-uri will be determined by the EchoSystem configuration on the Systems Settings page. The DNS name and port numbers can be customized on this page by each customer. To determine your {base-uri} logon to the EchoSystem as an system administrator and navigate to System > System Settings and review the “Public Application Base URL” setting.

An example {base-uri} is: https://ess.institution.com:8443/ess/scheduleapi/v1

**{entityName-id}:** Many of the API request URLs require the caller to specify one or more entity IDs. These IDs are GUID strings or the use of the alternate ID for a previously created entity. The documentation will simply use the {entityName-id} symbol to indicate that the caller provides an entity id.

Representations of entities are transferred by the EchoSystem schedule API. Three standard "levels" of entity representation (XML) are supported by the API; detailed, summary, and link. These levels are referred to in the API reference tables as “Rep. Levels”.

**Link**: The "link" representation is the corresponding URL that will retrieve an entity's "detailed" representation. Links usually refer to associated parent or child entities. For instance: a "detailed" building representation will contain a link to its rooms. The XML element "link" along with its attributes "href", "rel", and "title", define the link representation. For example:

<link href="{base-uri}/buildings/{building-id}/rooms" rel="http://schemas.com.echo360.rooms" title="rooms"/>

There can be optional content for the link element. This is expected to be a short description of the link target.

**Detailed**: The “detailed” representation contains all fields of a given attribute. This representation is provided on "POST" requests and "GET" entity responses. The top level XML element will be the entity name; such as "room". Its children elements map to the entity's properties/attributes.

For example:

<room>

 <id>938ab3edf432047a</id>

 <link href="{base-uri}/buildings/{GUID}"

 rel="http://schemas.com.ech360.building" title="building"/>

 <name>washington-101</name>

</room>

**Summary**: When lists of entities are requested, the API response is a list of entity summaries. Each summary contains a link to the detailed entity. This special link uses a "rel=self" link attribute.

**{name-patterm}:** A name or partial name of an entity, used for searching

## Basic API Response

Following the RESTful API pattern, the EchoSystem Scheduling API returns HTTP response headers with a XML content/body. The returned XML is either a "collection" of summary entities or a single detailed "entity" XML element. Typically, a given collection element is simply plural name of the entities within the collection.

**Entity vs. Entity Collection:** Each entity operated upon by the API has an associated entity collection. For instance: a "room" entity has an associated "rooms" collection.

Following the RESTful pattern, entities are accessed from their associated collection.

So a request for a specific room is addressed relative to the rooms collection. This pattern shows up in the API request URL. The basic URL pattern is:

"{base-uri}/{collection-name}/{entity-id}"

Examples:

“GET {base-uri}/rooms/{room-id}" returns the "detailed" representation of the given room.

"GET {base-uri}/rooms/{alternate-ID}" returns the "detailed" representation of the given room.

The associated collection name is the English plural of the entity name. Collections are returned by the API when the URL does not specify an entity id.

Example: "GET {base-uri}/rooms" returns a collection of all rooms within the organization.

For instance, the "rooms" collection is:

<rooms>

 <total-results>25</total-results>

 <items-per-page>25</items-per-page>

 <start-index>0</start-index>

 <!-- each room element is the "summary" representation of the entity -->

 <room><room/>

 <room><room/>

 <room><room/>

 ...

</rooms>

## API Error Responses

EchoSystem Scheduling API returns appropriate status codes in the HTTP headers in case of an error.

**400 Status codes** - Client/Data Errors: These 400 errors usually mean bad user input; unauthorized request, bad XML etc. The returned response body has more description of the actual cause of the error.

**500 Status codes** - Server Error: These errors indicate that something went wrong on the server. The returned response body has more description of the actual cause of the error.

## Authentication and Authorization

EchoSystem Server Scheduling API utilizes OAuth for handling system authentication and authorization.

**Authentication** is the process of verifying who sent a given API request. It also includes steps to verify that the request was not altered by an intermediate party. Note: Authentication does not address privacy of the data being transmitted.

The Echo360 System requires each API request to be "signed" by an API key and shared secret. The OAuth standard defines how to sign the HTTP API requests; including the format of the HTTP Authorization header field.

For the Scheduling API the key and shared secret are referred to as a "Trusted System". Each trusted system must register with the Echo360 System via the Administration User Interface page at (https://ess.institution.edu/ess/security/ListTrustedSystems.html). The registration process generates a Trusted System ID and a shared secret. The Trusted system then signs all their associated requests with these credentials. The third party system needs to secure the credentials; to prevent another party from impersonating the trusted system.

**Authorization** is the process of determining if a given Authenticated API user is allowed to perform the request action. Many systems define user roles which restrict the action that a user can take. Currently, the Scheduling API does not restrict the actions of an Authenticated API user.

**OAuth Specifics**

The Scheduling API uses a simplified two-legged OAuth authorization process. The OAuth standard also supports a more complex three-legged process that uses session based request/auth tokens along with the consumer key/secret. The three-step process is targeted to internet hosted services that are accessed by many diverse consumer clients. The RFC reference can be found at: <http://tools.ietf.org/html/rfc5849>.

In the simplified two-legged scheme, the consumer needs to register with the Echo360 System, in order to be assigned a unique consumer key and shared secret. These credentials are long lived and not limited to a session timeout. The consumer does not need to request a session token/secret (OAuth request & auth tokens/secrets) before initiating a request to the Echo360 System. Instead, the consumer just uses the consumer key/secret and an empty auth token/secret to sign all scheduling API requests.

As per the OAuth specification, the OAuth parameters and signature are passed in the HTTP "Authorization" header field.

**OAuth Terms**

Below are the terms defined by the OAuth specification and how they apply to the Scheduling API.

**Producer:** The Echo360 System.

**Consumer:** The system trusted by the Echo360 System.

**Consumer Key:** The key supplied by the API User when registering as a Trusted System.

**Consumer Secret:** The shared secret generated by the Echo360 System when the consumer was registered as a Trusted System.

Here is a sample OAuth Request Header:

**Name:** Authorization

**Value:** OAuth

realm="https%3A%2F%2Fess.echo360.com%3A8445%2Fess%2Fscheduleapi%2Fv1%2Fproduct-groups%2F0464bfc5-8785-435f-bbb6-34edc04f134f",oauth\_signature\_method="HMAC-SHA1",oauth\_version="1.0",oauth\_nonce="wD2NmM",oauth\_timestamp="1320236659",oauth\_consumer\_key="EchoCenter-048965",oauth\_signature="FNWMxwf24nomQl1wPTJulx1%2Fsa4%3D"

**OAuth Tools and Code References**

**Tools**

* Firefox RESTClient - <https://addons.mozilla.org/en-us/firefox/addon/restclient/>
* Chrome Advanced Rest Client - <https://chrome.google.com/webstore/detail/advanced-rest-client/hgmloofddffdnphfgcellkdfbfbjeloo?hl=en-US>

**Code Examples:**

* PHP - <http://code.google.com/p/oauth-php/wiki/ConsumerHowTo>
* Python - <https://github.com/simplegeo/python-oauth2>
* Ruby - <https://github.com/intridea/oauth2>
1. REST API

## Organizations API

Organizations allow you to implement a hierarchy of administration. You can have two hierarchical levels: parent and child. You can have only one parent but any number of child organizations. The parent organization, typically the university, is established automatically when you install EchoSystem. Child organizations are encouraged, because they can be changed, edited, and deleted if necessary. The parent organization cannot be deleted.

Child organizations initially inherit the settings of the parent but you can customize those settings. Customization allows an individual organization to define its own policies on such subjects as frequency of capture, the need for confidence monitoring, retention policies, and many other topics.

## Organization Entity's XML mapping

The below table defines the mapping of organization attributes/fields to/from its various XML representations (summary or detailed).

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | System generated entity identifier. |
| name | All | string | Organization name |
| alternateId | All | string | Alternate Identified for object |
| display-name | All | string | Required, Organizations display name |
| license-identifier | All | string | Parent license or customer identifier |
| parent-id | All | string | Unique identifier referring to the parent organization |

### Organization Collection Request

Get all organizations on the EchoSystem.

**URL:** GET {base-uri}/organizations

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/organizations

**Status Codes:**

**200 OK** – See response XML

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<organizations>

 <total-results>32</total-results>

 <items-per-page>32</items-per-page>

 <start-index>0</start-index>

<organization>

 <id>001f9510-978b-4357-a632-cb95ecc44243</id>

 <etag>0</etag>

 <name>UB</name>

 <alternateId/>

 <display-name>Institution</display-name>

 <license-identifier>10302019406501</license-identifier>

 <link rel="self" title="self" href= "https://ess.echo360.com/ess/scheduleapi/v1/organizations/001f9510-978b-4357-a632-cb95ecc44243" />

</organization>

<organization>

 <id>09f7ba67-d136-484e-92e0-f7eaabd02843</id>

 <etag>0</etag>

 <name>GMU</name>

 <alternateId/>

 <display-name>Institution / GMU</display-name>

 <license-identifier/>

<link rel="self" title="self" href= "https://pilot.echo360.com/ess/scheduleapi/v1/organizations/09f7ba67-d136-484e-92e0-f7eaabd02843" />

</organization>

<organization>

 <id>20652a1f-277b-4b98-82d1-3a1dfac2ffbb</id>

 <etag>0</etag>

 <name>ODU</name>

 <alternateId/>

 <display-name>Echo360 / ODU</display-name>

 <license-identifier/>

 <link rel="self" title="self" href= "https://ess.echo360.com/ess/scheduleapi/v1/organizations/20652a1f-277b-4b98-82d1-3a1dfac2ffbb" />

</organization>

### Get Organization Details

Retrieve the detailed information on the Organization entity.

**URL:** GET {base-uri}/organizations/{organization-id}

**URL:** GET {base-uri}/organizations/{alternate-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/20652a1f-277b-4b98-82d1-3a1dfac2ffbb

**Status Codes:**

**200 OK –** See response XML

**409 Bad Request** - The organization name provided already exists for the parent ID given.

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<organization>

 <id>09f7ba67-d136-484e-92e0-f7eaabd02843</id>

 <etag>0</etag>

 <name>GMU</name>

 <alternateId/>

 <display-name>Echo360 / GMU</display-name>

 <license-identifier/>

 <parent-id>2d99cf8a-ba4e-4b0f-8438-81833922dc40</parent-id>

 <description>George Mason University</description>

</organization>

### Add Organization

**URL:** POST {base-uri}/organizations

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/organizations

**Request XML:**

<organization>

 <name>Virtual Campus</name>

 <alternateId>VirtualCampus</alternateId >

 <parent-id>2d99cf8a-ba4e-4b0f-8438-81833922dc40</parent-id>

 <description>Institution Virtual Campus</description>

</organization>

**Status Codes:**

**200 OK –** See response XML

**400 Bad Request**

* The organization name provided already exists for the parent ID given.
* Missing or empty required element 'parent-id'
* Cannot create a root level Organization
* Cannot create an Organization more than 2 level deep.

**Response XML:**

<organization>

 <id>defc2203-e342-43b7-846a-314fdbbcb9c3</id>

 <name>Virtual Campus</name>

 <alternateId>VirtualCampus</alternateId >

 <display-name>Institution / Virtual Campus</display-name>

 <parent-id>2d99cf8a-ba4e-4b0f-8438-81833922dc40</parent-id>

 <license-identifier>

 </license-identifier>

 <description>Institution Virtual Campus</description>

 <link rel="self" title="self" href="https://ess.echo360.com:8445/ess/scheduleapi/v1/organizations/defc2203-e342-43b7-846a-314fdbbcb9c3"/>

</organization>

### Update Organization

**URL:** PUT {base-uri}/organizations/{organization-id}

**URL:** PUT {base-uri}/organizations/{alternate-id}

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/20652a1f-277b-4b98-82d1-3a1dfac2ffbb

**Errors:** Same as for Add Child (create) organization

**Request XML:**

Only need to specify the fields that are being updated. Non-updatable fields are ignored.

<organization>

 name>Virtual Campus</name>

</organization>

### Delete Organization

Remove the Organization.

**URL:** DELETE {base-uri}/organizations/{organization-id}

**URL:** DELETE {base-uri}/ organizations/{alternate-id}

**Errors:**

**404** - Entity 'organization-id', ID '<OrgID>' was not found

**500** - Internal Error, examine error for specific exception

## Person API

A person in EchoSystem can have one or more organization-roles. EchoSystem comes configured with several user roles, each with a unique set of rights. When the role is associated with the parent organization, the user can perform that role for the parent organization or any child organization. When the role is associated with a child organization, the user can affect only objects owned by the child organization.



### Person Entity's XML mapping

The below table defines the mapping of person attributes/fields to/from its various XML representations (summary or detailed).

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | System generated entity identifier. |
| alternateId | All | string | Optional alternate system identifier |
| user-name | All | string | Person’s user name in the system (same as credentials/user-name) |
| display-name | All | string | Required, Person's display name |
| last-name | All | string | Required Person's last name |
| first-name | All | string | Required, Person's first name |
| created-time | Detailed | iso-time | Auto populated with the creation time stamp. |
| title | Detailed | string | Optional formal title of the Person |
| email-address | Detailed | string | Optional email address for the Person |
| website | Detailed | string | Optional URL for the person's reference website. |
| time-zone | Detailed | string | Optional time zone of the Person. |
| locale | Detailed | string | Optional Locale of the Person. |
| block-alerts | Detailed | boolean | Relates to system alerts and requires e-mail address when true. Default is false. |
| credentials / user-name | Detailed | string | Required on create, the login user-name string. |
| credentials / password | Detailed | string | Required on create, the login password string. Due to security concerns, the password is never included in the Person response message. |
| organization-roles | Detailed | rolescollection | List of organization-roles assigned to the person. Inline collection of "organization-roles" containing "organization-role" names. Inline since organization-role entity is a simple structure. |

### "organization-roles" inline collection XML mapping

The Person's assigned role(s) are a simple collection element called "roles"; which contains "role" names. Each "role" element has a text role name and a UUID or organization name.

|  |  |  |  |
| --- | --- | --- | --- |
| Field / Element | Rep. Levels | Type (length) | Information |
| organization-id | All | UUID | Optional, System generated entity identifier. |
| organization-name | All | string | Optional, name of the organization, required if organization-id is missing |
| organization-role | All | enum string | Short or long role name. For example: "admin" or "role-admin" are the short/long role names for the System Administrator Role. Short Role Names: "admin", "system-admin", "av-technician", "academic-staff", "scheduler", "license-manager""license-manager" is only applicable at the root organization level |

### People Collection Request

Get all people within the organization. The optional "term" parameter limits the list to matching on the name (last, first) attribute.

**URL:** GET {base-uri}/people

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/people

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<people>

 <total-results>16</total-results>

 <items-per-page>16</items-per-page>

 <start-index>0</start-index>

 <person>

 <id>de83c9bf-a56d-467f-bfd9-0278a6eb9905</id>

 <etag>1</etag>

 <user-name>GMU.Admin</user-name>

<display-name>GMU Admin</display-name>

 <first-name>Gmu</first-name>

 <last-name>Admin</last-name>

 <created-time>2006-01-19T12:35:19.000Z</created-time>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/people/de83c9bf-a56d-467f-bfd9-0278a6eb9905" rel="self" title="self"/>

 </person>

 <person>

 <id>c53114ac-1ea2-4bb7-8651-55d4104510d3</id>

 <etag>1</etag>

 <user-name>ODU.Admin</user-name>

 <display-name>ODU Admin</display-name>

 <first-name>Odu</first-name>

 <last-name>Admin</last-name>

 <created-time>2006-01-19T12:35:19.000Z</created-time>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/people/c53114ac-1ea2-4bb7-8651-55d4104510d3" rel="self" title="self"/>

 </person>

</people>

### Get Person

Retrieve the detailed information on the Person entity.

