

Timetabler kafka “microservces-tt”

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1.0 Kafka

Host	
Port	
Topic	microservices-tt

1.1 Academic term

1.1.1 Create

Header			
method		academic_term_create	
Response			
session_id		optional	User perform action
request_id		required	unique id
academic_term	id	required	Created Id
	code	required	Code name
	name	required	Name
	start_date	required	Start Date
	end_date	required	End Date
	start_time	required	Start Time
	end_time	required	End Time
	default_availability	required	Default Availability
	default_usage	required	Default Usage
	default_start	required	Default Start
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	status	required	Status (1:active, 2:inactive)
	week	required	AcademicTermWeek relation ids (Complete ids relation)
week	id	required	Created Id
	week	required	Week number
	start_date	required	Week start date
Response Example			
{ "session_id": "dev",			

[illegible]

1.1.2 Update

Header			
method		academic_term_update	
Response			
session_id		optional	User perform action
request_id		required	unique id
academic_term	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	start_time	optional	Start Time
	end_time	optional	End Time
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	status	optional	Status (1:active, 2:inactive)
	week	required	AcademicTermWeek relation ids (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "academic_term": [{ "id": 3, "code": "A1111", "name": "A1", "start_time": "09:00", "end_time": "20:00", "extra_data_1": "extra1", "extra_data_2": null, "extra_data_3": null, "extra_data_4": null, "extra_data_5": null, "extra_data_6": "extra6", "extra_data_7": null, "extra_data_8": null, "extra_data_9": null, "extra_data_10": null, "status": "1" }] }</pre>			

```
}  
],  
  "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed"  
}
```

1.1.3 Delete

Header		
method		academic_term_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
academic_term_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "academic_term_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.2 Tag

1.2.1 Create

Header			
method		tag_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
tag	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	required	Description
	department	required	Department Id
	status	required	Status (1:active, 2:inactive)
Response Example			
<pre>{ "session_id": "dev", "tag": { "id": 5, "code": "tag3", "name": "Tag 2", "desc": "This is Tag", "department": 70, "status": 1 }, "request_id": "f82443ad-3485-4ceb-a7ba-9afb6f8746d" }</pre>			

1.2.2 Update

Header				
method			tag_update	
Response				
session_id		optional	User perform action	
request_id		required	unique id	
tag	id	required	Updated Id	
	code	optional	Code name (will only update code if single item update)	
	name	optional	Name	
	desc	optional	Description	
	department_id	optional	Department Id	
Response Example				
<pre>{ "session_id": "dev", "tag": [{ "id": 5, "code": "tag1-code", "name": "Tag 1-rename", "desc": "This is Tag-change", "department_id": 69, }, { "id": 6, "code": "tag1-code", "name": "Tag 1-rename", "desc": "This is Tag-change", "department_id": 69 }], "request_id": "10e2d02f-8ab2-4439-bc37-14bbc267e9b2" }</pre>				

1.2.3 Delete

Header		
method		tag_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
tag_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "tag_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.3 Department

1.3.1 Create

Header			
method		department_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
department	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	optional	Description
	department	optional	Sub Department Id
	zone	optional	Zone Id
	status	required	Status (1:active, 2:inactive)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "department": { "id": 96, "code": "D512", "name": "D5", "desc": "This is Department", "department": 70, "zone": 2, "extra_data_1": "extra1", "extra_data_6": "extra6", "status": 1, "tag": [1, 2] }, "request_id": "2eccb903-8588-49ef-acc4-b0a3f50c40e9" }</pre>			

1.3.2 Update

Header			
method		department_update	
Response			
session_id		optional	User perform action
request_id		required	unique id
department	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	desc	optional	Description
	department_id	optional	Sub Department Id
	zone_id	optional	Zone Id
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "department": [{ "id": 5, "name": "D2", "desc": "This is D2", "department_id": 70, "zone_id": 2, "extra_data_1": "extra1", "extra_data_2": null, "extra_data_3": null, "extra_data_4": null, "extra_data_5": "exrta5", "extra_data_6": null, "extra_data_7": "extra7", "extra_data_8": null, "extra_data_9": null, "extra_data_10": null, "tag": [1] }], }</pre>			

```
{
  "id": 6,
  "name": "D2",
  "desc": "This is D2",
  "department_id": 70,
  "zone_id": 2,
  "extra_data_1": "extra1",
  "extra_data_2": null,
  "extra_data_3": null,
  "extra_data_4": null,
  "extra_data_5": "exrta5",
  "extra_data_6": null,
  "extra_data_7": "extra7",
  "extra_data_8": null,
  "extra_data_9": null,
  "extra_data_10": null,
  "tag": [1]
}
],
"request_id": "aa9665a4-301b-4900-b45e-a3cfdcff8062"
}
```

1.3.3 Delete

Header		
method		department_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
department_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "department_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.4 Zone

1.4.1 Create

Header			
method		zone_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
zone	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	optional	Description
	department	optional	Department Id
	zone	optional	Sub Zone id
	status	required	Status (1:active, 2:inactive)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "department": { "id": 96, "code": "D512", "name": "D5", "desc": "This is Department", "department": 70, "zone": 2, "extra_data_1": "extra1", "extra_data_6": "extra6", "status": 1, "tag": [1, 2] }, "request_id": "2eccb903-8588-49ef-acc4-b0a3f50c40e9" }</pre>			