**URL:** GET {base-uri}/people/{person-id}

**URL:** GET {base-uri}/people/{alternate-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/people/d2f5d4e6-fb9d-4f34-abc5-9b930647979e

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<person>

 <id>d2f5d4e6-fb9d-4f34-abc5-9b930647979e</id>

 <etag>1</etag>

 <user-name>Root.Admin</user-name>

 <display-name>Root.Admin</display-name>

 <first-name>Root</first-name>

 <last-name>Admin</last-name>

 <created-time>2006-01-19T12:35:19.000Z</created-time>

 <alternateId/>

 <title/>

 <email-address>radmin@echo360.com</email-address>

 <website/>

 <block-alerts>false</block-alerts>

 <time-zone>US/Eastern</time-zone>

 <locale>en\_US</locale>

 <credentials>

 <user-name>radmin@echo360.com</user-name>

 </credentials>

 <organization-roles>

 <organization-role>

 <organization-id>e8b76e41-e9d1-454d-ac6b-18ceb464851a</organization-id>

 <role>role-name-admin</role>

 </organization-role>

 </organization-roles>

</person>

### Add Person

**URL:** POST {base-uri}/people

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/people

**Request XML:**

<person>

 <first-name>Clark</first-name>

 <last-name>Kent</last-name>

 <display-name>Clark Kent</display-name>

 <title>Super Hero</title>

 <alternateId>ckent@echo360.com</alternateId>

 <email-address>ckent@echo360.com</email-address>

 <block-alerts>false</block-alerts>

 <time-zone>US/Eastern</time-zone>

 <locale>en\_US</locale>

 <credentials>

 <user-name>ckent@echo360.com</user-name>

 <password>password</password>

 </credentials>

 <organization-roles>

 <organization-role>

 <organization-id>2dfce6cb-eb9f-4085-9673-fe27363ab797</organization-id>

 <role>role-name-admin</role>

 </organization-role>

 </organization-roles>

</person>

**Response XML:**

<person>

 <id>b141a223-4b3e-4db0-901a-4071c45dfd37</id>

 <etag>0</etag>

 <user-name>ckent@echo360.com</user-name>

 <display-name>Clark Kent</display-name>

 <first-name>Clark</first-name>

 <last-name>Kent</last-name>

 <created-time>2013-09-06T18:21:37.502Z</created-time>

 <alternateId>ckent@echo360.com</alternateId>

 <link rel="self" title="self" href= "https://ess.institution.edu/ess/scheduleapi/v1/people/b141a223-4b3e-4db0-901a-4071c45dfd37" />

</person>

**Errors (400):**

* Person must have at least one Organization-Role
* First Name cannot be blank.
* Last Name cannot be blank.
* Email address cannot be blank.
* Display name cannot be blank.
* Username cannot be blank if password is provided
* Duplicate user name
* Duplicate email address

### Update Person

Allows for changes to the person details, including the ability to change user status, setting to “retired” or returning from retired to “active”.

**NOTE:** If you retire a user who is the sole instructor for a section or schedule-rule, the system automatically assigns those sections/schedules to the “Default Presenter”.

**URL:** PUT {base-uri}/people/{person-id}

**URL:** PUT {base-uri}/people/{alternate-id}

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/people/b141a223-4b3e-4db0-901a-4071c45dfd37

**Errors:** same as for Add Person.

**Request XML:**

Only need to specify the fields that are being updated. Non-updatable fields are ignored.

<person>

 <display-name>Lois Kent</display-name>

 <last-name>Kent</last-name>

</person>

Or to update status:

<person>

 <status>retired</status>

</person>

### Delete Person

Remove the Person. Echoes with deleted Persons as their only Presenters will be assigned to the Default Presenter.

**URL:** DELETE {base-uri}/people/{person-id}

**URL:** DELETE {base-uri}/people/{alternate-id}

**Errors:**

* **404** if person doesn't exist with that id
* **500** - Internal Error, examine error for specific exception

### Get all Schedules for a Person

Retrieve a list of schedule-rules associated with a person.

**URL:** GET {base-uri}/people/{person-id}/schedule-rules

**URL:** GET {base-uri}/people/{alternate-id}/schedule-rules

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/people/b141a223-4b3e-4db0-901a-4071c45dfd37/schedule-rules

**Errors:**

* **404** if person doesn't exist with that id

## Campus, Building & Room API

The information on the university's/organization's meeting or classrooms is maintained by the EchoSystem. The Room entity/resource is a key scheduling component. Capture Devices and Course Sections are assigned to rooms. The Campus and Building are secondary entities/resources that provide natural groupings of rooms.



### Campus Entity XML mapping

This table defines the mapping of Campus attributes/fields to/from its various XML representations (summary or detailed). Note: optional fields can be omitted from the XML representations if the value is null/empty. Omitting empty fields allows concise data representation.

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | System generated entity identifier. |
| name | All | string | Required, unique campus name. |
| alternateId | All | string | Alternate identifier |
| time-zone-name | Detailed | string | Optional, defaults to caller's default time zone.<http://en.wikipedia.org/wiki/List_of_zoneinfo_time_zones>Examples: "America/New\_York", "Pacific/Honolulu" |
| buildings | Detailed | link | Link to the building collection. Initially empty at create. |

### Building Entity XML mapping

This table defines the mapping of building attributes/fields to/from its various XML representations (summary or detailed).

|  |  |  |  |
| --- | --- | --- | --- |
| Field / Element | Rep. Levels | Type (length) | Information |
| id | All | GUID | System generated entity identifier. |
| campus | All | link | Link to the parent Campus. |
| name | All | string | Required, unique name within the Campus. |
| alternateId | All | string | External System ID |
| time-zone-name | Detailed | string | This field is read-only and inherited from the parent Campus. It is included on "read" operations as a convenience. |
| rooms | Detailed | link | Link to the room collection. Initially empty at create. |

### Get Campus Collection

A Campus has a collection of Buildings. The Campus entity primarily provides a means of grouping rooms. The campus time zone attribute is inherited by all buildings and associated rooms within the campus.

**URL:** GET {base-uri}/campuses[?term=”{name-pattern}”]

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/campuses

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<campuses>

 <total-results>2</total-results>

 <items-per-page>2</items-per-page>

 <start-index>0</start-index>

 <campus>

 <id>e8a82f52-2e3f-4856-8967-5efc353a5826</id>

 <etag>0</etag>

 <name>GMU Fairfax Campus</name>

 <alternateId>GMU\_Fairfax</alternateId>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826" rel="self" title="self"/>

 </campus>

 <campus>

 <id>c1c6c465-5470-4a86-b2f4-8d0a7f46057e</id>

 <etag>0</etag>

 <name>Old Dominion Sterling Campus</name>

 <alternateId>ODU\_Sterling</alternateId>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/c1c6c465-5470-4a86-b2f4-8d0a7f46057e" rel="self" title="self"/>

 </campus>

</campuses>

### Get Campus

**URL:** GET {base-uri}/campuses/{campus-id}

**URL:** GET {base-uri}/campuses/{alternate-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<campus>

 <id>e8a82f52-2e3f-4856-8967-5efc353a5826</id>

 <etag>0</etag>

 <name>GMU Fairfax Campus</name>

 <alternateId>GMU\_Fairfax</alternateId>

 <time-zone-name>US/Eastern</time-zone-name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826/buildings" rel="http://schemas.com.echo360.building" title="buildings"/>

</campus>

### Add Campus

Sent from the ESS to generate a new Tenant entity for the given Customer and ESS deployment.

**URL:** POST {base-uri}/campuses

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/campuses

**Request XML:**

<campus>

 <name>GMU Fairfax Campus - 2</name>

 <alternateId>GMU\_Fairfax\_2</alternateId>

 <time-zone-name>US/Eastern</time-zone-name>

</campus>

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<campus>

 <id>c0db2f75-89ba-4187-a1dd-7148ed3e0b79</id>

 <etag>0</etag>

 <name>GMU Fairfax Campus - 2</name>

 <alternateId>GMU\_Fairfax\_2</alternateId>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/c0db2f75-89ba-4187-a1dd-7148ed3e0b79" rel="self" title="self"/>

</campus>

### Update Campus

**URL:** PUT {base-uri}/campuses/{campus-id}

**URL:** PUT {base-uri}/campuses/{alternate-id}

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826

**Request XML:**

<campus>

 <name>GMU Prince William Campus</name>

</campus>

### Delete Campus

Remove the campus.

**URL:** DELETE {base-uri}/campuses/{campus-id}

**URL:** DELETE {base-uri}/campuses/{alternate-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/c0db2f75-89ba-4187-a1dd-7148ed3e0b79

**Errors:**

* **404** - Entity 'campus-id', ID ‘<MyCampusID>' was not found
* **500** - Internal Error, examine error for specific exception

### Get Building Collection in a Campus

A Building belongs to a parent Campus and has a collection of Rooms. The time zone attribute is inherited by the Building from the parent Campus.

**URL:** GET {base-uri}/campuses/{campus-id}/buildings

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826/buildings

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<buildings>

 <total-results>1</total-results>

 <items-per-page>1</items-per-page>

 <start-index>0</start-index>

 <building>

 <id>75638692-b5a3-423e-9fa1-36baaeaa2cc9</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826" rel="http://schemas.com.echo360.campus" title="campus"/>

 <name>Science and Tech Building 2</name>

 <alternateId>ScienceTech2</alternateId>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/75638692-b5a3-423e-9fa1-36baaeaa2cc9" rel="self" title="self"/>

 </building>

</buildings>

### Add Building to a Campus

Add a new building to the specified campus resource.

**URL:** POST {base-uri}/campuses{campus-id}/buildings

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826/buildings

**Errors:**

* **400** - duplicate name
* **500** - Internal Error, examine error for specific exception

**Request XML:**

<building>

 <name>Science and Tech Building 2</name>

 <alternateId>ScienceTech2</alternateId>

</building>

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<building>

 <id>4b04b1b6-b122-4f78-a653-abe2824d73a4</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826" rel="http://schemas.com.echo360.campus" title="campus"/>

 <name>Science and Tech Building 2</name>

 <alternateId>ScienceTech2</alternateId>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/4b04b1b6-b122-4f78-a653-abe2824d73a4" rel="self" title="self"/>

</building>

### Get Building Collection across all Campuses

Retrieve the list of all Buildings across all Campuses. The optional "term" parameter limits the list to buildings whose name is like the search term value.

**URL:** GET{base-uri}/buildings[?term=”{name-pattern}”]

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/buildings

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<buildings>

 <total-results>3</total-results>

 <items-per-page>3</items-per-page>

 <start-index>0</start-index>

 <building>

 <id>4b04b1b6-b122-4f78-a653-abe2824d73a4</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826" rel="http://schemas.com.echo360.campus" title="campus"/>

 <name>Science and Tech Building 2</name>

 <alternateId>ScienceTech2</alternateId>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/4b04b1b6-b122-4f78-a653-abe2824d73a4" rel="self" title="self"/>

 </building>

 <building>

 <id>75638692-b5a3-423e-9fa1-36baaeaa2cc9</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826" rel="http://schemas.com.echo360.campus" title="campus"/>

 <name>Science and Tech Building I</name>

 <alternateId>ScienceTech1</alternateId>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/75638692-b5a3-423e-9fa1-36baaeaa2cc9" rel="self" title="self"/>

 </building>

 <building>

 <id>5df6a341-52f1-4970-bb82-0cb75e2d5398</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/c1c6c465-5470-4a86-b2f4-8d0a7f46057e" rel="http://schemas.com.echo360.campus" title="campus"/>

 <name>Signal Hill Plaza</name>

 <alternateId>SignalHillPlaza</alternateId>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/5df6a341-52f1-4970-bb82-0cb75e2d5398" rel="self" title="self"/>

 </building>

</buildings>

### Get Building Details

**URL:** GET {base-uri}/buildings/{building-id}

**URL:** GET {base-uri}/buildings/{alternate-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/75638692-b5a3-423e-9fa1-36baaeaa2cc9

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<building>

 <id>75638692-b5a3-423e-9fa1-36baaeaa2cc9</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826" rel="http://schemas.com.echo360.campus" title="campus"/>

 <name>Science and Tech Building I</name>

 <alternateId>ScienceTech1</alternateId>

 <time-zone-name>US/Eastern</time-zone-name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/75638692-b5a3-423e-9fa1-36baaeaa2cc9/rooms" rel="http://schemas.com.echo360.room" title="rooms"/>

</building>

### Update building

**URL:** PUT {base-uri}/buildings/{building-id}

**URL:** PUT {base-uri}/buildings/{alternate-id}

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/4b04b1b6-b122-4f78-a653-abe2824d73a4

**Request XML:**

<building>

 <name>Science and Tech Building 2 NEW</name>

</building>

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<building>

 <id>4b04b1b6-b122-4f78-a653-abe2824d73a4</id>

 <etag>1</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826" rel="http://schemas.com.echo360.campus" title="campus"/>

 <name>Science and Tech Building 2 NEW</name>

 <alternateId>ScienceTech2</alternateId>

 <time-zone-name>US/Eastern</time-zone-name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/4b04b1b6-b122-4f78-a653-abe2824d73a4/rooms" rel="http://schemas.com.echo360.room" title="rooms"/>

</building>

### Delete building

Remove the building.

**URL:** DELETE {base-uri}/buildings/{building-id}

**URL:** DELETE {base-uri}/buildings/{alternate-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/4b04b1b6-b122-4f78-a653-abe2824d73a4

**Errors:**

* **404** - The server has not found anything matching the request URI
* **500** - Internal Error, examine error for specific exception

## Room

A room is a central component of a lecture capture schedule. A room belongs to a parent Building. Rooms are reserved/scheduled for Course Sections and their associated capture events. A Room can be in either a “retired” or “active” state. Only active Rooms can be scheduled for Course Sections. Only retired Rooms can be deleted.

### Room Entity's XML mapping

This table defines the mapping of room attributes/fields to its various XML representations (summary or detailed). A room contains many link fields due to it being reserved by Course Sections and Captures.

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | System generated entity identifier. |
| alternateId | All | string | External System ID |
| buildingName | All | string | Name of the parent Building |
| campusName | All | string | Name of the parent Campus |
| building | All | link | Link to the parent Building. |
| name | All | string(32) | Required, unique name within the parent Building. |
| time-zone-name | Detailed | string | This field is read-only and inherited from the grandparent Campus. It is included on "read" operations as a convenience. |
| device-rooms | Detailed | link | Link to fetch devices that are/were (history) used by a room. The typical case is that 1 device is dedicated to a given room. The device-room abstraction allows moving a device to another room, or device swapping for maintenance/upgrades. (see Device Resource) |
| current-device | Detailed | compositeelement | For convenience, the current device that is assigned to the room (read-only). If no device is assigned, then the XML element is empty. Otherwise, it contains the "id" and "key" fields of the assigned device. |
| schedule-rules | Detailed | link | Link to fetch the schedule-rules for this room. schedule-rules contain Capture reservations for Course Sections, as well as lecture capture events. (see Schedule Rules Resource)Link = "GET {base-uri}/rooms/{room-id}/schedule-rules" |

### "current-device" XML mapping

The Room's current device composite XML element is described by the below table.

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | System generated identifier of the Device. |
| key | All | string | unique device key used when addressing the device |

### Get Room Collection in a Building

A room is a central component of a lecture capture schedule. A room belongs to a parent Building. Rooms are reserved/scheduled for Course Sections and their associated capture events. Retrieve the list of Rooms that are assigned to the Building. The optional "term" parameter limits the list to rooms whose name is like the search term value.

**URL:** GET {base-uri}/buildings/{building-id}/rooms

**URL:** GET {base-uri}/buildings/{alternate-id}/rooms

**URL:** GET {base-uri}/buildings/{building-id}/rooms[?term=”{name-pattern}”]

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/75638692-b5a3-423e-9fa1-36baaeaa2cc9/rooms

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<rooms>

 <total-results>6</total-results>

 <items-per-page>6</items-per-page>

 <start-index>0</start-index>

 <room>

 <id>204b1e6b-e115-4fdb-9fdf-95abd5780d8d</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/75638692-b5a3-423e-9fa1-36baaeaa2cc9" rel="http://schemas.com.echo360.building" title="building"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/303c4e3b-9803-4826-9fb0-578ed2d505fc" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>Podium Room 1</name>

 <alternateId>Podium\_Room\_1</alternateId>

 <status>active</status>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/204b1e6b-e115-4fdb-9fdf-95abd5780d8d" rel="self" title="self"/>

 </room>

 <room>

 <id>6f232d02-49b1-4805-95ee-d30a2a60b51a</id>

 <etag>1</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/75638692-b5a3-423e-9fa1-36baaeaa2cc9" rel="http://schemas.com.echo360.building" title="building"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>Shared Room</name>

 <alternateId>Shared\_Room</alternateId>

 <status>retired</status>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/6f232d02-49b1-4805-95ee-d30a2a60b51a" rel="self" title="self"/>

 </room>

 …

</rooms>

### Add a New Room to a Building

**URL:** POST {base-uri}/buildings/{building-id}/rooms

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/75638692-b5a3-423e-9fa1-36baaeaa2cc9/rooms

**Request XML:**

<room>

 <name>Random Room 2</name>

</room>

### Get Room Collection in a Campus

Get all rooms within the specified Campus. Optional "term" parameter limits list to rooms with the matching name search pattern.