1.4.2 Update

Header			
method		zone_update	
Response			
session_id		optional	User perform action
request_id		required	unique id
zone	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	desc	optional	Description
	department_id	optional	Department Id
	zone_id	optional	Sub Zone id
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "department": [{ "id": 2, "code": "Z1", "name": "Z1", "desc": "This is Zone", "department_id": 69, "zone_id": 51, "extra_data_1": "extra1", "extra_data_2": null, "extra_data_3": null, "extra_data_4": null, "extra_data_5": "exrta5", "extra_data_6": null, "extra_data_7": "extra7", "extra_data_8": null, "extra_data_9": null, "extra_data_10": null, }] }</pre>			

```
    "tag": [1]
  }
],
"request_id": "0ed9b4a2-e26d-413a-94e4-27822cba46e6"
}
```

1.4.3 Delete

Header		
method		zone_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
zone_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "zone_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.5.1 Create

[illegible]

```
"tag": [1, 2]
},
"request_id": "54cee1ef-6b6d-4bb0-96e5-db0081995004"
}
```

1.5.2 Update

[illegible]

```
    "extra_data_7": "extra7",  
    "extra_data_8": null,  
    "extra_data_9": null,  
    "extra_data_10": null,  
    "tag": [1, 2]  
  }  
],  
  "request_id": "1afdd2c7-b81e-41be-98cf-01e990078941"  
}
```

1.5.3 Delete

Header		
method		usage_preference_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
usage_preference_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "usage_preference_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.6 Start Preference

1.6.1 Create

[illegible]

```
"tag": [1, 2]
},
"request_id": "54cee1ef-6b6d-4bb0-96e5-db0081995004"
}
```

1.6.2 Update

[illegible]

```
    "extra_data_7": "extra7",  
    "extra_data_8": null,  
    "extra_data_9": null,  
    "extra_data_10": null,  
    "tag": [1, 2]  
  }  
],  
  "request_id": "1afdd2c7-b81e-41be-98cf-01e990078941"  
}
```

1.6.3 Delete

Header		
method		start_preference_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
start_preference_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "start_preference_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.7.1 Create

[illegible]

```
"tag": [1, 2]
},
"request_id": "54cee1ef-6b6d-4bb0-96e5-db0081995004"
}
```

1.7.2 Update

[illegible]

```
    "extra_data_7": "extra7",  
    "extra_data_8": null,  
    "extra_data_9": null,  
    "extra_data_10": null,  
    "tag": [1, 2]  
  }  
],  
  "request_id": "1afdd2c7-b81e-41be-98cf-01e990078941"  
}
```

1.7.3 Delete

Header		
method		availability_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
availability_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "availability_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.8 Staff

1.8.1 Create

Header			
method		staff_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
staff	id	required	Created Id
	code	required	Code name
	name	required	Name
	email	optional	Email
	desc	optional	Description
	department	optional	Department Id
	is_part_time	required	Is Part time (1:yes, 2:no)
	maximum_period	required	Maximum period
	contract_period	required	Contract period
	shared_with_all_department	required	Shared with all department (1:yes, 2:no)
	zone	optional	Zone id
	availability	optional	Availability id
	availability_pattern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preference	optional	Start preference id
	start_preference_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
usage_preferen	optional	Usage preference id	

ce		
usage_preference_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
status	optional	Status (1:active, 2:inactive)
avoid_concurrency	optional	Avoid Concurrency relation (Complete ids relation)
constraint_profile	optional	Constraint Profile relation (Complete ids relation)
shared_with_department	optional	Shared with department relation (Complete ids relation)
suitability	optional	Suitability relation (Complete ids relation)
tag	optional	Tag relation (Complete ids relation)

Response Example

[illegible]

```
"extra_data_6": "extra6",
"status": 1,
"avoid_concurrency": [1,2],
"constraint_profile": [1,2]
"suitability": [1, 2],
"shared_with_department": [4],
"tag": [1, 2]
},
"request_id": "b3b4c4f3-7eee-409b-b1e9-9a1573e10d6c"
}
```

1.8.2 Update

Header			
method		staff_update	
Response			
session_id		optional	User perform action
request_id		required	Unique id
staff	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	email	optional	Email
	desc	optional	Description
	department_id	optional	Department Id
	is_part_time	optional	Is Part time (1:yes, 2:no)
	maximum_peri od	optional	Maximum period
	contract_period	optional	Contract period
	shared_with_all _department	optional	Shared with all department (1:yes, 2:no)
	zone_id	optional	Zone id
	availability_id	optional	Availability id
	availability_patt ern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preferenc e_id	optional	Start preference id
	start_preferenc e_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
usage_preferen ce_id	optional	Usage preference id	

	usage_preference_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	status	optional	Status (1:active, 2:inactive)
	avoid_concurrency	optional	Avoid Concurrency relation (Complete ids relation)
	constraint_profile	optional	Constraint Profile relation (Complete ids relation)
	shared_with_department	optional	Shared with department relation (Complete ids relation)
	suitability	optional	Suitability relation (Complete ids relation)
	tag	optional	Tag relation (Complete ids relation)

Response Example

```
{
  "session_id": "dev",
  "staff": [
    {
      "id": 20,
      "code": "staff24",
      "availability_pattern": null,
      "start_preference_pattern": null,
      "usage_preference_pattern": null,
      "name": "staff44",
      "desc": "This is staff",
      "department_id": 69,
      "email": "staff@tt.com",
      "zone_id": null,
      "is_part_time": 1,
      "suitability": [1, 2],
      "maximum_period": 144,
      "contract_period": 144,
      "shared_with_department": [4],
      "shared_with_all_department": 0,
      "availability_id": 1,
      "start_preference_id": 1,
      "usage_preference_id": 1,
      "tag": [1, 2],
      "extra_data_1": "extra1",
      "extra_data_2": null,
      "extra_data_3": null,
    }
  ]
}
```

```

    "extra_data_4": null,
    "extra_data_5": "exrta5",
    "extra_data_6": null,
    "extra_data_7": "extra7",
    "extra_data_8": null,
    "extra_data_9": null,
    "extra_data_10": null,
    "avoid_concurrency": [1,2],
    "constraint_profile": [1,2]
  },
  {
    "id": 21,
    "code": "staff24",
    "availability_pattern": null,
    "start_preference_pattern": null,
    "usage_preference_pattern": null,
    "name": "staff44",
    "desc": "This is staff",
    "department_id": 69,
    "email": "staff@tt.com",
    "zone_id": null,
    "is_part_time": 1,
    "suitability": [1, 2],
    "maximum_period": 144,
    "contract_period": 144,
    "shared_with_department": [4],
    "shared_with_all_department": 0,
    "availability_id": 1,
    "start_preference_id": 1,
    "usage_preference_id": 1,
    "tag": [1, 2],
    "extra_data_1": "extra1",
    "extra_data_2": null,
    "extra_data_3": null,
    "extra_data_4": null,
    "extra_data_5": "exrta5",
    "extra_data_6": null,
    "extra_data_7": "extra7",
    "extra_data_8": null,
    "extra_data_9": null,
    "extra_data_10": null,
    "avoid_concurrency": [1,2],
    "constraint_profile": [1,2]
  }
],
"request_id": "f7d46707-b29e-4226-9ff3-711cce40dcca"
}

```

1.8.3 Delete

Header		
method		staff_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
staff_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "staff_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.9 Location

1.9.1 Create

Header			
method		location_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
location	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	optional	Description
	department	optional	Department Id
	capacity	optional	Capacity
	area	optional	Area
	maximum_period	required	Maximum period
	contract_period	required	Contract period
	shared_with_all_department	optional	Shared with all department (1:yes, 2:no)
	zone	optional	Zone id
	availability	optional	Availability id
	availability_pattern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preference	optional	Start preference id
	start_preference_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
usage_preferen	optional	Usage preference id	

	ce		
	usage_preference_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	status	optional	Status (1:active, 2:inactive)
	avoid_concurrency	optional	Avoid Concurrency relation (Complete ids relation)
	constraint_profile	optional	Constraint Profile relation (Complete ids relation)
	shared_with_department	optional	Shared with department relation (Complete ids relation)
	suitability	optional	Suitability relation (Complete ids relation)
	tag	optional	Tag relation (Complete ids relation)

Response Example

```
{
  "session_id": "dev",
  "location": {
    "id": 6,
    "code": "location321",
    "name": "location1",
    "desc": "This is location",
    "department": 69,
    "capacity": 100,
    "area": 1,
    "maximum_period": 144,
    "contract_period": 144,
    "shared_with_all_department": false,
    "zone": 51,
    "availability": 1,
    "start_preference": 1,
    "usage_preference": 1,
    "extra_data_1": "extra1",
    "extra_data_6": "extra6",
    "status": 1,
    "suitability": [1, 2],
    "shared_with_department": [4],
    "tag": [1, 2]
  },
  "request_id": "5873dff4-eff1-4a23-a0f4-264102221ea1"
```

}

1.9.2 Update

Header			
method		location_update	
Response			
session_id		optional	User perform action
request_id		required	Unique id
location	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	desc	optional	Description
	department_id	optional	Department Id
	capacity	optional	Capacity
	area	optional	Area
	maximum_peri od	optional	Maximum period
	contract_period	optional	Contract period
	shared_with_all _department	optional	Shared with all department (1:yes, 2:no)
	zone_id	optional	Zone id
	availability_id	optional	Availability id
	availability_patt ern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preferenc e_id	optional	Start preference id
	start_preferenc e_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
usage_preferen ce_id	optional	Usage preference id	

[illegible]

```
    "extra_data_7": "extra7",  
    "extra_data_8": null,  
    "extra_data_9": null,  
    "extra_data_10": null,  
    "suitability": [1]  
  },  
],  
"request_id": "6e7ca7da-e8de-4c19-b945-ba5e06c4db88"  
}
```

1.9.3 Delete

Header		
method		staff_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
location_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "location_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.10 Week pattern

1.10.1 Create

Header			
method		week_pattern_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
location	id	required	Created Id
	code	required	Code name
	name	required	Name
	department	optional	Department Id
	academic_term	required	Academic Term id
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	status	required	Status (1:active, 2:inactive)
	week	required	AcademicTermWeek relation ids (Complete ids relation)
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "week_pattern": { "id": 6, "code": "WP3D1", "name": "WP1 Name", "department": 69, "academic_term": 1, "extra_data_1": "extra1", "extra_data_6": "extra6", "status": 1, "week": [2, 5, 7], "tag": [1, 2] }, "request_id": "67322601-3c46-478b-94f2-574f3c35f564" }</pre>			