**URL:** GET {base-uri}/campuses/{campus-id}/rooms[?term=”{name-pattern}”]

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/campuses/e8a82f52-2e3f-4856-8967-5efc353a5826/rooms

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<rooms>

 <total-results>7</total-results>

 <items-per-page>7</items-per-page>

 <start-index>0</start-index>

 <room>

 <id>204b1e6b-e115-4fdb-9fdf-95abd5780d8d</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/75638692-b5a3-423e-9fa1-36baaeaa2cc9" rel="http://schemas.com.echo360.building" title="building"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/303c4e3b-9803-4826-9fb0-578ed2d505fc" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>Podium Room 1</name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/204b1e6b-e115-4fdb-9fdf-95abd5780d8d" rel="self" title="self"/>

 </room>

 <room>

 <id>6f232d02-49b1-4805-95ee-d30a2a60b51a</id>

 <etag>1</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/75638692-b5a3-423e-9fa1-36baaeaa2cc9" rel="http://schemas.com.echo360.building" title="building"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>Shared Room</name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/6f232d02-49b1-4805-95ee-d30a2a60b51a" rel="self" title="self"/>

 </room>

 …

 …

 …

</rooms>

### Get Room Collection in the entire Organization

**URL:** GET {base-uri}/rooms[?filter={name-pattern}]

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/rooms

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<rooms>

 <total-results>14</total-results>

 <items-per-page>14</items-per-page>

 <start-index>0</start-index>

 <room>

 <id>be3ee55d-2003-43de-bae7-43d6aa78ad53</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/5df6a341-52f1-4970-bb82-0cb75e2d5398" rel="http://schemas.com.echo360.building" title="building"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/2dca51e6-f376-4579-8019-fdbe70dfb1f5" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>ODU Room 1</name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/be3ee55d-2003-43de-bae7-43d6aa78ad53" rel="self" title="self"/>

 </room>

 <room>

 <id>458aee25-8fd3-4ebf-a683-5fcb0f0dcc95</id>

 <etag>1</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/5df6a341-52f1-4970-bb82-0cb75e2d5398" rel="http://schemas.com.echo360.building" title="building"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/2dca51e6-f376-4579-8019-fdbe70dfb1f5" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>ODU Room 2</name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/458aee25-8fd3-4ebf-a683-5fcb0f0dcc95" rel="self" title="self"/>

 </room>

 ...

 ...

 ...

</rooms>

### Get Room Details

**URL:** GET {base-uri}/rooms/{room-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/be3ee55d-2003-43de-bae7-43d6aa78ad53

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<room>

 <id>be3ee55d-2003-43de-bae7-43d6aa78ad53</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/5df6a341-52f1-4970-bb82-0cb75e2d5398" rel="http://schemas.com.echo360.building" title="building"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/2dca51e6-f376-4579-8019-fdbe70dfb1f5" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>ODU Room 1</name>

 <status>active</status>

 <time-zone-name>US/Eastern</time-zone-name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/be3ee55d-2003-43de-bae7-43d6aa78ad53/device-rooms" rel="http://schemas.com.echo360.device-room" title="device-rooms"/>

 <current-device/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/be3ee55d-2003-43de-bae7-43d6aa78ad53/schedule-rules" rel="http://schemas.com.echo360.schedule-rule" title="schedule-rules"/>

</room>

### Update Room

This call can be used for changing the name of the room and for changing the room state between “active” and “retired”.

**URL:** PUT {base-uri}/rooms/{room-id}

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/be3ee55d-2003-43de-bae7-43d6aa78ad53

**Request XML:**

<room>

 <name>ODU Room 1 UPDATED</name>

 <status>active</status>

</room>

### Delete Room

Permanently deletes the Room from the system. Only “retired” Rooms can be deleted.

**URL:** DELETE {base-uri}/rooms/{room-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/68adfdd5-ebc7-459d-9452-db762b2dd9b6

## Product-Group, Publisher & Publish-Channel API

Product groups identify the processed output that will be delivered based on the input from each capture. Publishers and publishing channels identify how the processed echoes are being delivered to end users.

### Get Product-Group Collection

**URL:** GET {base-uri}/product-groups

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/product-groups

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<product-groups>

 <total-results>11</total-results>

 <items-per-page>11</items-per-page>

 <start-index>0</start-index>

 <product-group>

 <id>0464bfc5-8785-435f-bbb6-34edc04f134f</id>

 <etag>0</etag>

 <name>Video Only (Podcast/Vodcast/EchoPlayer). Optimized for presenter capture quality (SD)</name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/product-groups/0464bfc5-8785-435f-bbb6-34edc04f134f" rel="self" title="self"/>

 </product-group>

 <product-group>

 <id>111b3180-b9fb-4675-b306-2bd715d1d01d</id>

 <etag>0</etag>

 <name>Display Only (Podcast/Vodcast/EchoPlayer). Optimized for detailed PowerPoint presentations</name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/product-groups/111b3180-b9fb-4675-b306-2bd715d1d01d" rel="self" title="self"/>

 </product-group>

 ...

 ...

 ...

</product-groups>

### Product-Group Details

**URL:** GET {base-uri}/product-groups/{product-group-id}

**Request XML:**

<?xml version="1.0" encoding="UTF-8"?>

<product-group>

 <id>0464bfc5-8785-435f-bbb6-34edc04f134f</id>

 <etag>0</etag>

 <name>Video Only (Podcast/Vodcast/EchoPlayer). Optimized for presenter capture quality (SD)</name>

</product-group>

### Publisher Collection

**URL:** GET {base-uri}/publishers

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/publishers

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<publishers>

 <total-results>1</total-results>

 <items-per-page>1</items-per-page>

 <start-index>0</start-index>

 <publisher>

 <id>4b29bf3a-13ac-46b4-a321-9eef2d87b7b2</id>

 <etag>0</etag>

 <name>Publisher1</name>

 <description/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/publishers/4b29bf3a-13ac-46b4-a321-9eef2d87b7b2" rel="self" title="self"/>

 </publisher>

</publishers>

### Publisher Detail

**URL:** GET {base-uri}/publishers/{publisher-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/publishers/4b29bf3a-13ac-46b4-a321-9eef2d87b7b2

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<publisher>

 <id>4b29bf3a-13ac-46b4-a321-9eef2d87b7b2</id>

 <etag>0</etag>

 <name>Publisher1</name>

 <description/>

 <properties/>

</publisher>

### Publish-Channel Collection in a Section

**URL:** GET {base-uri}/sections/{section-id}/publish-channels

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/72b017b9-52cb-4e54-a90b-cf2f45e83375/publish-channels

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<publish-channels>

 <total-results>1</total-results>

 <items-per-page>1</items-per-page>

 <start-index>0</start-index>

 <publish-channel>

 <id>56ff4eee-93c7-4d99-8b50-46c6ca3ac2ce</id>

 <etag>0</etag>

 <name>Blackboard Publisher</name>

 <target-id>Math 101</target-id>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/72b017b9-52cb-4e54-a90b-cf2f45e83375" rel="http://schemas.com.echo360.section" title="section"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/publishers/9e218dd1-3d6e-4b82-9d19-9615fe3a7bd3" rel="http://schemas.com.echo360.publisher" title="publisher"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/publish-channels/56ff4eee-93c7-4d99-8b50-46c6ca3ac2ce" rel="self" title="self"/>

 </publish-channel>

</publish-channels>

### Delete Publish-Channel Collection from a Section

**URL:** DELETE {base-uri}/sections/{section-id}/publish-channels

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/72b017b9-52cb-4e54-a90b-cf2f45e83375/publish-channels

### Publish-Channel Detail

**URL:** GET {base-uri}/publish-channels/{publish-channel-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/publish-channels/56ff4eee-93c7-4d99-8b50-46c6ca3ac2ce

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<publish-channel>

 <id>56ff4eee-93c7-4d99-8b50-46c6ca3ac2ce</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/72b017b9-52cb-4e54-a90b-cf2f45e83375" rel="http://schemas.com.echo360.section" title="section"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/publishers/9e218dd1-3d6e-4b82-9d19-9615fe3a7bd3" rel="http://schemas.com.echo360.publisher" title="publisher"/>

 <properties/>

</publish-channel>

### Update Publish-Channel

**URL:** PUT {base-uri}/publish-channels/{publish-channel-id}

**Http Request Header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/publish-channels/837203a8-5e75-49e6-8ffd-fadb718ba3c7

**Request XML:**

<?xml version="1.0" encoding="UTF-8"?>

<publish-channel>

 <properties>

 <property>

 <key>target-id</key>

 <value>cmsid-1</value>

 </property>

 </properties>

</publish-channel>

### Delete Publish-Channel

**URL:** DELETE {base-uri}/publish-channels/{publish-channel-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/publish-channels/837203a8-5e75-49e6-8ffd-fadb718ba3c7

**NOTE:** For the below API calls, the {section-id} entity can be the EchoSystem ID or the Alternate ID for the section. To make API calls using an Alternate ID, the ID must have been entered into the ESS for the object (in this case, for the section).

### Publish-Channel Collection in a Section by Publisher

**URL:** GET {base-uri}/sections/{section-id}/publishers/{publisher-id}/publish-channels

**Alternate URL:** GET {base-uri}/publishers/{publisher-id}/sections/{section-id}/publish-channels

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/72b017b9-52cb-4e54-a90b-cf2f45e83375/publishers/9e218dd1-3d6e-4b82-9d19-9615fe3a7bd3/publish-channels

**Alternate URL Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/publishers/9e218dd1-3d6e-4b82-9d19-9615fe3a7bd3/sections/72b017b9-52cb-4e54-a90b-cf2f45e83375/publish-channels

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<publish-channels>

 <total-results>1</total-results>

 <items-per-page>1</items-per-page>

 <start-index>0</start-index>

 <publish-channel>

 <id>56ff4eee-93c7-4d99-8b50-46c6ca3ac2ce</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/72b017b9-52cb-4e54-a90b-cf2f45e83375" rel="http://schemas.com.echo360.section" title="section"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/publishers/9e218dd1-3d6e-4b82-9d19-9615fe3a7bd3" rel="http://schemas.com.echo360.publisher" title="publisher"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/publish-channels/56ff4eee-93c7-4d99-8b50-46c6ca3ac2ce" rel="self" title="self"/>

 </publish-channel>

</publish-channels>

### Add new Publish-Channel to Section targeting a Publisher

**URL:** PUT {base-uri}/sections/{section-id}/publishers/{publisher-id}/publish-channels

**Http Request header:** Content-Type=application/xml

**Alternate URL:** PUT {base-uri}/publishers/{publisher-id}/sections/{section-id}/publish-channels

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/publishers/9e218dd1-3d6e-4b82-9d19-9615fe3a7bd3/sections/72b017b9-52cb-4e54-a90b-cf2f45e83375/publish-channels

**Request XML:**

<?xml version="1.0" encoding="UTF-8"?>

<publish-channel>

 <properties>

 <property>

 <key>target-id</key>

 <value>cmsid-2</value>

 </property>

 </properties>

</publish-channel>

**Response XML**:

<?xml version="1.0" encoding="UTF-8"?>

<publish-channel>

 <id>2534d6df-412c-44b7-843f-336df779a9cf</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/72b017b9-52cb-4e54-a90b-cf2f45e83375" rel="http://schemas.com.echo360.section" title="section"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/publishers/9e218dd1-3d6e-4b82-9d19-9615fe3a7bd3" rel="http://schemas.com.echo360.publisher" title="publisher"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/publish-channels/2534d6df-412c-44b7-843f-336df779a9cf" rel="self" title="self"/>

</publish-channel>

### Delete Publish-Channel from a Section matching a Publisher

**URL:** DELETE {base-uri}/sections/{section-id}/publishers/{publisher-id}/publish-channels

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/72b017b9-52cb-4e54-a90b-cf2f45e83375/publishers/9e218dd1-3d6e-4b82-9d19-9615fe3a7bd3/publish-channels

### Publish-Channel Collection targeting a Publisher

**URL:** GET {base-uri}/publishers/{publisher-id}/publish-channels

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/publishers/9e218dd1-3d6e-4b82-9d19-9615fe3a7bd3/publish-channels

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<publish-channels>

 <total-results>1</total-results>

 <items-per-page>1</items-per-page>

 <start-index>0</start-index>

 <publish-channel>

 <id>80fae587-a643-4739-a41f-be0c957a67ec</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/72b017b9-52cb-4e54-a90b-cf2f45e83375" rel="http://schemas.com.echo360.section" title="section"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/publishers/9e218dd1-3d6e-4b82-9d19-9615fe3a7bd3" rel="http://schemas.com.echo360.publisher" title="publisher"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/publish-channels/80fae587-a643-4739-a41f-be0c957a67ec" rel="self" title="self"/>

 </publish-channel>

</publish-channels>

## Term API

An academic "term" is a period in time in which a collection of courses is offered to students. Typical terms are: Fall, Spring, Summer I, etc.



### Term Entity's XML mapping

This table defines the mapping of term attributes/fields to/from its various XML representations (summary or detailed).

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | System generated entity identifier. |
| alternateID | All | String | External system ID |
| organization-id | All | GUID | Organization identifier |
| organization | All | link | Link to the parent organization for this Term.Auto set to the caller's default organization. |
| name | All | string(32) | Required, unique name. |
| start-date | All | iso-date | The date of the first day of the Term.Format: "YYYY-MM-DD" |
| end-date | All | iso-date | The date of the last day of the Term.Format: "YYYY-MM-DD" |
| excluded-dates | Detailed | composite collection | An inline collection of date ranges which indicate dates when the Term is not in session. These could be scheduled holiday and break dates. The collection child element is "date-range". |
| sections | Detailed | link | Link to fetch the collection of Course Sections offered within the academic term. |

### "date-range" collection item

The Term contains an inline "excluded-dates" collection; which is a list of "date-range" XML elements. A "date-range" element is a simple container holding a "start", and "end" ISO-date element. The format of the date-range element is in the below table.

|  |  |  |  |
| --- | --- | --- | --- |
| Field / Element | Rep. Levels | Type (length) | Information |
| start | All | iso-date | The date of the first day of the date range.Format: "YYYY-MM-DD" |
| end | All | iso-date | The date of the last day of the date range.Format: "YYYY-MM-DD" |

### Term Collection

The [?term="name-pattern"] URL parameter filters Terms by matching the Term's name to the search term pattern. Don't confuse the search "term" URL parameter with the "Term" entity.

**URL:** GET {base-uri}/terms[?term=”{name-pattern}”]

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/terms

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<terms>

 <total-results>3</total-results>

 <items-per-page>3</items-per-page>

 <start-index>0</start-index>

 <term>

 <id>382c9bd7-2cd7-422e-9d8b-aaff921ffd12</id>

 <etag>12</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>Spring 2011</name>

 <alternateId>Term alternate ID</alternateId>

 <organization-id>e8b76e41-e9d1-454d-ac6b-18ceb464851a</organization-id>

 <start-date>2011-01-01</start-date>

 <end-date>2011-05-31</end-date>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/terms/382c9bd7-2cd7-422e-9d8b-aaff921ffd12" rel="self" title="self"/>

 </term>

 …

 …

 …

</terms>

### Add New Term

**URL:** POST {base-uri}/terms

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/terms

**Request XML:**

<term>

 <name>Autumn 2011</name>

 <alternateId>Term alternate ID</alternateId>

 <organization-id>e8b76e41-e9d1-454d-ac6b-18ceb464851a</organization-id>

 <start-date>2011-09-01</start-date>

 <end-date>2011-11-30</end-date>

</term>

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<term>

 <id>c0862d72-467a-45f8-8154-4f3a44c53d9d</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>Autumn 2011</name>

 <alternateId>Term alternate ID</alternateId>

 <organization-id>e8b76e41-e9d1-454d-ac6b-18ceb464851a</organization-id>

 <start-date>2011-09-01</start-date>

 <end-date>2011-11-30</end-date>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/terms/c0862d72-467a-45f8-8154-4f3a44c53d9d" rel="self" title="self"/>

</term>

### Term Detail

**URL:** GET {base-uri}/terms/{term-id}

**URL:** GET {base-uri}/terms/{term-alternate-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/terms/382c9bd7-2cd7-422e-9d8b-aaff921ffd12

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<term>

 <id>382c9bd7-2cd7-422e-9d8b-aaff921ffd12</id>

 <etag>12</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>Spring 2011</name>

 <alternateId>Term alternate ID</alternateId>

 <organization-id>e8b76e41-e9d1-454d-ac6b-18ceb464851a</organization-id>

 <start-date>2011-01-01</start-date>

 <end-date>2011-05-31</end-date>

 <excluded-dates>

 <total-results>0</total-results>

 <items-per-page>0</items-per-page>

 <start-index>0</start-index>

 </excluded-dates>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/terms/382c9bd7-2cd7-422e-9d8b-aaff921ffd12/sections" rel="http://schemas.com.echo360.section" title="sections"/>

</term>

### Update Term

Update the specified Term entity. If the "excluded-date" element is present in the request content, then the current excluded dates are replaced by the request contents.