1.10.2 Update

Header			
method		week_pattern_update	
Response			
session_id		optional	User perform action
request_id		required	Unique id
week_pattern	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	department_id	optional	Department Id
	academic_term_id	optional	Academic Term id
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	week	optional	AcademicTermWeek relation ids (Complete ids relation)
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "week_pattern": [{ "id": 5, "name": "WP3 Name", "department_id": 70, "academic_term_id": 1, "extra_data_1": "extra1", "extra_data_2": null, "extra_data_3": null, "extra_data_4": null, "extra_data_5": null, "extra_data_6": "extra6", "extra_data_7": null, "extra_data_8": null, "extra_data_9": null, "extra_data_10": null, "week": [8, 2, 3] }], }</pre>			

```
{
  "id": 6,
  "name": "WP3 Name",
  "department_id": 70,
  "academic_term_id": 1,
  "extra_data_1": "extra1",
  "extra_data_2": null,
  "extra_data_3": null,
  "extra_data_4": null,
  "extra_data_5": null,
  "extra_data_6": "extra6",
  "extra_data_7": null,
  "extra_data_8": null,
  "extra_data_9": null,
  "extra_data_10": null,
  "week": [8, 2, 3]
}
],
"request_id": "1d74172b-3597-4bcd-a83c-00eeb3b25667"
}
```

1.10.3 Delete

Header		
method		week_pattern_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
week_pattern_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "week_pattern_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.11 Module Group

1.11.1 Create

Header			
method		module_group_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
module_group	id	required	Created Id
	code	required	Code name
	name	required	Name
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
Response Example			
<pre>{ "session_id": "dev", "module_group": { "id": 10, "code": "MG4", "name": "MG4 Name", "extra_data_1": "extra1", "extra_data_6": "extra6", "status": 1 }, "request_id": "12271686-4f75-4e4b-aced-83d3a312f215" }</pre>			

1.11.2 Update

Header			
method		module_group_update	
Response			
session_id		optional	User perform action
request_id		required	Unique id
module_group	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	required	Name
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
Response Example			
<pre>{ "session_id": "dev", "module_group": [{ "id": 9, "name": "MG1+2 Name0", "extra_data_1": "extra1", "extra_data_2": null, "extra_data_3": null, "extra_data_4": null, "extra_data_5": null, "extra_data_6": "extra6", "extra_data_7": null, "extra_data_8": null, "extra_data_9": null, "extra_data_10": null, }, { "id": 10, "name": "MG1+2 Name0", "extra_data_1": "extra1", "extra_data_2": null, "extra_data_3": null, "extra_data_4": null, "extra_data_5": null, "extra_data_6": "extra6", "extra_data_7": null, "extra_data_8": null, }] }</pre>			

```
    "extra_data_9": null,  
    "extra_data_10": null,  
  },  
],  
  "request_id": "b97fd68d-3ed1-491e-ae21-3d6b4615f70d"  
}
```

1.11.3 Delete

Header		
method		module_group_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
module_group_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "module_group_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.12 Pos

1.12.1 Create

Header			
method		pos_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
pos	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	optional	Description
	department	optional	Department Id
	planned_size	required	Planned size
	max_credit	required	Max Credit
	academic_term	required	Academic Term id
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	status	required	Status
	module_group	required	Pos Module Group relation (Complete ids relation)
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "pos": { "id": 6, "code": "test_pos_d1123", "name": "test_pos", "desc": "This is POS", "department": 70, "planned_size": 200, "max_credit": 16,</pre>			

```
"academic_term": 1,  
"extra_data_1": "extra1",  
"extra_data_6": "extra6",  
"status": 1,  
"module_group": [1, 2, 3],  
"tag": [1, 2]  
},  
"request_id": "043cb609-8302-4fcc-86fa-25df017bde28"  
}
```

1.12.2 Update

Header			
method		pos_update	
Response			
session_id		optional	User perform action
request_id		required	Unique id
pos	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	desc	optional	Description
	department	optional	Department Id
	planned_size	optional	Planned size
	max_credit	optional	Max Credit
	academic_term	optional	Academic Term id
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	module_group	optional	Pos Module Group relation (Complete ids relation)
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "pos": [{ "id": 6, "name": "p1", "desc": "This is Pos", "department_id": null, "planned_size": 100, "max_credit": 3, "extra_data_1": "extra1", "extra_data_2": null, "extra_data_3": null, "extra_data_4": null, "extra_data_5": null,</pre>			

```
"extra_data_6": "extra6",
"extra_data_7": null,
"extra_data_8": null,
"extra_data_9": null,
"extra_data_10": null,
"module_group": [2, 3]
},
{
  "id": 5,
  "name": "p1",
  "desc": "This is Pos",
  "department_id": null,
  "planned_size": 100,
  "max_credit": 3,
  "extra_data_1": "extra1",
  "extra_data_2": null,
  "extra_data_3": null,
  "extra_data_4": null,
  "extra_data_5": null,
  "extra_data_6": "extra6",
  "extra_data_7": null,
  "extra_data_8": null,
  "extra_data_9": null,
  "extra_data_10": null,
  "module_group": [2, 3]
}
],
"request_id": "82e5f9e2-0108-48bb-a17d-33459650bc73"
}
```

1.12.3 Delete

Header		
method		pos_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
pos_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "pos_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.12.4 Pos Update Module

Header			
method		pos_update_module	
Response			
session_id		optional	User perform action
request_id		required	Unique id
modules	pos_module_group_id	required	Pos module group id
	pos_id	required	Pos id
	module_group	required	Module group id
	module_id	required	Module id
Response Example			
<pre>{ "session_id": "dev", "modules": [{ "pos_module_group_id": 1, "pos_id": 1, "module_group": 1, "module_id": [4, 5] }, { "pos_module_group_id": 2, "pos_id": 1, "module_group": 2, "module_id": [2] }], "request_id": "a843c059-dd4c-40ee-96c5-88e53aab0c8f" }</pre>			

1.13 Module

1.13.1 Create

Header			
method		module_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
module	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	optional	Description
	department	optional	Department Id
	academic_term	required	Academic Term id
	planned_size	required	Planned size
	real_size	required	Max Credit
	credit_provided	required	Credit provided
	week_pattern	optional	Week Pattern Id
	availability	optional	Availability id
	availability_pattern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preference	optional	Start preference id
	start_preference_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	usage_preference	optional	Usage preference id
	usage_preference_pattern	optional	Usage preference pattern (if got id, pattern, always null)

1.13.2 Update

Header			
method		module_update	
Response			
session_id		optional	User perform action
request_id		required	Unique id
module	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	desc	optional	Description
	department	optional	Department Id
	academic_term	optional	Academic Term id
	planned_size	optional	Planned size
	real_size	optional	Max Credit
	credit_provided	optional	Credit provided
	week_pattern	optional	Week Pattern Id
	availability	optional	Availability id
	availability_patt ern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preferenc e	optional	Start preference id
	start_preferenc e_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	usage_preferen ce	optional	Usage preference id
usage_preferen ce_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)	

	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	week	optional	Module Week relation (Complete ids relation)
	tag	optional	Tag relation (Complete ids relation)

Response Example

```
{
  "session_id": "dev",
  "module": [
    {
      "id": 9,
      "name": "m4",
      "desc": "This is Module",
      "department_id": null,
      "planned_size": 100,
      "real_size": 100,
      "credit_provided": 4,
      "availability_id": 1,
      "availability_pattern": null,
      "start_preference_id": 1,
      "start_preference_pattern": null,
      "usage_preference_id": 1,
      "usage_preference_pattern": null,
      "extra_data_1": "extra1",
      "extra_data_2": null,
      "extra_data_3": null,
      "extra_data_4": null,
      "extra_data_5": null,
      "extra_data_6": "extra6",
      "extra_data_7": null,
      "extra_data_8": null,
      "extra_data_9": null,
      "extra_data_10": null,
      "week": [2, 5, 7],
      "tag": [1]
    },
    {
      "id": 10,
      "name": "m4",
      "desc": "This is Module",
      "department_id": null,
      "planned_size": 100,
      "real_size": 100,
      "credit_provided": 4,
      "availability_id": 1,
      "availability_pattern": null,
      "start_preference_id": 1,
```

```
"start_preference_pattern": null,  
"usage_preference_id": 1,  
"usage_preference_pattern": null,  
"extra_data_1": "extra1",  
"extra_data_2": null,  
"extra_data_3": null,  
"extra_data_4": null,  
"extra_data_5": null,  
"extra_data_6": "extra6",  
"extra_data_7": null,  
"extra_data_8": null,  
"extra_data_9": null,  
"extra_data_10": null,  
"week": [2, 5, 7],  
"tag": [1]  
}  
],  
"request_id": "6f820789-f5c1-441d-90a4-b6829a8e02fe"  
}
```

1.13.3 Delete

Header		
method		module_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
module_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "module_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.14 Student Set

1.14.1 Create

Header			
method		student_set_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
student_set	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	required	Description
	department	optional	Department Id
	academic_term	required	Academic Term id
	pos	required	Pos id
	planned_size	required	Planned size
	real_size	required	Real size
	availability	optional	Availability id
	availability_pattern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preference	optional	Start preference id
	start_preference_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	usage_preference	optional	Usage preference id
	usage_preference_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)

	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	status	required	Status
	module	required	Student set module relation (Complete ids relation)
	constraint_profile	optional	Student set constraint profile relation (Complete ids relation)
	tag	optional	Tag relation (Complete ids relation)

Response Example

```
{
  "session_id": "dev",
  "student_set": {
    "id": 43,
    "code": "test ss4",
    "name": "ss4 name",
    "desc": "This is student set",
    "department": 69,
    "academic_term": 1,
    "pos": 1,
    "planned_size": 41,
    "availability": 1,
    "start_preference": 1,
    "usage_preference": 1,
    "extra_data_1": "extra1",
    "extra_data_6": "extra6",
    "status": 1,
    "module": [2, 4]
  },
  "request_id": "1bff7585-ab27-4131-9dad-e61ee13084e2"
}
```

1.14.2 Update

Header			
method		student_set_update	
Response			
session_id		optional	User perform action
request_id		required	Unique id
student_set	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	required	Name
	desc	required	Description
	department_id	optional	Department Id
	pos_id	required	Pos id
	planned_size	required	Planned size
	real_size	optional	Real size
	availability_id	optional	Availability id
	availability_pattern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preference_id	optional	Start preference id
	start_preference_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	usage_preference_id	optional	Usage preference id
	usage_preference_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
extra_data_1 - 10		optional	Extra data from 1 until 10, all are the same concept
module		optional	Student set module relation (Complete ids relation)