**Request Content:** "term" detail XML. Only need to specify the fields that are being updated (name, start/end date, excluded-dates). Non-updatable fields are ignored.

**Response Content:** Status Only

**Errors:** not found, duplicate name, client error(bad data format)

**URL:** PUT {base-uri}/terms/{term-id}

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/terms/c0862d72-467a-45f8-8154-4f3a44c53d9d

**Request XML:**

<term>

 <name>Autumn 2011 - Special Term</name>

</term>

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<term>

 <id>c0862d72-467a-45f8-8154-4f3a44c53d9d</id>

 <etag>1</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>Autumn 2011 - Special Term</name>

 <organization-id>e8b76e41-e9d1-454d-ac6b-18ceb464851a</organization-id>

 <start-date>2011-09-01</start-date>

 <end-date>2011-11-30</end-date>

 <excluded-dates>

 <total-results>0</total-results>

 <items-per-page>0</items-per-page>

 <start-index>0</start-index>

 </excluded-dates>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/terms/c0862d72-467a-45f8-8154-4f3a44c53d9d/sections" rel="http://schemas.com.echo360.section" title="sections"/>

</term>

### Delete Term

Remove the Term. Removes all content from Term if it is not empty. This includes all Sections, Schedules, and Echoes. The Term will be quickly removed from visibility in the ESS UI, but depending on how many other entities need to be deleted, may remain in the system for several days or even weeks.

**URL:** DELETE {base-uri}/terms/{term-id}

**Errors:** not found, client error (undeletable).

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/terms/c0862d72-467a-45f8-8154-4f3a44c53d9d

### Get Term’s Excluded Dates

On Term add or update API requests, the caller can include an excluded-dates collection within the uploaded Term XML. If present, the excluded dates collection defines (on add) or replaces (on update) the current Term excluded dates. This inline collection support is a convenience provided by the API.

The alternate approach is to manage the Term's excluded dates separate from the Term. The table below defines the resource URL calls for managing the exclude dates collection separate from the Term entity.

**URL:** GET {base-uri}/terms/{term-id}/excluded-dates

**URL:** GET {base-uri}/terms/{term-alternate-id}/excluded-dates

**Reply Content:** "excluded-dates" collection that contains "date-range" elements.

**Errors:** not found

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/terms/8c9ab585-daa3-4f7a-ba73-3c8a400cd686/excluded-dates

<?xml version="1.0" encoding="UTF-8"?>

<excluded-dates>

 <total-results>2</total-results>

 <items-per-page>2</items-per-page>

 <start-index>0</start-index>

 <date-range>

 <start>2011-11-24</start>

 <end>2011-11-25</end>

 </date-range>

 <date-range>

 <start>2011-12-23</start>

 <end>2011-12-26</end>

 </date-range>
</excluded-dates>

### Add Term’s Excluded Dates

**URL:** PUT {base-uri}/terms/{term-id}/excluded-dates

**Http Request header:** Content-Type=application/xml

**Request XML:**

<date-range>

 <start>2011-10-24</start>

 <end>2011-10-25</end>

</date-range>

**Response XML:**

<date-range>

 <start>2011-10-24</start>

 <end>2011-10-25</end>

</date-range>

### Delete Term’s Excluded Dates

Remove (clear) all entries from the specified Term's excluded-date collection.

**Errors:** not found

**URL:** DELETE {base-uri}/terms/{term-id}/excluded-dates

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/terms/8c9ab585-daa3-4f7a-ba73-3c8a400cd686/excluded-dates

## Course API

A Course is offered as one or more Sections within various academic Terms.

Not all schools divide Courses into Sections. In this case, the Course will have only one section. To facilitate this use case, the Echo System can be configured to create a Section record in the "current" academic Term for any newly created Course. If this is the case at your installation, then adding a Course via the API will also create the default Course Section.

### Course Entity's XML mapping

This table defines the mapping of Course attributes/fields to/from its various XML representations (summary or detailed).

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | System generated entity identifier. |
| alternateId | All | string | External system ID |
| organization-id | All | GUID | System ID of the parent organization |
| organization | All | link | Link to the parent organization for this Course.Auto set to the caller's default organization. |
| name | All | string | Required, unique course name. |
| identifier | All | string | Course identifier known externally by the organization. |
| sections | Detail | link | Link to fetch the collection of Sections offered for this Course. |

### Get all Courses

**URL:** GET {base-uri}/courses[?term=”{name-pattern}”]

**Example:** [https://ess.institution.com:8443/ess/scheduleapi/v1/courses](https://ess.echo360.com:8445/ess/scheduleapi/v1/courses)

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<courses>

 <total-results>5</total-results>

 <items-per-page>5</items-per-page>

 <start-index>0</start-index>

 <course>

 <id>e7163b85-0947-4158-a03f-f7ac1d8c8a40</id>

 <etag>40</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>A new course</name>

 <alternateId>Course Alternate Id</alternateId>

 <identifier>ECHO000</identifier>

 <organization-id>e8b76e41-e9d1-454d-ac6b-18ceb464851a</organization-id>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/courses/e7163b85-0947-4158-a03f-f7ac1d8c8a40" rel="self" title="self"/>

 </course>

 …

 …

 …

</courses>

### Add a New Course

**URL:** POST {base-uri}/courses

**Http Request header:** Content-Type=application/xml

**Request Content:** "course" detail XML (name, identifier)

**Response Content:** "course" summary XML ("id" element holds new ID)

**Errors:** duplicate "name", client error (content invalid)

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/courses

**Request XML:**

<course>

 <name>Math 101</name>

 <identifier>M101</identifier>

</course>

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<course>

 <id>73894863-cfed-4be7-b508-9126e9630ce8</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>Math 101</name>

 <alternateId>Course Alternate Id</alternateId>

 <identifier>M101</identifier>

 <organization-id>e8b76e41-e9d1-454d-ac6b-18ceb464851a</organization-id>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/courses/73894863-cfed-4be7-b508-9126e9630ce8" rel="self" title="self"/>

</course>

### Get Courses in a Term

Get all Courses with at least one Section within the specified Academic Term.

**Reply Content:** "courses" collection XML containing "course" summary elements.

**Errors:** Term not found

**URL:** GET {base-uri}/terms/{term-id}/courses

**URL:** GET {base-uri}/terms/{term-id}/courses[?term=”{name-pattern}”]

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/terms/8c9ab585-daa3-4f7a-ba73-3c8a400cd686/courses

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<courses>

 <total-results>5</total-results>

 <items-per-page>5</items-per-page>

 <start-index>0</start-index>

 <course>

 <id>e7163b85-0947-4158-a03f-f7ac1d8c8a40</id>

 <etag>40</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>A new course</name>

 <alternateId>Course Alternate Id</alternateId>

 <identifier>ECHO000</identifier>

 <organization-id>e8b76e41-e9d1-454d-ac6b-18ceb464851a</organization-id>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/courses/e7163b85-0947-4158-a03f-f7ac1d8c8a40" rel="self" title="self"/>

 </course>

 ...

 ...

 ...

</courses>

### Course Detail

Retrieve the detailed information on the Course entity.

**Reply Content:** "course" detailed XML.

**Errors:** Course not found

**URL:** GET {base-url}/courses/{course-id}

**URL:** GET {base-url}/courses/{course-alternate-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/courses/e7163b85-0947-4158-a03f-f7ac1d8c8a40

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<course>

 <id>e7163b85-0947-4158-a03f-f7ac1d8c8a40</id>

 <etag>40</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>A new course</name>

 <alternateId>Course Alternate Id</alternateId>

 <identifier>ECHO000</identifier>

 <organization-id>e8b76e41-e9d1-454d-ac6b-18ceb464851a</organization-id>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/courses/e7163b85-0947-4158-a03f-f7ac1d8c8a40/sections" rel="http://schemas.com.echo360.section" title="sections"/>

</course>

### Update Course

Update the specified Course entity.

**Request Content:** "course" detail XML. Only need to specify the fields that are being updated (name, identifier). Non-updatable fields are ignored.

**Response Content:** Status Only

**Errors:** not found, duplicate name, client error(bad data format)

**URL:** PUT {base-url}/courses/{course-id}

**URL:** PUT {base-url}/courses/{course-alternate-id}

**Http Request header:** Content-Type=application/xml

**Request XML:**

<course>

 <name>Math 102 - updated</name>

 <identifier>M102-updated</identifier>

 <organization-id>e8b76e41-e9d1-454d-ac6b-18ceb464851a</organization-id>

</course>

### Delete Course

Remove the Course. All entities specifically tied to this Course will also be deleted, including Sections, Schedules, and Echoes. The Course will be removed from the ESS UI quickly, but depending on the size and number of related entities, could remain in the system for several days or weeks.

**Errors:** not found, client error (undeletable).

**URL:** DELETE {base-url}/courses/{course-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/courses/73894863-cfed-4be7-b508-9126e9630ce8

## Section

A Section is an offering of a Course for a particular Academic Term. Sections are scheduled against rooms and have lecture captures. The Section's schedule is a set of associated Schedule Event Rules.

### Section Entity's XML mapping

This table defines the mapping of section attributes/fields to/from its various XML representations (summary or detailed).

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | System generated entity identifier. |
| term | All | link | Link to the academic term for this Section. |
| course | All | link | Link to the Section's parent course. |
| alternateId | All | string | External system ID |
| name | All | string(32) | Required, unique section name. |
| section-complete | Detailed | boolean | Indicates if the Section is now complete. If complete, no more captures are scheduled for the section. |
| publishing-complete | Detailed | boolean | Have all the section captures been published. |
| do-not-publish | Detailed | boolean | Don't allow captures from the section to be published. |
| default-publishers-set | Detailed | boolean | Were the default publishers set up for the section. |
| course-portal-enabled | Detailed | boolean |  |
| course-portal | Detailed | link |  |
| properties | Detailed | inline collection | Inline collection of Section "property" items. [New in v2.6] |
| section-roles | Detailed | inline collection | Inline list of presenters associated with the Section.  |
| schedule-rules | Detailed | link | Link to fetch the schedule-rules for this Section. Schedule-rules contain Capture reservations for Sections, as well as lecture capture events. (see Schedule Rules Resource) |
| branding-banner-background-asset | Detailed | Link |  |
| logo-asset | Detailed | Link |  |
| branding-intro-asset | Detailed | Link |  |
| branding-outro-asset | Detailed | Link |  |
| branding-watermark-asset | Detailed | Link |  |

### Section Property Item's XML mapping

A Section has a set of Media Property assignments. These settings are implemented as a Section property set. Below, is the "property" XML mapping table.

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| key | All | string | Unique Section property key. |
| value | All | string | Value bound/assigned to the property. |

### section-roles inline collection item

The Section entity contains an inline section-roles collection; which is a list of "section-role" XML elements. A "section-role" element is a simple container holding a "person" reference element. The format of the nested "person" xml element is in the below table. Valid section roles are: instructor, ta, student-presenter, guest-presenter. All require the Person to have the academic staff role in the Organization.

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | ID of the person which is a used as a "presenter. |
| first-name | All | string | The person's first name. |
| last-name | All | string | The person's last name. |
| created-time | All |  |  |
| self | All | Link |  |

**Sample section-roles:**

 <section-roles>

 <section-role>

 <person>

 <id>880e9358-c724-4729-9b1b-9bb28f243683</id>

 <etag>1</etag>

 <first-name>Samuel</first-name>

 <last-name>Clemens</last-name>

 <created-time>2006-01-19T12:35:19.000Z</created-time>

 <link href="null/people/880e9358-c724-4729-9b1b-9bb28f243683" rel="self" title="self"/>

 </person>

 <role>section-role-name-instructor</role>

 </section-role>

 </section-roles>

### Get Sections

Retrieve the list of Sections. The optional search "term" parameter limits the list to Sections matching on the name attribute.

**Reply Content:** "sections" collection XML containing "section" summary elements.

**Errors:** course/term not found

**URL:** [GET]{base-url}/terms/{term-id}/courses/{course-id}/sections[?term=”{name-pattern}”]

**Alternate URL 1:** {base-uri}/courses/{course-id}/sections[?term="{name-pattern}"]

Retrieve the list of Sections for the given Course. The optional "term" parameter limits the list to Sections matching on the search name attribute.

**Reply Content:** "sections" collection XML containing "section" summary elements.

**Errors:** course not found

**Alternate URL 2:** {base-uri}/terms/{term-id}/sections[?term="{name-pattern}"]

Retrieve the list of Sections for the given Academic Term. The optional search "term" parameter limits the list to Sections matching on the name attribute.

**Reply Content:** "sections" collection XML containing "section" summary elements.

**Errors:** Term not found

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/terms/8c9ab585-daa3-4f7a-ba73-3c8a400cd686/courses/8dbee430-a63b-44eb-986c-bb6847add25f/sections

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<sections>

 <total-results>3</total-results>

 <items-per-page>3</items-per-page>

 <start-index>0</start-index>

 <section>

 <id>99c14ad9-3077-430f-921f-643261b7c4c8</id>

 <etag>3</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/terms/8c9ab585-daa3-4f7a-ba73-3c8a400cd686" rel="http://schemas.com.echo360.term" title="term"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/courses/8dbee430-a63b-44eb-986c-bb6847add25f" rel="http://schemas.com.echo360.course" title="course"/>

 <name>100-001</name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/99c14ad9-3077-430f-921f-643261b7c4c8" rel="self" title="self"/>

 </section>

 ...

 ...

 ...

</sections>

### Add a new Section to Course and Term

Add a new Section to the specified Course and Academic Term.

**Request Content:** "section" detail XML (name, retention parameters, presenters)

**Response Content:** "section" summary XML ("id" element holds new ID)

**Errors:** duplicate name, course/term not found, client error (content invalid)

**URL:** POST {base-url}/terms/{term-id}/courses/{course-id}/sections

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/terms/8c9ab585-daa3-4f7a-ba73-3c8a400cd686/courses/8dbee430-a63b-44eb-986c-bb6847add25f/sections

**Request XML:**

<section>

 <name>100-099</name>

 <section-roles>

 <section-role>
 <person-id>4e7103ef-9440-4d19-9d55-3c0350b556e9</person-id>
 <role-name>section-role-name-instructor</role-name>
 </section-role>
 </section-roles>
</section>

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<section>

 <id>b1063a53-227d-4bc6-89a1-40dd52635703</id>

 <etag>2</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/terms/8c9ab585-daa3-4f7a-ba73-3c8a400cd686" rel="http://schemas.com.echo360.term" title="term"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/courses/8dbee430-a63b-44eb-986c-bb6847add25f" rel="http://schemas.com.echo360.course" title="course"/>

 <name>100-099</name>

 <alternateId>alternate section id</alternateId>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/b1063a53-227d-4bc6-89a1-40dd52635703" rel="self" title="self"/>

</section>

### Section Detail

Retrieve the detailed information on the Section entity.

**Reply Content:** "section" detailed XML.

**Errors:** Section not found

**URL:** {base-uri}/sections/{section-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/60053c45-7fe2-415b-b006-b2e08c1aa396

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<section>

 <id>60053c45-7fe2-415b-b006-b2e08c1aa396</id>

 <etag>3</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/terms/382c9bd7-2cd7-422e-9d8b-aaff921ffd12" rel="http://schemas.com.echo360.term" title="term"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/courses/8dbee430-a63b-44eb-986c-bb6847add25f" rel="http://schemas.com.echo360.course" title="course"/>

 <name>100-001</name>

 <section-complete>true</section-complete>

 <publishing-complete>true</publishing-complete>

 <do-not-publish>false</do-not-publish>

 <default-publishers-set>true</default-publishers-set>

 <course-portal-enabled>true</course-portal-enabled>

 <link href="http://10.3.11.174:8082/ess/portal/section/60053c45-7fe2-415b-b006-b2e08c1aa396" title="course-portal"/>

 <section-roles>

 <section-role>

 <person>

 <id>880e9358-c724-4729-9b1b-9bb28f243683</id>

 <etag>1</etag>

 <first-name>Samuel</first-name>

 <last-name>Clemens</last-name>

 <created-time>2006-01-19T12:35:19.000Z</created-time>

 <link href="null/people/880e9358-c724-4729-9b1b-9bb28f243683" rel="self" title="self"/>

 </person>

 <role>section-role-name-instructor</role>

 </section-role>

 </section-roles>

 <properties>

 <property>

 <key>product-group</key>

 <value>74156b84-8edb-4016-a597-35abc0c1c486</value>

 </property>

 ...

 ...

 ...

 </properties>

 <link title="ec-branding-logo"/>

 <link title="branding-banner-background-asset"/>

 <link title="logo-asset"/>

 <link title="branding-intro-asset"/>

 <link title="branding-outro-asset"/>

 <link title="branding-watermark-asset"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/60053c45-7fe2-415b-b006-b2e08c1aa396/schedule-rules" rel="http://schemas.com.echo360.schedule-rule" title="schedule-rules"/>

</section>

### Update Section

Update the specified Section entity.

**Request Content:** "section" detail XML. Only need to specify the fields that are being updated (retention attributes, presenters). Non-updatable fields are ignored.

**Response Content:** Status Only

**Errors:** Section not found, duplicate name, client error(bad data format)

**URL:** PUT {base-uri}/sections/{section-id}

**Http Request header:** Content-Type=application/xml

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/60053c45-7fe2-415b-b006-b2e08c1aa396

**Request XML:**

<section>

 <name>100-099-updated</name>

</section>

### Delete Section

Remove the Section. Deletion will also result in the deletion of all Schedules and Echoes associated with this section. The Section is quickly removed from the ESS UI, but depending on the number of entities associated with it, may remain in the system for longer.

**Errors:** Section not found, client error (undeletable).

**URL:** DELETE {base-uri}/sections/{section-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/60053c45-7fe2-415b-b006-b2e08c1aa396

### Get Section Presenters

The section presenters can be specified within the Section entity XML, or via the following presenter URLs. These URLs allow direct manipulation of a Section's presenter list.

**URL:** [GET]{base-uri}/sections/{section-id}/presenters

**Example:** [https://ess.institution.com:8443/ess/scheduleapi/v1/sections/3c27c936-4c2e-43f3-a577-42292317fd57/presenters](https://ess.echo360.com:8445/ess/scheduleapi/v1/sections/3c27c936-4c2e-43f3-a577-42292317fd57/presenters)

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<section-roles>

 <total-results>1</total-results>

 <items-per-page>1</items-per-page>

 <start-index>0</start-index>

 <section-role>

 <person-id>880e9358-c724-4729-9b1b-9bb28f243683</person-id>

 <section-id>3c27c936-4c2e-43f3-a577-42292317fd57</section-id>

 <role-name>section-role-name-instructor</role-name>

 </section-role>

</section-roles>

### Delete

Clear the Section's presenter list. Removes all presenters currently assigned to the Section.

**Errors:** Section not found

**URL:** [DELETE]{base-uri}/sections/{section-id}/presenters

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/32d73ef8-3511-4ddb-a882-b88824b752fb/presenters/

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<section-roles><total-results>0</total-results><items-per-page>0</items-per-page><start-index>0</start-index></section-roles>

### Section Presenter Detail

Can be used to confirm that a person is a presenter of the Section.

**Errors:** Section/Person was not found, or the person was not a presenter.

**URL:** [GET] {base-uri}/sections/{section-id}/presenters/{person-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/32d73ef8-3511-4ddb-a882-b88824b752fb/presenters/a7a26e4e-4915-4300-acd1-12a5ca14b93c

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<section-role>

 <person-id>a7a26e4e-4915-4300-acd1-12a5ca14b93c</person-id>

 <section-id>32d73ef8-3511-4ddb-a882-b88824b752fb</section-id>

 <role-name>section-role-name-instructor</role-name>

</section-role>

### Add Section Presenter

Add the person to the Section's presenter list (if they are not already assigned).

**Errors:** Section/Person was not found

**URL:** PUT {base-uri}/sections/{section-id}/presenters/{person-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/32d73ef8-3511-4ddb-a882-b88824b752fb/presenters/a7a26e4e-4915-4300-acd1-12a5ca14b93c

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<section-role>

 <person-id>a7a26e4e-4915-4300-acd1-12a5ca14b93c</person-id>

 <section-id>32d73ef8-3511-4ddb-a882-b88824b752fb</section-id>

 <role-name>section-role-name-guest-presenter</role-name>

</section-role>

### Delete Section Presenter

Remove the Person from the Section's presenter list.

**Errors:** Section/Person was not found. Person was not a presenter.

**URL:** [DELETE] {base-uri}/sections/{section-id}/presenters/{person-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/32d73ef8-3511-4ddb-a882-b88824b752fb/presenters/a7a26e4e-4915-4300-acd1-12a5ca14b93c

### Get all sections for a given Presenter

**URL:** [GET] {base-uri}/presenters/{person-id}/sections

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/presenters/a7a26e4e-4915-4300-acd1-12a5ca14b93c/sections

**Response XML:**

 <?xml version="1.0" encoding="UTF-8"?>

<section-roles>

 <total-results>6</total-results>

 <items-per-page>6</items-per-page>

 <start-index>0</start-index>

 <section-role>

 <person-id>a7a26e4e-4915-4300-acd1-12a5ca14b93c</person-id>

 <section-id>32d73ef8-3511-4ddb-a882-b88824b752fb</section-id>

 <role-name>section-role-name-instructor</role-name>

 </section-role>

 ...

</section-roles>

### Security Module Detail

Can be used to retrieve a listing of the Security Module names and UUID values within EchoSystem.

**URL:** [GET] {base-uri}/security-modules

 [GET] {base-uri}/security-modules/<Security Module ID>

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/security-modules

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<security-modules>

 <total-results>3</total-results>

 <items-per-page>3</items-per-page>

 <start-index>0</start-index>

 <security-module>

 <id>41f562db-bea5-42fb-9368-64a8e297798b</id>

 <etag>0</etag>

 <name>Authentication Required</name>

 <description>Access to content requires authentication (single sign-on or seamless sign-on if configured, or via ESS database)</description>

 <organization-id>9174c9d6-3ca9-4adc-9973-02235d3dad3f</organization-id>

 <link rel="self" title="self" href="https://10.11.3.200:8443/ess/scheduleapi/v1/security-modules/41f562db-bea5-42fb-9368-64a8e297798b"/>

 </security-module>

 <security-module>

 <id>5c600793-45ff-4d27-b546-f6a9bb61e2cf</id>

 <etag>0</etag>

 <name>Allow All</name>

 <description>Allows anyone to have access to content, no authentication is required</description>

 <organization-id>9174c9d6-3ca9-4adc-9973-02235d3dad3f</organization-id>

 <link rel="self" title="self" href="https://10.11.3.200:8443/ess/scheduleapi/v1/security-modules/5c600793-45ff-4d27-b546-f6a9bb61e2cf"/>

 </security-module>

 <security-module>

 <id>d59497f2-e705-481a-acf7-854d413b6e28</id>

 <etag>0</etag>

 <name>Seamless Only</name>

 <description>Access to content is only allowed using seamless authentication from an external system</description>

 <organization-id>9174c9d6-3ca9-4adc-9973-02235d3dad3f</organization-id>

 <link rel="self" title="self" href="https://10.11.3.200:8443/ess/scheduleapi/v1/security-modules/d59497f2-e705-481a-acf7-854d413b6e28"/>

 </security-module>

</security-modules>

## Schedule

A Schedule is used to identify the device and room to be used for a capture, and link it to a section, a presenter and a product group for a single or set of specified dates and times.



### Schedule Rule Entity's XML mapping

This table defines the mapping of Schedule Rule attributes/fields for its various XML representations (summary or detailed).

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | System generated entity identifier. |
| section | All | link | link to the parent Section offering. |
| room | All | link | Link to the room assignment for capturing the section.Note: the rule can have an unassigned room; which resultsin an absent room link. |
| title | All | string | Required name/title for the rule. Useful for searching. |
| status | All | string | Enumeration constant: (draft, active, complete, trashed) |
| alternateID | All | string | External system ID |
| description | Detail | string | Optional text description of the rule |
| start-date | Detail | iso-date | The starting period for this rule. Can be empty if the rule is still in "draft" state. Format: "YYYY-MM-DD" |
| end date | Detail | iso-date | If this is a recurring capture, then the end date of the rule is required. Format: "YYYY-MM-DD" |
| start-time | Detail | iso-time | The starting period for this rule. Can be empty. |
| duration-seconds | Detail | int | Each capture is scheduled to run this many seconds. |
| recurring | Detail | boolean | Is this rule a one-time capture event or does it capture multiple events? |
| days-of-week | Detail | composite element | Group of Booleans that indicate which days of the week the recurring capture is performed. The field is empty if the recurring bit is false. |
| end-date | Detail | iso-date | If this is a recurring capture, then the end date of the rule is required. Format: "YYYY-MM-DD" |
| start-time | Detail | iso-time | The starting period for this rule. Can be empty. |
| duration-seconds | Detail | int | Each capture is scheduled to run this many seconds. |
| recurring | Detail | boolean | Is this rule a one-time capture event or does it capture multiple events? |
| days-of-week | Detail | composite element | Group of Booleans that indicate which days of the week the recurring capture is performed. The field is empty if the recurring bit is false. |
| excluded-dates | Detail | date-range collection | Inline list of "date-range" elements representing dates when the capture should not take place. For example, breaks or holidays. See Term Entity's "excluded-dates". |
| excluded-dates | Detail | date-range collection | Inline list of "date-range" elements representing dates when the capture should not take place. For example, breaks or holidays. See Term Entity's "excluded-dates". |
| target-display-input-override | Detail | string | Optional setting for the capture input dimensions generated by this rule. For example: "640x720". |
| presenters | Detail | presentercollection | Inline list of presenters for the capture events.See Section Entity's "presenters". |
| product-group | Detail |  |  |
| captures | Detail | link | Link to the Capture Events generated by this schedule rule. |
| target-display-input-override | Detail | string | Optional setting for the capture input dimensions generated by this rule. For example: "640x720". |
| presenters | Detail | presentercollection | Inline list of presenters for the capture events.See Section Entity's "presenters". |
| product-group | Detail |  |  |
| captures | Detail | link | Link to the Capture Events generated by this schedule rule. |

### "schedule-rule/days-of-week" XML mapping

This table defines the mapping of the days-of-week data structure to its XML representations.

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| sunday | All | boolean | True if the capture recurs every Sunday. |
| monday | All | boolean | True if the capture recurs every Monday. |
| tuesday | All | boolean | True if the capture recurs every Tuesday. |
| wednesday | All | boolean | True if the capture recurs every Wednesday. |
| thursday | All | boolean | True if the capture recurs every Thursday. |
| friday | All | boolean | True if the capture recurs every Friday. |
| saturday | All | boolean | True if the capture recurs every Saturday. |

### Get all Rules in a Section

Get all Rules associated with the specified Section offering.

**URL:** [GET]{base-uri}/sections/{section-id}/schedule-rules[?term="name-pattern"]

**Reply content:** "schedule-rules" collection XML containing "schedule-rule" summary elements.

**Errors:** Section not found.

**Example**: https://ess.institution.com:8443/ess/scheduleapi/v1/sections/ee408624-a703-4488-be88-0f9ac5245cdc/schedule-rules

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<schedule-rules>

 <total-results>3</total-results>

 <items-per-page>3</items-per-page>

 <start-index>0</start-index>

 <schedule-rule>

 <id>07ff5c3d-c64b-4677-a458-381802bcb9d0</id>

 <etag>3</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/99c14ad9-3077-430f-921f-643261b7c4c8" rel="http://schemas.com.echo360.section" title="section"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79" rel="http://schemas.com.echo360.room" title="room"/>

 <title>Introduction to EchoSystem Server (ECHO100-100-001) Fall 2011</title>

 <status>completed</status>

 <alternateId>Schedule Rule Alternate ID</alternateId>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/07ff5c3d-c64b-4677-a458-381802bcb9d0" rel="self" title="self"/>

 </schedule-rule>

 …

</schedule-rules>

### Get all Rules in a Term

**URL:** [GET] {base-uri}/terms/{term-id}/schedule-rules

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/terms/8c9ab585-daa3-4f7a-ba73-3c8a400cd686/schedule-rules

### Add a new Schedule Rule to a Section

Add a new Schedule Rule to the Section.

**URL:** POST {base-uri}/sections/{section-id}/schedule-rules

**Errors:** duplicate name, client error (content invalid)

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/32d73ef8-3511-4ddb-a882-b88824b752fb/schedule-rules

**Request XML:**

<schedule-rule>

 <title>EchoSystem Server Administration (ECHO101-101-001) Fall 2011</title>

 <status>active</status>

 <description/>

 <start-date>2011-11-23</start-date>

 <end-date>2011-11-23</end-date>

 <start-time>15:00:00.000</start-time>

 <duration-seconds>300</duration-seconds>

 <recurring>false</recurring>

 <days-of-week>

 <sunday>false</sunday>

 <monday>false</monday>

 <tuesday>false</tuesday>

 <wednesday>false</wednesday>

 <thursday>false</thursday>

 <friday>false</friday>

 <saturday>false</saturday>

 </days-of-week>

 <excluded-dates>

 </excluded-dates>

 <target-display-input-override>800x600</target-display-input-override>

 <product-group>

 <id>74156b84-8edb-4016-a597-35abc0c1c486</id>

 <name>Display Only (Podcast/Vodcast/EchoPlayer). Balanced between file size &amp; quality</name>

 </product-group>

 <capture-output-type>archive</capture-output-type>

 <room><id>144682f9-0c88-4d4c-b96b-dd3cc2b44d79</id></room>

</schedule-rule>

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<schedule-rule><id>2a7d38ea-4e73-4891-bc13-84c14ead03fd</id><etag>2</etag><link rel="http://schemas.com.echo360.section" title="section" href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/ee408624-a703-4488-be88-0f9ac5245cdc"/><link rel="http://schemas.com.echo360.room" title="room" href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79"/><title>EchoSystem Server Administration (ECHO101-101-001) Fall 2011</title><status>active</status><link rel="self" title="self" href="https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/2a7d38ea-4e73-4891-bc13-84c14ead03fd"/></schedule-rule>

### Get Schedule-Rule Detail

Retrieve the detailed information on the Schedule Rule.

**Reply content:** "schedule-rule" detailed XML..

**Errors:** not found.

**URL:** [GET] {base-uri}/schedule-rules/{schedule-rule-id}

**URL:** [GET] {base-uri}/schedule-rules/{schedule-rule-alternate-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/412848e0-5d1c-42ec-8845-13a4e3602d67

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<schedule-rule>

 <id>412848e0-5d1c-42ec-8845-13a4e3602d67</id>

 <etag>3</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/ee408624-a703-4488-be88-0f9ac5245cdc" rel="http://schemas.com.echo360.section" title="section"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79" rel="http://schemas.com.echo360.room" title="room"/>

 <title>EchoSystem Server Administration (ECHO101-101-001) Fall 2011</title>

 <status>completed</status>

 <alternateId>Schedule Rule Alternate ID</alternateId>

 <description/>

 <start-date>2011-10-31</start-date>

 <end-date>2011-10-31</end-date>

 <start-time>16:15:00.000</start-time>

 <duration-seconds>3000</duration-seconds>

 <recurring>false</recurring>

 <days-of-week>

 <sunday>false</sunday>

 <monday>false</monday>

 <tuesday>false</tuesday>

 <wednesday>false</wednesday>

 <thursday>false</thursday>

 <friday>false</friday>

 <saturday>false</saturday>

 </days-of-week>

 <excluded-dates>

 <total-results>0</total-results>

 <items-per-page>0</items-per-page>

 <start-index>0</start-index>

 </excluded-dates>

 <target-display-input-override>800x600</target-display-input-override>

 <presenters>

 <person>

 <id>a7a26e4e-4915-4300-acd1-12a5ca14b93c</id>

 <etag>1</etag>

 <first-name>Jason</first-name>

 <last-name>Bourne</last-name>

 <created-time>2006-07-10T09:16:27.000Z</created-time>

 <link href="null/people/a7a26e4e-4915-4300-acd1-12a5ca14b93c" rel="self" title="self"/>

 </person>

 </presenters>

 <product-group>

 <id>244d88c9-4738-450d-8a50-bab64fa9e468</id>

 <etag>0</etag>

 <name>Display/Video (Podcast/Vodcast/EchoPlayer). Balanced between file size &amp; quality</name>

 </product-group>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/412848e0-5d1c-42ec-8845-13a4e3602d67/captures" rel="http://schemas.com.echo360.capture" title="captures"/>

</schedule-rule>

### Update Schedule-Rule

Update the specified Schedule Rule.