"request_id": "8d275000-e104-4349-9721-4addc5431ebc"

}

1.14.3 Delete

Header		
method		student_set_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
student_set_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "student_set_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.15 Allocation

Header			
method		allocation	
Response			
session_id		optional	User perform action
request_id		required	Unique id
student_set	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	required	Description
	department	optional	Department Id
	academic_term	required	Academic Term id
	pos	required	Pos id
	planned_size	optional	Planned size
	real_size	optional	Real size
	availability	optional	Availability id
	availability_pattern	required	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preference	optional	Start preference id
	start_preference_pattern	required	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	usage_preference	optional	Usage preference id
	usage_preference_pattern	required	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept	

[illegible]

```
],  
"request_id": "9f6f4b3f-9693-4337-8c08-db085c11a104"  
}
```

1.16 Activity template

1.16.1 Create

Header			
method		activity_template_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
activity_template	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	required	Description
	activity_type	required	Activity Type
	academic_term	required	Academic Term id
	department	optional	Department Id
	zone	optional	Zone id
	duration	required	Duration
	slot_required	required	Slot required
	module	required	Module
	planned_size	optional	Availability id
	staff_requirement_type	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	staff_requirement	optional	Start preference id
	location_requirement_type	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
location_requirement	optional	Usage preference id	

	week_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	availability	optional	Availability id
	availability_pattern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preference	optional	Start preference id
	start_preference_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	usage_preference	optional	Usage preference id
	usage_preference_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	status	required	Status
	week	optional	Activity Template Week relation
	staff	optional	Activity Template Staff relation
	staff_suitability	optional	Activity Template Staff Suitability relation
	location	optional	Activity Template Location relation
	location_suitability	optional	Activity Template Location Suitability relation
	tag	optional	Tag relation

Response Example

```
{
  "session_id": "dev",
  "activity_template": {
    "id": 13,
    "code": "mid22/Tut1 temp2",
    "name": "mid22/Tut1",
    "desc": "This is Activity Template",
  }
}
```

[illegible]

1.16.2 Update

Header			
method		activity_template_update	
Response			
session_id		optional	User perform action
request_id		required	Unique id
activity_template	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	desc	optional	Description
	department_id	optional	Department Id
	zone_id	optional	Zone id
	duration	optional	Duration
	slot_required	optional	Slot required
	planned_size	optional	Availability id
	staff_requirement_type	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	staff_requirement	optional	Start preference id
	location_requirement_type	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	location_requirement	optional	Usage preference id
	week_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
availability_id	optional	Availability id	
availability_pattern	optional	Availability pattern (if got id, pattern, always null)	

			(if id and pattern null, pattern will give default pattern)
	start_preference_id	optional	Start preference id
	start_preference_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	usage_preference_id	optional	Usage preference id
	usage_preference_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	week	optional	Activity Template Week relation
	staff	optional	Activity Template Staff relation
	staff_suitability	optional	Activity Template Staff Suitability relation
	location	optional	Activity Template Location relation
	location_suitability	optional	Activity Template Location Suitability relation
	tag	optional	Tag relation
activity	id	optional	Activity Id (only given when activity is created by activity template)
	name	optional	Activity Name

Response Example

```
{
  "session_id": "dev",
  "activity_template": [
    {
      "id": 13,
      "code": "AT1-2",
      "name": "mid22/Tut1",
      "desc": "This is AT4",
      "department_id": null,
      "zone_id": null,
      "planned_size": 50,
      "duration": 60,
      "slot_required": 2,
```

[illegible]

```
],  
"request_id": "b410e4a3-260d-4371-8cf9-22efa924960e"  
}  
  
"request_id": "8d275000-e104-4349-9721-4addc5431ebc"  
}
```

1.16.3 Delete

Header		
method		activity_template_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
activity_template_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "activity_template_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.16.4 Allocator

Header			
method		activity_template_allocator	
Response			
session_id		optional	User perform action
request_id		required	Unique id
allocator	student_set	required	Student set id
	activity	required	Activity id
Response Example			
<pre>{ "session_id": "dev", "allocator": [{ "student_set": 38, "activity": [10, 18, 21, 6, 90] }, { "student_set": 39, "activity": [6, 91] }, { "student_set": 40, "activity": [5, 80, 81, 85, 89] }, { "student_set": 41, "activity": [27, 7, 82, 86, 89] }, { "student_set": 42, "activity": [22, 83, 87, 8, 89] }, { "student_set": 43, "activity": [89] }], "request_id": "8f9391b9-d783-4d8c-889d-99f32f08d59c" }</pre>			