**URL:** PUT {base-uri}/schedule-rules/{schedule-rule-id}

**URL:** PUT {base-uri}/schedule-rules/{schedule-rule-alternate-id}

**Request Content:** "schedule-rule" detail XML (description, start-date, start-time, end-date, duration-seconds, target-display-override, recurring, days-of-week, exclude-dates, status, presenters). Note: Only the fields that have changed are required to be present.

**Errors:** duplicate name, client error (content invalid)

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/9cfb0cc4-7086-41e6-aeba-dcbe0b847b2c

**Request XML:**

<schedule-rule>

 <title>UPDATED Introduction to EchoSystem Server (ECHO100-100-001) Fall 2011</title>

<product-group>

 <id>244d88c9-4738-450d-8a50-bab64fa9e468</id>

 <etag>0</etag>

 <name>Display/Video (Podcast/Vodcast/EchoPlayer). Balanced between file size &amp; quality</name>

 </product-group>

</schedule-rule>

### Delete Schedule-Rule

Remove the schedule rule. This will remove all future scheduled Captures, but any Captures that are in progress or completed will not be removed. In progress Captures will be stopped.

**URL:** [DELETE] {base-uri}/schedule-rules/{schedule-rule-id}

**URL:** [DELETE] {base-uri}/schedule-rules/{schedule-rule-alternate-id}

**Errors:** not found

### Get Schedule-Rule Rooms

Retrieve a "rooms" collection for the specified Schedule Rule. The collection will contain zero or one room summary entity.

On Schedule Rule add or update API requests, the caller can include the assigned room within the uploaded entity XML. The alternate approach is to manage the room assignment operation separate from the Schedule Rule entity update operation.

**Reply Content:** "rooms" collection that contains zero/one "room" element.

**Errors:** Schedule Rule was not found

**URL:** [GET] {base-uri}/schedule-rules/{schedule-rule-id}/rooms

**URL:** [GET] {base-uri}/schedule-rules/{schedule-rule-alternate-id}/rooms

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/412848e0-5d1c-42ec-8845-13a4e3602d67/rooms

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<rooms>

 <total-results>1</total-results>

 <items-per-page>1</items-per-page>

 <start-index>0</start-index>

 <room>

 <id>144682f9-0c88-4d4c-b96b-dd3cc2b44d79</id>

 <etag>1</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/5df6a341-52f1-4970-bb82-0cb75e2d5398" rel="http://schemas.com.echo360.building" title="building"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>Capture Appliance Room</name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79" rel="self" title="self"/>

 </room>

</rooms>

### Delete Schedule-Rule Rooms

Set the room assignment to empty/null.

**Errors:** Schedule Rule was not found.

**URL:** [DELETE] {base-uri}/schedule-rules/{schedule-rule-id}/rooms

**URL:** [DELETE] {base-uri}/schedule-rules/{schedule-rule-alternate-id}/rooms

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/412848e0-5d1c-42ec-8845-13a4e3602d67/rooms

### Get Schedule-Rule Room

Check if the given Room is already assigned to the specified Schedule Rule.

**Returns 200:** if the room is already assigned to the rule.

**Returns 400 (not found):** if the room is not assigned to the rule.

**Returns 400 (not found):** if the Schedule Rule or Room are not found.

**URL:** [GET] {base-uri}/schedule-rules/{schedule-rule-id}/rooms/{room-id}

**URL:** [GET] {base-uri}/schedule-rules/{schedule-rule-alternate-id}/rooms/{room-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/21e3022b-3b13-48df-ab87-d8db599c4703/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<room>

 <id>144682f9-0c88-4d4c-b96b-dd3cc2b44d79</id>

 <etag>1</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/5df6a341-52f1-4970-bb82-0cb75e2d5398" rel="http://schemas.com.echo360.building" title="building"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>Capture Appliance Room</name>

 <time-zone-name>US/Eastern</time-zone-name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79/device-rooms" rel="http://schemas.com.echo360.device-room" title="device-rooms"/>

 <current-device>

 <id>e935c8f3-ebcb-4280-b368-5c9a30c2101c</id>

 <key>00-50-c2-8e-ae-5b</key>

 </current-device>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79/schedule-rules" rel="http://schemas.com.echo360.schedule-rule" title="schedule-rules"/>

</room>

### Add Room to Schedule-Rule

Assign the given room to the specified schedule-rule.

**Errors:** Schedule Rule or Room was not found.

**URL:** PUT {base-uri}/schedule-rules/{schedule-rule-id}/rooms/{room-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/2b46f818-7aff-43a6-849a-60fc12906cc7/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<room>

 <id>144682f9-0c88-4d4c-b96b-dd3cc2b44d79</id>

 <etag>1</etag>

 <link href="null/buildings/5df6a341-52f1-4970-bb82-0cb75e2d5398" rel="http://schemas.com.echo360.building" title="building"/>

 <link href="null/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>Capture Appliance Room</name>

 <link href="null/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79" rel="self" title="self"/>

</room>

### Delete Room from Schedule-Rule

Remove the room from the Schedule Rule.

**Errors:** Schedule Rule or Room was not found, or the Room was not assigned to the rule.

**URL:** [DELETE] {base-uri}/schedule-rules/{schedule-rule-id}/rooms/{room-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/2b46f818-7aff-43a6-849a-60fc12906cc7/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79

### Get Schedule-Rule Excluded-Dates

Retrieve the excluded-dates collection for the specified Schedule Rule.

On Schedule Rule add or update API requests, the caller can include an excluded-dates collection within the uploaded entity XML. If present, the excluded dates collection defines (on add) or replaces (on update) the current Schedule Rule's excluded dates. This inline collection support is a convenience provided by the API.

The alternate approach is to manage the excluded dates separate from the Schedule Rule entity.

**URL:** [GET]{base-uri}/schedule-rules/{schedule-rule-id}/excluded-dates

**Reply content:** "excluded-dates" collection that contains "date-range" elements.

**Errors:** Schedule Rule was not found.

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/239e6662-3873-46ea-8ecb-1b21692d516f/excluded-dates

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<excluded-dates>

 <total-results>2</total-results>

 <items-per-page>2</items-per-page>

 <start-index>0</start-index>

 <date-range>

 <start>2011-11-24</start>

 <end>2011-11-25</end>

 </date-range>

 <date-range>

 <start>2011-12-23</start>

 <end>2011-12-25</end>

 </date-range>

</excluded-dates>

### Add Excluded-Dates to Schedule-Rule

Add a date range to the Schedule Rule's excluded dates collection.

**Request Content:** "date-range" XML.

**Response Content:** "date-range" XML (can be ignored)

**Errors:** not found, client error(bad data format)

**URL:** PUT {base-uri}/schedule-rules/{schedule-rule-id}/excluded-dates

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/239e6662-3873-46ea-8ecb-1b21692d516f/excluded-dates

**Request XML:**

<date-range>

<start>2011-11-11</start>

<end>2011-11-10</end>

</date-range>

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<date-range><start>2011-11-11</start><end>2011-11-10</end></date-range>

### Delete All Excluded-Dates from Schedule-Rule

Remove all entries from the specified Schedule Rule's excluded-date collection.

**Errors:** not found

**URL:** [DELETE] {base-uri}/schedule-rules/{schedule-rule-id}/excluded-dates

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/239e6662-3873-46ea-8ecb-1b21692d516f/excluded-dates

### Get Schedule-Rule Presenters

Retrieve the list of presenters for the specified Schedule Rule. See also [Get all Schedules for a Person](#Get_all_Schedules) on page 15.

**Reply content:** "presenters" collection of "presenter" elements.

**Errors:** Schedule Rule was not found.

**URL:** [GET] {base-uri}/schedule-rules/{schedule-rule-id}/presenters

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/239e6662-3873-46ea-8ecb-1b21692d516f/presenters

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<presenters>

 <total-results>1</total-results>

 <items-per-page>1</items-per-page>

 <start-index>0</start-index>

 <presenter>

 <person>

 <id>880e9358-c724-4729-9b1b-9bb28f243683</id>

 <first-name>Samuel</first-name>

 <last-name>Clemens</last-name>

 </person>

 </presenter>

</presenters>

### Delete all Schedule-Rule Presenters

Clear the Schedule Rule's presenter list.

**Errors:** Schedule Rule was not found.

**URL:** [DELETE] {base-uri}/schedule-rules/{schedule-rule-id}/presenters

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/239e6662-3873-46ea-8ecb-1b21692d516f/presenters

### Add a Presenter to Schedule-Rule

Add the person to the Schedule Rule's presenter list.

**Request Content:** Empty

**Response Content:** Empty

**Errors:** Schedule Rule was not found.

**URL:** PUT {base-uri}/schedule-rules/{schedule-rule-id}/presenters/{person-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/239e6662-3873-46ea-8ecb-1b21692d516f/presenters/880e9358-c724-4729-9b1b-9bb28f243683

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<presenter><person><id>880e9358-c724-4729-9b1b-9bb28f243683</id><first-name>Samuel</first-name><last-name>Clemens</last-name></person></presenter>

### Delete Person from Schedule-Rule

Remove the Person from the Schedule Rule's presenter list.

**Errors:** Schedule Rule was not found.

**URL:** [DELETE]{base-uri}/schedule-rules/{schedule-rule-id}/presenters/{person-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/239e6662-3873-46ea-8ecb-1b21692d516f/presenters/880e9358-c724-4729-9b1b-9bb28f243683

### Get Schedule Rule Product-Groups

Retrieve the list of Product assignments for the specified Schedule Rule.

**Reply Content:** "products" collection of "product" elements.

**Errors:** Schedule Rule not found

**URL:** [GET]{base-uri}/schedule-rules/{schedule-rule-id}/product-groups

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/9cfb0cc4-7086-41e6-aeba-dcbe0b847b2c/product-groups

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<product-groups>

 <total-results>1</total-results>

 <items-per-page>1</items-per-page>

 <start-index>0</start-index>

 <product-group>

 <id>244d88c9-4738-450d-8a50-bab64fa9e468</id>

 <etag>0</etag>

 <name>Display/Video (Podcast/Vodcast/EchoPlayer). Balanced between file size &amp; quality</name>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/product-groups/244d88c9-4738-450d-8a50-bab64fa9e468" rel="self" title="self"/>

 </product-group>

</product-groups>

### Delete Schedule-Rule Product-Groups

Clear the Schedule Rule's product list. Removes all products currently assigned to the Rule.

**Errors:** Schedule Rule not found

**URL:** [DELETE] {base-uri}/schedule-rules/{schedule-rule-id}/product-groups

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/9cfb0cc4-7086-41e6-aeba-dcbe0b847b2c/product-groups

### Get Product-Group Detail

**URL:** [GET] {base-uri}/schedule-rules/{schedule-rule-id}/product-groups/{product-group-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/9cfb0cc4-7086-41e6-aeba-dcbe0b847b2c/product-groups/244d88c 9-4738-450d-8a50-bab64fa9e468

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<product-group>

 <id>244d88c9-4738-450d-8a50-bab64fa9e468</id>

 <etag>0</etag>

 <name>Display/Video (Podcast/Vodcast/EchoPlayer). Balanced between file size &amp; quality</name>

</product-group>

### Add Product-Group to Schedule-Rule

**URL:** PUT {base-uri}/schedule-rules/{schedule-rule-id}/product-groups/{product-group-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/9cfb0cc4-7086-41e6-aeba-dcbe0b847b2c/product-groups/244d88c 9-4738-450d-8a50-bab64fa9e468

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<product-group>

 <id>244d88c9-4738-450d-8a50-bab64fa9e468</id>

 <etag>0</etag>

 <name>Display/Video (Podcast/Vodcast/EchoPlayer). Balanced between file size &amp; quality</name>

 <link href="null/product-groups/244d88c9-4738-450d-8a50-bab64fa9e468" rel="self" title="self"/>

</product-group>

### Remove Product-Group from Schedule-Rule

**URL:** [DELETE] {base-uri}/schedule-rules/{schedule-rule-id}/product-groups/{product-group-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/9cfb0cc4-7086-41e6-aeba-dcbe0b847b2c/product-groups/244d88c 9-4738-450d-8a50-bab64fa9e468

## Capture

The Capture related entities are only available as read-only entities from the Scheduling API. They represent the capture history as well as the future scheduled capture events. The Scheduling Rule is the updatable entity that control scheduled capture events. Changes to the Schedule Rule will create/modify capture events.

One or more capture entities are created when a Schedule Rule is entered into the Echo360 System. The Captures represent each instance of a lecture capture. The Scheduling API only allows read access to Capture records. Changes made to the parent Schedule Rule will update the related (future) Captures.



### Capture Entity's XML mapping

This table defines the mapping of Capture Event attributes/fields for its various XML representations (summary or detailed).

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | System generated entity identifier. |
| organization | All | link | Link to the parent organization for this Capture.Auto set to the caller's default organization. |
| schedule-rule | All | link | link to the parent Schedule Rule that created this capture event. |
| name | All | string(116) | Name used for search. |
| scheduled-start-time | All | iso-datetime | When the event is/was scheduled to start. |
| scheduled-duration-seconds | All | int | The scheduled length of the capture event. |
| start-time | Detail | iso-datetime | The actual start date/time of the captured event. This is set to the scheduled start time if this is a future event. |
| duration-milliseconds | Detail | int | The actual length of the captured event. |
| title | Detail | string(255) | Capture event title. |
| external-tag | Detail | string(50) | Optional field set to an external system's tag property. |
| status | Detail | string | Status enumeration value. |
| target-display-input | Detail | string(30) |  |
| capture-video | Detail | boolean | Should the event capture the video feed. |
| allow-audio-download | Detail | boolean | Is the audio only allowed to be downloaded. |
| timing-xml | Detail | CLOB |  |
| capture-medias | Detail | link | link to the list of media files (media data) created by this capture event. |
| [section] | Detail | link | In order to support event data archive, the Section captured is placed in its own capture field. |
| [room] | Detail | link | In order to support event data archive, the Room captured is placed in its own capture field. |
| [presenters] | Detail | inline-collection | In order to support event data archive, the Presenters captured is placed in its own collection field. |

### Get Captures for a Schedule-Rule

Get all Captures associated to the specified Schedule Rule.

**Reply Content:** "captures" collection XML containing "capture" summary elements.

**Errors:** schedule-rule was not found.

**URL:** [GET] {base-uri}/schedule-rule/{schedule-rule-id}/captures[?term="{name-pattern}"]

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/239e6662-3873-46ea-8ecb-1b21692d516f/captures

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<captures>

 <total-results>8</total-results>

 <items-per-page>8</items-per-page>

 <start-index>0</start-index>

 <capture>

 <id>8c5d66a8-581c-4fbd-9c47-14179e0f7b69</id>

 <etag>1</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/99c14ad9-3077-430f-921f-643261b7c4c8" rel="http://schemas.com.echo360.section" title="section"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/courses/8dbee430-a63b-44eb-986c-bb6847add25f" rel="http://schemas.com.echo360.course" title="course"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/303c4e3b-9803-4826-9fb0-578ed2d505fc" rel="http://schemas.com.echo360.organization" title="organization"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/239e6662-3873-46ea-8ecb-1b21692d516f" rel="http://schemas.com.echo360.schedule-rule" title="schedule-rule"/>

 <name>42584795b3c8446db087d34ca688ca23</name>

 <title>Introduction to EchoSystem Server (ECHO100-100-001) Fall 2011</title>

 <scheduled-start-time tz="EST">2011-11-07T12:30:00.000-05:00</scheduled-start-time>

 <scheduled-duration-seconds>600</scheduled-duration-seconds>

 <until-start-seconds>14512</until-start-seconds>

 <status>capture-status-not-started</status>

 <live>false</live>

 <live-capable>false</live-capable>

 <archive>true</archive>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/captures/8c5d66a8-581c-4fbd-9c47-14179e0f7b69" rel="self" title="self"/>

 </capture>

 ...

 ...

</captures>

### Get Captures for a Room

Get all Captures associated with a given room.

**Reply Content:** "captures" collection XML containing "capture" summary elements.

**Errors:** room was not found.

**URL:** {base-uri}/rooms/{room-id}/captures[?term="{name-pattern}"]

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79/captures

**Response XML:**

<captures>

 <total-results>10</total-results>

 <items-per-page>10</items-per-page>

 <start-index>0</start-index>

 <capture>

 <id>988b0214-1d2e-4479-b747-2699133ac051</id>

 <etag>61</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/99c14ad9-3077-430f-921f-643261b7c4c8" rel="http://schemas.com.echo360.section" title="section"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/courses/8dbee430-a63b-44eb-986c-bb6847add25f" rel="http://schemas.com.echo360.course" title="course"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/303c4e3b-9803-4826-9fb0-578ed2d505fc" rel="http://schemas.com.echo360.organization" title="organization"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/07ff5c3d-c64b-4677-a458-381802bcb9d0" rel="http://schemas.com.echo360.schedule-rule" title="schedule-rule"/>

 <name>45e3c51ccebd40b5a5102d04f36baf27</name>

 <title>Introduction to EchoSystem Server (ECHO100-100-001) Fall 2011</title>

 <scheduled-start-time tz="EST">2011-11-21T12:30:00.000-05:00</scheduled-start-time>

 <scheduled-duration-seconds>3000</scheduled-duration-seconds>

 <until-start-seconds>-1464352</until-start-seconds>

 <status>capture-status-skipped</status>

 <live>false</live>

 <live-capable>false</live-capable>

 <archive>true</archive>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/captures/988b0214-1d2e-4479-b747-2699133ac051" rel="self" title="self"/>

 </capture>

 ...

</captures>

### Get Capture Details

Retrieve the detailed information on the Capture event.

**Reply Content:** "capture" detailed XML.

**Errors:** not found

**URL:** [GET] {base-uri}/captures/{capture-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/captures/8c5d66a8-581c-4fbd-9c47-14179e0f7b69

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<capture>

 <id>8c5d66a8-581c-4fbd-9c47-14179e0f7b69</id>

 <etag>1</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/99c14ad9-3077-430f-921f-643261b7c4c8" rel="http://schemas.com.echo360.section" title="section"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/courses/8dbee430-a63b-44eb-986c-bb6847add25f" rel="http://schemas.com.echo360.course" title="course"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/303c4e3b-9803-4826-9fb0-578ed2d505fc" rel="http://schemas.com.echo360.organization" title="organization"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/schedule-rules/239e6662-3873-46ea-8ecb-1b21692d516f" rel="http://schemas.com.echo360.schedule-rule" title="schedule-rule"/>

 <name>42584795b3c8446db087d34ca688ca23</name>

 <title>Introduction to EchoSystem Server (ECHO100-100-001) Fall 2011</title>

 <scheduled-start-time tz="EST">2011-11-07T12:30:00.000-05:00</scheduled-start-time>

 <scheduled-duration-seconds>600</scheduled-duration-seconds>

 <until-start-seconds>13102</until-start-seconds>

 <status>capture-status-not-started</status>

 <live>false</live>

 <live-capable>false</live-capable>

 <archive>true</archive>

 <start-time tz="EST">2011-11-07T12:30:00.000-05:00</start-time>

 <duration-milliseconds>600000</duration-milliseconds>

 <category>capture-category-scheduled-recurring</category>

 <external-tag/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/captures/8c5d66a8-581c-4fbd-9c47-14179e0f7b69/capture-medias" rel="http://schemas.com.echo360.capture-media" title="capture-medias"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79" rel="http://schemas.com.echo360.room" title="room"/>

 <presenters>

 <person>

 <id>880e9358-c724-4729-9b1b-9bb28f243683</id>

 <etag>1</etag>

 <first-name>Samuel</first-name>

 <last-name>Clemens</last-name>

 <created-time>2006-01-19T12:35:19.000Z</created-time>

 <link href="null/people/880e9358-c724-4729-9b1b-9bb28f243683" rel="self" title="self"/>

 </person>

 </presenters>

</capture>

## Capture-Media

A single Capture Event can generate multiple media files. Each generated file is represented by the Capture Media Entity. As with the Capture event entity, the Scheduling API only allows read access to the Capture Media records.

### Capture Media Entity's XML mapping

This table defines the mapping of Capture Media attributes/fields for its various XML representations (summary or detailed).

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | System generated entity identifier. |
| capture | All | link | link to the parent Capture Event that created the media. |
| media-track | All | string | Enumerated constant that indicates how this media is used.Values (audio, audio-vga, audio-video, flash-movie, flipbook, thumbnail, vga, video) |
| media-group | All | string | Enumerated constant that indicates the major media group for this media. Values (edit-proxy, master, primary, projector). |
| duration-milliseconds | Detail | int | Running length of the media in milliseconds. |
| offset-milliseconds | Detail | int |  |
| device | Detail | link | Link to the Device which generated/captured this media. |
| product-profiles | Detail | inline collection | Inline list of "product-profile" items. These are the Product Profiles used when generating the media file. |
| media | Detail | composite element | Detailed media attributes of the captured file. |

### "media" composite element XML mapping

This table defines the mapping of Media attributes/fields for its XML representation. A Media entity contains information on a capture generated media file.

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| path | All | string | File path of the media. |
| type | All | string | The media file type: jpg, mp3, aac, m4b, rm, mov, wmv, flv, swf, m4v, h264, mp4 |
| hash | All | composite element | Hash value of the associated capture media file. |
| file-size-bytes | All | long | Bytes size of the associated media file. |
| technical | All | composite element | Grouping of file capture technical stats. |
| tag | All | composite element | Grouping of information attributes about the media contents. |

### "media/hash" composite element XML mapping

This table defines the mapping of Hash attributes/fields for its XML representation. Each file generated by a capture has an associated hash value that helps verify the file integrity after file transfer.

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| algorithm | All | string | An enumerated string that indicates the hash algorithm used to generate the hash vale. (Adler32, CRC32, MD2, MD5, SHA\_1, SHA\_256, SHA\_384, SHA\_512) |
| value | All | string | The actual hash value generated for the associated capture media file. |

### "media/technical" XML mapping

This table defines the mapping of media-technical attributes/fields to its XML representations.

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| frame-rate | All | numeric | frame rate of the captured media. |
| bit-rate | All | int | Captured bit-rate of the media. |
| width | All | int | line/pixel width of the media frames. |
| height | All | int | line/pixel height of the media frames. |
| file-server | All | string |  |

### "media/tag" XML mapping

This table defines the mapping of media tag attributes/fields to its XML representations. Media Tag is a collection of metadata attributes that can be assigned to a captured media. The "tag" attributes are set/edited by a Echo360 user via the presentation UI component.

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| year | All | int | Optional year when the content was produced/recorded |
| comment | All | string | Optional text describing the content |
| copyright | All | string | Optional copyright statement covering the content. |
| album | All | string | Optional album name used to group content. |
| artist-name | All | string | Optional person who produced the content. |
| genre | All | string | Optional category of the content. |

### Get Capture-Medias

Get all Media associated with the specified Capture Event.

**Reply Content:** "capture-medias" collection XML containing "capture-media" summary elements.

**Errors:** Capture Event not found.

**URL:** [GET]{base-uri}/captures/{capture-id}/capture-medias

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/captures/75e3a99d-6a6b-4292-8155-bbfd104b9270/capture-medias

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<capture-medias>

 <total-results>27</total-results>

 <items-per-page>27</items-per-page>

 <start-index>0</start-index>

 <capture-media>

 <id>1c4485ad-a16c-4e95-b448-d241f2a71750</id>

 <etag>1</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/captures/75e3a99d-6a6b-4292-8155-bbfd104b9270" rel="http://schemas.com.echo360.capture" title="capture"/>

 <media-track>video</media-track>

 <media-group>master</media-group>

 <duration-millis>227250</duration-millis>

 <offset-millis>0</offset-millis>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/devices/e935c8f3-ebcb-4280-b368-5c9a30c2101c" rel="http://schemas.com.echo360.device" title="device"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/capture-medias/1c4485ad-a16c-4e95-b448-d241f2a71750" rel="self" title="self"/>

 </capture-media>

 <capture-media>

 <id>cfad3576-77b4-4088-92a4-996228e5a561</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/captures/75e3a99d-6a6b-4292-8155-bbfd104b9270" rel="http://schemas.com.echo360.capture" title="capture"/>

 <media-track>mobile-video</media-track>

 <media-group>primary</media-group>

 <duration-millis>227369</duration-millis>

 <offset-millis>0</offset-millis>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/devices/e935c8f3-ebcb-4280-b368-5c9a30c2101c" rel="http://schemas.com.echo360.device" title="device"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/capture-medias/cfad3576-77b4-4088-92a4-996228e5a561" rel="self" title="self"/>

 </capture-media>

 ...

 ...

</capture-medias>

### Capture-Media Details

Retrieve the detailed information on the Capture Media.

**Reply Content:** "capture-media" detailed XML.

**Errors:** not found.

**URL:** [GET] {base-uri}/capture-medias/{capture-media-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/capture-medias/cfad3576-77b4-4088-92a4-996228e5a561

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<capture-media>

 <id>cfad3576-77b4-4088-92a4-996228e5a561</id>

 <etag>0</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/captures/75e3a99d-6a6b-4292-8155-bbfd104b9270" rel="http://schemas.com.echo360.capture" title="capture"/>

 <media-track>mobile-video</media-track>

 <media-group>primary</media-group>

 <duration-millis>227369</duration-millis>

 <offset-millis>0</offset-millis>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/devices/e935c8f3-ebcb-4280-b368-5c9a30c2101c" rel="http://schemas.com.echo360.device" title="device"/>

 <product>

 <id>88b22b64-2ada-4088-852e-6504be508a12</id>

 <etag>0</etag>

 <name-key>swf-vga-flv-audio-video</name-key>

 <link href="null/products/88b22b64-2ada-4088-852e-6504be508a12" rel="self" title="self"/>

 </product>

 <media>

 <path>audio-vga-streamable.m4v</path>

 <type>m4v</type>

 <hash>

 <algorithm>Adler32</algorithm>

 <value>30d38a00</value>

 </hash>

 <file-size-in-bytes>979956</file-size-in-bytes>

 <technical>

 <frame-rate>4.0</frame-rate>

 <bit-rate>564000</bit-rate>

 <width>640</width>

 <height>480</height>

 <file-server/>

 </technical>

 <tag/>

 </media>

</capture-media>

### Get Presentations

**URL:** [GET] {base-uri}/captures/{capture-id}/presentations

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/captures/75e3a99d-6a6b-4292-8155-bbfd104b9270/presentations

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<presentations>

 <total-results>1</total-results>

 <items-per-page>1</items-per-page>

 <start-index>0</start-index>

 <presentation>

 <id>6c7a5f73-e6d4-46fe-94fa-53469af3c051</id>

 <etag>2</etag>

 <until-start-seconds>-585859</until-start-seconds>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/303c4e3b-9803-4826-9fb0-578ed2d505fc" rel="http://schemas.com.echo360.organization" title="organization"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/captures/75e3a99d-6a6b-4292-8155-bbfd104b9270" rel="http://schemas.com.echo360.capture" title="capture"/>

 <name>2ea2aec153a34325b2f8d4318fe0f856</name>

 <title>EchoSystem Server Administration (ECHO101-101-001) Fall 2011</title>

 <start-time>2011-10-31T16:15:00.000-04:00</start-time>

 <duration-milliseconds>227250</duration-milliseconds>

 <deleted>false</deleted>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/presentations/6c7a5f73-e6d4-46fe-94fa-53469af3c051" rel="self" title="self"/>

 </presentation>

</presentations>

### Get Presentation Details

**URL:** [GET] {base-uri}/presentations/{presentation-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/presentations/6c7a5f73-e6d4-46fe-94fa-53469af3c051

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<presentation>

 <id>6c7a5f73-e6d4-46fe-94fa-53469af3c051</id>

 <etag>2</etag>

 <until-start-seconds>-585923</until-start-seconds>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/303c4e3b-9803-4826-9fb0-578ed2d505fc" rel="http://schemas.com.echo360.organization" title="organization"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/captures/75e3a99d-6a6b-4292-8155-bbfd104b9270" rel="http://schemas.com.echo360.capture" title="capture"/>

 <name>2ea2aec153a34325b2f8d4318fe0f856</name>

 <title>EchoSystem Server Administration (ECHO101-101-001) Fall 2011</title>

 <start-time>2011-10-31T16:15:00.000-04:00</start-time>

 <duration-milliseconds>227250</duration-milliseconds>

 <deleted>false</deleted>

 <description/>

 <available>true</available>

 <archived>false</archived>

 <link href="http://10.3.11.174:8082/ess/echo/presentation/6c7a5f73-e6d4-46fe-94fa-53469af3c051/media.mp3" title="podcast"/>

 <link href="http://10.3.11.174:8082/ess/echo/presentation/6c7a5f73-e6d4-46fe-94fa-53469af3c051/media.m4v" title="vodcast"/>

 <link href="http://10.3.11.174:8082/ess/echo/presentation/6c7a5f73-e6d4-46fe-94fa-53469af3c051/2ea2aec153a34325b2f8d4318fe0f856.zip" title="player"/>

 <link href="http://10.3.11.174:8082/ess/echo/presentation/6c7a5f73-e6d4-46fe-94fa-53469af3c051" title="rich-media"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/sections/ee408624-a703-4488-be88-0f9ac5245cdc" rel="http://schemas.com.echo360.section" title="section"/>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79" rel="http://schemas.com.echo360.room" title="room"/>

 <presenters>

 <person>

 <id>a7a26e4e-4915-4300-acd1-12a5ca14b93c</id>

 <etag>1</etag>

 <first-name>Jason</first-name>

 <last-name>Bourne</last-name>

 <created-time>2006-07-10T09:16:27.000Z</created-time>

 <link href="null/people/a7a26e4e-4915-4300-acd1-12a5ca14b93c" rel="self" title="self"/>

 </person>

 </presenters>

</presentation>

### Get Presentations in a Section

**URL:** [GET] {base-uri}/sections/{section-id}/presentations

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/sections/32d73ef8-3511-4ddb-a882-b88824b752fb/x-presentations

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<presentations>

 <total-results>3</total-results>

 <items-per-page>3</items-per-page>

 <start-index>0</start-index>

 <presentation>

 <id>0a1da8bb-349d-417a-ba4f-48de7dfb793e</id>

 <etag>0</etag>

 <until-start-seconds>-172622129</until-start-seconds>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/303c4e3b-9803-4826-9fb0-578ed2d505fc" rel="http://schemas.com.echo360.organization" title="organization"/>

 <name>some\_presentation\_23</name>

 <title>some\_presentation\_23</title>

 <start-time>2006-05-19T12:35:19.000-04:00</start-time>

 <duration-milliseconds>7200000</duration-milliseconds>

 <deleted>false</deleted>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/presentations/0a1da8bb-349d-417a-ba4f-48de7dfb793e" rel="self" title="self"/>

 </presentation>

 ...

</presentations>

## Device

The Device entity represents the Lecture Capture and Presentation Processing devices registered with the Echo System. Most of the Device attributes are read-only status information used to monitor the device health. The Scheduling API currently supports read-only access to the device entities.

### Device Entity's XML mapping

This table defines the mapping of Device attributes/fields for its various XML representations (summary or detailed).

| Field / Element | Rep. Levels | Type (length) | Information |
| --- | --- | --- | --- |
| id | All | GUID | System generated product identifier. |
| key | All | string | Unique MAC address of the device. |
| type | All | enum string | Choices are: "software-capture", "hardware-capture", "pc-capture", "media-processor", "personal-capture". |
| description | Detailed | string | Optional text description of the Device. |
| address | Detailed | string | Device network address. |
| external-address | Detailed | string | Optional, alternative network address. |
| operational-mode | Detailed | enum string | Choices are: "fixed". |
| last-capture-status | Detailed | enum string | Choices are: "active", "complete", "error", "idle", "na", "new", "overdue", "error-time-sync", "paused", "unknown", "waiting". |
| last-log-upload-status | Detailed | enum string | See last-capture-status. |
| first-status-time | Detailed | timestamp | When the Echo System first received a status package from the Device. |
| last-status-time | Detailed | timestamp | When the Echo System last received a status package from the Device. Used to determine overdue devices. |
| next-status-time | Detailed | timestamp | Max threshold when the Echo System should receive the Device's next Status packet. |
| last-start-time | Detailed | timestamp | When the Device last cycled power/operation. |
| last-client-status-time | Detailed | timestamp | Last time when a device client (Ad hoc) communicated directly with the device. |
| time-out-of-sync-for-alert | Detailed | boolean | True if the Device internal clock has drifted from the Echo System clock and an Alert was generated for this condition. |
| time-out-of-sync-for-reject | Detailed | boolean | True if the Device internal clock has drifter from the Echo System clock; to the point that the Echo system will reject all communication from the device. |
| platform/os | Detailed | string | The Device's Operating System type/version. |
| platform/processor | Detailed | string | The Device's CPU brand. |
| os-details | Detailed | string | More details on the Device OS. |

### Get all Devices

Get a list of all Devices defined in the Echo System.