1.17 Activity

1.17.1 Create

Header			
method		activity_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
activity	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	optional	Description
	activity_template	required	Activity template id
	activity_type	required	Activity Type id
	department	optional	Department id
	zone	optional	Zone id
	academic_term	required	Academic Term id
	module	required	Module id
	duration	required	duration
	slot_required	required	slot_required
	planned_size	required	Planned size
	real_size	optional	real_size
	staff_requirement_type	optional	Staff requirement type
	staff_requirement	optional	Staff requirement
	location_requirement_type	optional	Location requirement type

	location_requirement	optional	Location requirement
	scheduled_start_time	optional	Scheduled start time
	scheduled_day	optional	Schedule day
	scheduled_start_slot	optional	Scheduled start slot
	suggested_day	optional	Suggested day
	suggested_time	optional	Suggested time
	suggest_time_slot	optional	Suggested time slot
	week_pattern	optional	Week pattern id
	availability	optional	Availability id
	availability_pattern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preference	optional	Start preference id
	start_preference_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	usage_preference	optional	Usage preference id
	usage_preference_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	is_jta	required	Is JTA (0: false, 1: true)
	jta_parent	required	JTA parent id
	is_variant	required	Is variant (0: false, 1: true)
	variant_parent	required	Variant parent id

scheduled	required	Scheduled status
status	required	Status
week	optional	Module Week relation (Complete ids relation) (if got week_pattern, week null)
staff	optional	Activity staff relation (Complete ids relation)
location	optional	Activity location relation (Complete ids relation)
student_set	optional	Student set activity relation (Complete ids relation)
staff_preset	optional	Activity staff preset relation (Complete ids relation)
staff_suitability	optional	Activity staff suitability relation (Complete ids relation)
location_preset	optional	Activity location preset relation (Complete ids relation)
location_suitability	optional	Activity location suitability relation (Complete ids relation)
tag	optional	Tag relation (Complete ids relation)

Response Example

[illegible]

[illegible]

1.17.1 Generate

Header			
method		activity_generate	
Response			
session_id		optional	User perform action
request_id		required	Unique id
activity	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	optional	Description
	activity_template	required	Activity template id
	activity_type	required	Activity Type id
	department	optional	Department id
	zone	optional	Zone id
	academic_term	required	Academic Term id
	module	required	Module id
	duration	required	duration
	slot_required	required	slot_required
	planned_size	required	Planned size
	real_size	optional	real_size
	staff_requirement_type	optional	Staff requirement type
	staff_requirement	optional	Staff requirement
	location_requirement_type	optional	Location requirement type
	location_requirement	optional	Location requirement

	scheduled_start_time	optional	Scheduled start time
	scheduled_day	optional	Schedule day
	scheduled_start_slot	optional	Scheduled start slot
	suggested_day	optional	Suggested day
	suggested_time	optional	Suggested time
	suggested_time_slot	optional	Suggested time slot
	week_pattern	optional	Week pattern id
	availability	optional	Availability id
	availability_pattern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preference	optional	Start preference id
	start_preference_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	usage_preference	optional	Usage preference id
	usage_preference_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	is_jta	required	Is JTA (0: false, 1: true)
	jta_parent	required	JTA parent id
	is_variant	required	Is variant (0: false, 1: true)
	variant_parent	required	Variant parent id
	scheduled	required	Scheduled status
	status	required	Status

[illegible]

[illegible]

1.17.3 Update

Header			
method		activity_update	
Response			
session_id		optional	User perform action
request_id		required	Unique id
activity	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	desc	optional	Description
	activity_template_id	optional	Activity template id
	activity_type_id	optional	Activity Type id
	department_id	optional	Department id
	zone_id	optional	Zone id
	academic_term_id	optional	Academic Term id
	module_id	optional	Module id
	duration	optional	duration
	slot_required	optional	slot_required
	planned_size	optional	Planned size
	real_size	optional	real_size
	staff_requirement_type	optional	Staff requirement type
	staff_requirement	optional	Staff requirement
	location_requirement_type	optional	Location requirement type
	location_requirement	optional	Location requirement

	scheduled_start_time	optional	Scheduled start time
	scheduled_day	optional	Schedule day
	scheduled_start_slot	optional	Scheduled start slot
	suggested_day	optional	Suggested day
	suggested_time	optional	Suggested time
	suggest_time_slot	optional	Suggested time slot
	week_pattern_id	optional	Week pattern id
	availability_id	optional	Availability id
	availability_pattern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preference_id	optional	Start preference id
	start_preference_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	usage_preference_id	optional	Usage preference id
	usage_preference_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	is_jta	optional	Is JTA (0: false, 1: true)
	jta_parent	optional	JTA parent id
	is_variant	optional	Is variant (0: false, 1: true)
	variant_parent	optional	Variant parent id
	scheduled	optional	Scheduled status

[illegible]

1.17.3 Delete

Header		
method		activity_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
activity_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "activity_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.18 Activity Type

1.18.1 Create

Header			
method		activity_type_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
activity_type	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	optional	Description
	department	optional	Department Id
	booking	optional	Booking (1: true, 0 false)
	contract	optional	Contract (1: true, 0 false)
	cover	optional	Cover (1: true, 0 false)
	color	required	Color (hex color code)
	status	required	Status (1:active, 2:inactive)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "activity_type": { "id": 5, "code": "tut12", "name": "Tut", "desc": "This is Tut", "department": 69, "booking": 0, "contact": 1,</pre>			

```
"cover": 0,  
"color": "#000000",  
"extra_data_1": "extra1",  
"extra_data_6": "extra6",  
"status": 1,  
"tag": [1, 2]  
},  
"request_id": "024aa1ff-9cc8-4a28-8533-f93d3aaf59e1"  
}
```