**Reply Content:** "devices" collection XML containing "device" summary elements.

**URL:** [GET] {base-uri}/devices

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/devices

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<devices>

 <total-results>5</total-results>

 <items-per-page>5</items-per-page>

 <start-index>0</start-index>

 <device>

 <id>da872ee1-276f-4a54-9f4e-ebe1b84bef36</id>

 <etag>1</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <key>00-50-c2-28-6c-1f</key>

 <type>hardware-capture</type>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/devices/da872ee1-276f-4a54-9f4e-ebe1b84bef36" rel="self" title="self"/>

 </device>

 …

</devices>

### Get all Devices in a Room

Get a list of Devices associated with the given Room.

**Reply Content:** "devices" collection XML containing "device" summary elements.

**URL:** [GET] {base-uri}/rooms/{room-id}/devices

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79/devices

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<devices>

 <total-results>1</total-results>

 <items-per-page>1</items-per-page>

 <start-index>0</start-index>

 <device>

 <id>e935c8f3-ebcb-4280-b368-5c9a30c2101c</id>

 <etag>528</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <key>00-50-c2-8e-ae-5b</key>

 <type>hardware-capture</type>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/devices/e935c8f3-ebcb-4280-b368-5c9a30c2101c" rel="self" title="self"/>

 </device>

</devices>

### Get all Devices in a Building

Get a list of Devices associated with the given Building.

**Reply Content:** "devices" collection XML containing "device" summary elements.

**URL:** [GET] {base-uri}/buildings/{building-id}/devices

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/buildings/5df6a341-52f1-4970-bb82-0cb75e2d5398/devices

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<devices>

 <total-results>2</total-results>

 <items-per-page>2</items-per-page>

 <start-index>0</start-index>

 <device>

 <id>c592f573-d442-4a14-9fec-586864135ed5</id>

 <etag>1</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/2dca51e6-f376-4579-8019-fdbe70dfb1f5" rel="http://schemas.com.echo360.organization" title="organization"/>

 <key>00-50-c2-42-54-e7</key>

 <type>hardware-capture</type>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/devices/c592f573-d442-4a14-9fec-586864135ed5" rel="self" title="self"/>

 </device>

 <device>

 <id>e935c8f3-ebcb-4280-b368-5c9a30c2101c</id>

 <etag>528</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <key>00-50-c2-8e-ae-5b</key>

 <type>hardware-capture</type>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/devices/e935c8f3-ebcb-4280-b368-5c9a30c2101c" rel="self" title="self"/>

 </device>

</devices>

### Get Device Details

Retrieve the detailed information on the specified Device.

**Reply Content:** "device" detailed XML.

**Errors:** Specified Device was not found.

**URL:** [GET]{base-uri}/devices/{device-id}

**Example:** https://ess.institution.com:8443/ess/scheduleapi/v1/devices/e935c8f3-ebcb-4280-b368-5c9a30c2101c

**Response XML:**

<?xml version="1.0" encoding="UTF-8"?>

<device>

 <id>e935c8f3-ebcb-4280-b368-5c9a30c2101c</id>

 <etag>528</etag>

 <link href="https://ess.institution.com:8443/ess/scheduleapi/v1/organizations/e8b76e41-e9d1-454d-ac6b-18ceb464851a" rel="http://schemas.com.echo360.organization" title="organization"/>

 <key>00-50-c2-8e-ae-5b</key>

 <type>hardware-capture</type>

 <description/>

 <last-capture-status>idle</last-capture-status>

 <last-log-upload-status>idle</last-log-upload-status>

 <first-status-time>2011-10-31T19:55:18.000Z</first-status-time>

 <last-status-time>2011-11-07T14:33:11.000Z</last-status-time>

 <next-status-time>2011-11-07T14:33:21.000Z</next-status-time>

 <last-start-time>2011-11-06T08:30:40.000Z</last-start-time>

 <last-client-status-time/>

 <time-out-of-sync-for-alert>false</time-out-of-sync-for-alert>

 <time-out-of-sync-for-reject>false</time-out-of-sync-for-reject>

 <platform>

 <os>linux.32</os>

 <processor>ppc</processor>

 </platform>

 <os-details/>

 <address>/10.3.10.143</address>

 <external-address>/10.3.10.143</external-address>

 <device-profile>custom: eac6a3bb-eb56-4bbd-949b-bf79d8b1036b</device-profile>

 <device-rooms>

 <total-results>1</total-results>

 <items-per-page>1</items-per-page>

 <start-index>0</start-index>

 <device-room>

 <link href="null/devices/e935c8f3-ebcb-4280-b368-5c9a30c2101c" rel="http://schemas.com.echo360.device" title="device"/>

 <link href="null/rooms/144682f9-0c88-4d4c-b96b-dd3cc2b44d79" rel="http://schemas.com.echo360.room" title="room"/>

 <start-date>2011-10-31T19:57:40.000Z</start-date>

 <end-date/>

 </device-room>

 </device-rooms>

</device>

Appendix A: Sample Section Property Set XML

<property>

 <key>presentation-initially-unavailable</key>

 <value>false</value>

</property>

<property>

 <key>product-group</key>

 <value>74156b84-8edb-4016-a597-35abc0c1c486</value>

</property>

<property>

 <key>delete-original-media</key>

 <value>false</value>

</property>

<property>

 <key>delete-original-media-days</key>

 <value>120</value>

</property>

<property>

 <key>security-module</key>

 <value>5c600793-45ff-4d27-b546-f6a9bb61e2cf</value>

</property>

<property>

 <key>enforce-file-upload-quota</key>

 <value>false</value>

</property>

<property>

 <key>file-upload-quota-limit</key>

 <value>21474836480</value>

</property>

<property>

 <key>disable-course-list-end-of-term</key>

 <value>false</value>

</property>

<property>

 <key>display-podcast-link</key>

 <value>false</value>

</property>

<property>

 <key>display-vodcast-link</key>

 <value>false</value>

</property><property>

 <key>display-rich-media-link</key>

 <value>true</value>

</property>

<property>

 <key>scheduled-capture-label</key>

 <value>Lecture</value>

</property>

<property>

 <key>scheduled-capture-label-plural</key>

 <value>Lectures</value>

</property>

<property>

 <key>unscheduled-capture-label</key>

 <value>Supplemental</value>

</property>

<property>

 <key>unscheduled-capture-label-plural</key>

 <value>Supplementals</value>

</property>

<property>

 <key>external-system-id-1</key>

 <value/>

</property>

<property>

 <key>external-system-id-2</key>

 <value/>

</property>

<property>

 <key>copyright-text</key>

 <value/>

</property>

<property>

 <key>branding-metadata-text-color</key>

 <value>#999999</value>

</property>

<property>

 <key>branding-title-text-color</key>

 <value>#ffffff</value>

</property>

<property>

 <key>logo-tooltip</key>

 <value/>

</property>

<property>

 <key>logo-click-uri</key>

 <value/>

</property>

<property>

 <key>support-text</key>

 <value/>

</property>

<property>

 <key>support-phone</key>

 <value/>

</property>

<property>

 <key>support-uri</key>

 <value/>

</property>

<property>

 <key>application-bookmarks</key>

 <value>true</value>

</property>

<property>

 <key>application-discussions</key>

 <value>true</value>

</property>

<property>

 <key>application-usage-data</key>

 <value>true</value>

</property>

 <property>

 <key>application-feedback</key>

 <value>true</value>

</property>

 <property>

 <key>application-sharing</key>

 <value>true</value>

</property>

Appendix B: Summary Request URL Listing

|  |
| --- |
|  |
| **“/v1/versions”** Resource: Versions – List (only) version numbers for various components (JVM, database, etc.). |
|  |
| **"/v1/people"** Resource: Person - List all People, or Add a new Person. |
| **"/v1/people/{person-id}"** Resource: Person - Get, Modify, or Delete a Person. |
|  |
| **"/v1/campuses"** Resource: Campus - List all Campuses, or Add a new Campus. |
| **"/v1/campuses/{campus-id}"** Resource: Campus - Get, Modify, or Delete a given Campus. |
|  |
| **"/v1/campuses/{campus-id}/buildings"** Resource: Building - List Buildings within a Campus, or Add new Building to a Campus. |
| **"/v1/buildings"** Resource: Building - List (only) all Buildings across all Campuses. |
| **"/v1/buildings/{building-id}"** Resource: Building - Get, Modify, or Delete a Building. |
|  |
| **"/v1/rooms"** Resource: Room - List (only) all Rooms. |
| **"/v1/campuses/{campus-id}/rooms"** Resource: Room - List Rooms within a specified Campus. |
| **"/v1/buildings/{building-id}/rooms"** Resource: Room - List Rooms within a Building, or Add a new Room to a Building. |
| **"/v1/rooms/{room-id}"** Resource: Room - Get, Modify, or Delete a Room. |
|  |
| **"/v1/organizations"** Resource: Organization – List all Organizations, or Add a new Organization. |
| **"/v1/organizations/{organization-id}"** Resource: Organization – Get, Modify, or Delete an Organization. |
|  |
| **"/v1/product-groups"** Resource: ProductGroup - List (only) all Capture/Presentation Products. |
| **"/v1/product-groups/{product-group-id}"** Resource: ProductGroup - Get (only) details of a Product. |
|  |
| **"/v1/publishers"** Resource: Publisher - List (only) all Publishers. |
| **"/v1/publishers/{publisher-id}"** Resource: Publisher - Get (only) details of a Publisher. |
|  |
| **"/v1/terms"** Resource: Term - List all Academic Terms, or Add a new Term. |
| **"/v1/terms/{term-id}"** Resource: Term - Get, Update, or Delete an Academic Term. |
| **"/v1/terms/{term-id}/excluded-dates"** Resource: Term.ExcludedDates collection. List the Term's excluded dates, Clear the Term's excluded dates collection, or Add a date range to the Term's excluded date collection. |
|  |
| **"/v1/courses"** Resource: Course - List all Courses, or Add a new Course. \*Depending on the System Configuration, Adding a new Course can auto generate a default Course Section. |
| **"/v1/terms/{term-id}/courses"** Resource: Course - List (only) all Courses with at least 1 section within the Academic Term. |
| **"/v1/courses/{course-id}"** Resource: Course - Get, Update, or Delete a Course. |
|  |
| **"/v1/terms/{term-id}/sections"** Resource: Section - List (only) all Sections within the Academic Term. |
| **"/v1/courses/{course-id}/sections"** Resource: Section - List (only) all Sections for a Course (across Terms). |
| **"/v1/terms/{term-id}/courses/{course-id}/sections"** Resource: Section - List all Sections for a given Course and Academic Term, or Add a new Section to the Course for the given Term. |
| **"/v1/sections/{section-id}"** Resource: Section - Get, Modify, or Delete a given Course Section. |
|  |
| **"/v1/sections/{section-id}/presenters"** Resource: Section.Presenter collection - List or Clear the Section's Presenter collection. |
| **"/v1/sections/{section-id}/presenters/{section-role-id}"** Resource: Section. Presenter collection - Direct (empty content) Add or Remove of the Person to/from the Section's Presenter list. (presenter-id = person-id). A GET can be used to confirm the Person is already a Presenter of the Section. |
|  |
| **"/v1/sections/{section-id}/publish-channels"** Resource: PublishChannel - List or Clear the Section's Publish Channel collection. |
| **"/v1/publish-channels/{publish-channel-id}"** Resource: PublishChannel - Get, Modify, or Delete the Section's Publish Channel. |
| **"/v1/publishers/{publisher-id}/sections/{section-id}/publish-channels"** Resource: Section.PublishChannel - List, Add, or Clear the Section's Publishing Channels that target the given Publisher.  |
| **"/v1/sections/{section-id}/publishers/{publisher-id}/publish-channels"** Resource: Section.PublishChannel - List, Add, or Clear the Section's Publishing Channels that target the given Publisher. |
| **"/v1/publishers/{publisher-id}/publish-channels"** Resource: Section.PublishChannel - List (only) all Publish Channel that use the given Publisher. (could be a big data set) |
|  |
| **"/v1/sections/{section-id}/product-groups"** Resource: Section.ProductGroup collection - List or Clear the Section's assigned Capture ProductGroup. |
| **"/v1/sections/{section-id}/product-groups/{product-group-id}"** Resource: Section.ProductGroup collection - Direct (empty content) Add or Delete of the ProductGroup to/from the Section's associated ProductsGroups. A GET can be used to confirm the presence of Capture ProductGroup. |
|  |
| **"/v1/sections/{section-id}/schedule-rules"** Resource: ScheduleRule - List all Schedule event Rules for a course Section, or Add a new Schedule event Rule to the Section. |
| **"/v1/terms/{term-id}/schedule-rules"** Resource: ScheduleRule - List (only) Schedule event Rules for an academic Term. |
| **"/v1/people/{person-id}/schedule-rules"** Resource: ScheduleRule - List (only) Schedule event Rules for a person. |
| **"/v1/rooms/{room-id}/schedule-rules"** Resource: ScheduleRule - List (only) Schedule event Rules for a room. |
| **"/v1/schedule-rules/{schedule-rule-id}"** Resource: ScheduleRule - Get, Modify, or Delete a given Schedule event Rule. |
|  |
| **"/v1/schedule-rules/{schedule-rule-id}/product-groups"** Resource: ScheduleRule.ProductGroup collection - List the ProductGroups assigned to the Schedule event Rule, or Clear the entire assigned ProductGroup collection. |
| **"/v1/schedule-rules/{schedule-rule-id}/product-groups/{product-group-id}"** Resource: ScheduleRule.ProductGroup collection - Direct (empty content) Add or Delete of a ProductGroup assignment for a Schedule event Rule. A Get could be used to confirm ProductGroup assignment. |
|  |
| **"/v1/schedule-rules/{schedule-rule-id}/rooms"** Resource: ScheduleRule.Room collection - List the Rooms that are/were assigned to the Schedule event Rule. DELETE will Unassign the currently assigned room. |
| **"/v1/schedule-rules/{schedule-rule-id}/rooms/{room-id}"** Resource: ScheduleRule.Room collection - Direct (empty content) Add or Delete of the currently assigned room. |
|  |
| **"/v1/schedule-rules/{schedule-rule-id}/excluded-dates"** Resource: ScheduleRule.ExcludedDate collection - List or Clear the given schedule event Rule's Excluded Dates collection. Also, Add a new date range to the excluded date collection. |
|  |
| **"/v1/schedule-rules/{schedule-rule-id}/presenters"** Resource: ScheduleRule.Presenter collection - List or Clear the Schedule event Rule's currently assigned Presenters. |
| **"/v1/schedule-rules/{schedule-rule-id}/presenters/{person-id}"** Resource: ScheduleRule.Presenter collection - Direct Add or Remove of a Presenter to/from the Schedule event Rule's Presenter collection. A Get can be used to confirm the Person is a Presenter for the Schedule event Rule. |
|  |
| **"/v1/schedule-rules/{schedule-rule-id}/captures"** Resource: Capture - List (only) all Captures for the given Schedule event Rule. |
| **"/v1/sections/{section-id}/captures"** Resource: Capture - List (only) all Captures for the given Section. |
| **"/v1/rooms/{room-id}/captures"** Resource: Capture - List (only) all Captures for the given Room. |
| **"/v1/captures/{capture-id}"** Resource: Capture - Get (only) details on a given Capture. |
|  |
| **"/v1/captures/{capture-id}/capture-medias"** Resource: Capture.Media - List (only) the media which was generated by a given Capture. |
| **"/v1/capture-medias/{capture-media-id}"** Resource: Capture.Media - Get (only) details for a given Capture Media. |
|  |
| **"/v1/devices"** Resource: Device - Summary List (only) of all Devices. |
| **"/v1/devices/{device-id}"** Resource: Device - Get (only) the details of the Device. |
| **"/v1/rooms/{room-id}/devices"** Resource: Device - List (only) of Devices associated to the Room. |
| **"/v1/buildings/{building-id}/devices"** Resource: Device - List (only) of Devices associated to the Building. |
|  |
| **"/v1/captures/{capture-id}/presentations"** Resource: Presentation - Summary List (only) of all Presentations in a given Capture. |
| **"/v1/sections/{section-id}/presentations"** Resource: Presentation - Summary List (only) of all Presentation in a given Section. |
| **"/v1/presentations/{presentation-id}**" Resource: Presentation – Get. |
|  |
| "**/v1/presenters/{person-id}/sections**" Resource: SectionRole – Summary List. |