1.18.2 Update

Header			
method		activity_type_update	
Response			
session_id		optional	User perform action
request_id		required	unique id
activity_type	id	required	Created Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	desc	optional	Description
	department_id	optional	Department Id
	booking	optional	Booking (1: true, 0 false)
	contract	optional	Contract (1: true, 0 false)
	cover	optional	Cover (1: true, 0 false)
	color	optional	Color (hex color code)
	status	optional	Status (1:active, 2:inactive)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "activity_type": [{ "id": 4, "name": "LecTut", "desc": "This is LecTut", "department_id": 70, "booking": 0, "contact": 0, "cover": 1, "color": "#000001",</pre>			

```
"extra_data_1": "extra1",
"extra_data_2": null,
"extra_data_3": null,
"extra_data_4": null,
"extra_data_5": "exrta5",
"extra_data_6": null,
"extra_data_7": "extra7",
"extra_data_8": null,
"extra_data_9": null,
"extra_data_10": null,
"tag": [2]
},
{
  "id": 5,
  "name": "LecTut",
  "desc": "This is LecTut",
  "department_id": 70,
  "booking": 0,
  "contact": 0,
  "cover": 1,
  "color": "#000001",
  "extra_data_1": "extra1",
  "extra_data_2": null,
  "extra_data_3": null,
  "extra_data_4": null,
  "extra_data_5": "exrta5",
  "extra_data_6": null,
  "extra_data_7": "extra7",
  "extra_data_8": null,
  "extra_data_9": null,
  "extra_data_10": null,
  "tag": [2]
}
],
"request_id": "1cb72a8f-1eaa-4919-8436-68746ca14227"
}
```

1.18.3 Delete

Header		
method		activity_type_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
activity_type_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "activity_type_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.19 Variant

1.19.1 Create

Header			
method		variant_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
variant_parent	id	required	Created Id
	code	required	Code name
	name	required	Name
	week_pattern_id	required	Description
	is_variant	required	Department Id
	week_ids	optional	Activity Week relation to create
	delete_week_ids	optional	Activity Week relation to delete
variant_child	id	required	Created Id
	code	required	Code name
	name	optional	Name
	desc	optional	Description
	activity_template	required	Activity template id
	activity_type	required	Activity Type id
	department	optional	Department id
	zone	optional	Zone id
	academic_term	required	Academic Term id
	module	required	Module id
	duration	required	duration

	slot_required	required	slot_required
	planned_size	required	Planned size
	real_size	optional	real_size
	staff_requirement_type	optional	Staff requirement type
	staff_requirement	optional	Staff requirement
	location_requirement_type	optional	Location requirement type
	location_requirement	optional	Location requirement
	scheduled_start_time	optional	Scheduled start time
	scheduled_day	optional	Schedule day
	scheduled_start_slot	optional	Scheduled start slot
	suggested_day	optional	Suggested day
	suggested_time	optional	Suggested time
	suggest_time_slot	optional	Suggested time slot
	week_pattern	optional	Week pattern id
	availability	optional	Availability id
	availability_pattern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preference	optional	Start preference id
	start_preference_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	usage_preference	optional	Usage preference id
	usage_preference	optional	Usage preference pattern

	ce_pattern		(if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	is_jta	required	Is JTA (0: false, 1: true)
	jta_parent	required	JTA parent id
	is_variant	required	Is variant (0: false, 1: true)
	variant_parent	required	Variant parent id
	scheduled	required	Scheduled status
	status	required	Status
	week	optional	Module Week relation (Complete ids relation) (if got week_pattern, week null)
	staff	optional	Activity staff relation (Complete ids relation)
	location	optional	Activity location relation (Complete ids relation)
	student_set	optional	Student set activity relation (Complete ids relation)
	staff_preset	optional	Activity staff preset relation (Complete ids relation)
	staff_suitability	optional	Activity staff suitability relation (Complete ids relation)
	location_preset	optional	Activity location preset relation (Complete ids relation)
	location_suitability	optional	Activity location suitability relation (Complete ids relation)
	tag	optional	Tag relation (Complete ids relation)

Response Example

```
{
  "session_id": "dev",
  "variant_parent": {
    "id": 1,
    "name": "m1/prac1/01 <5>",
    "code": "MV0000000001 001",
    "week_pattern_id": null,
    "is_variant": 1,
    "delete_week_ids": [2, 3, 4]
  },
  "variant_child": {
    "id": 72,
```

```
"code": "MV0000000001 002",
"name": "m1/prac1/01 <2-4>",
"desc": "This is Activity Template 2",
"activity_template": 2,
"activity_type": 2,
"academic_term": 1,
"module": 1,
"duration": 30,
"slot_required": 1,
"planned_size": 30,
"real_size": 0,
"staff_requirement_type": 2,
"staff_requirement": 1,
"location_requirement_type": 2,
"location_requirement": 1,
"availability": 1,
"start_preference": 1,
"usage_preference": 1,
"extra_data_1": "extra1",
"extra_data_6": "extra6",
"is_jta": 0,
"is_variant": 1,
"variant_parent": 1,
"scheduled": 0,
"status": 1,
"week": [2, 3, 4],
"student_set": [1, 30],
"staff_preset": [3],
"staff_suitability": [1],
"location_preset": [1],
"location_suitability": [],
"tag": [1, 2]
},
"request_id": "5ed16204-53fd-4eea-aab5-5296e999732c"
}
```

1.20 JTA

1.20.1 Create

Header			
method		jta_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
create_activity	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	optional	Description
	activity_template	required	Activity template id
	activity_type	required	Activity Type id
	department	optional	Department id
	zone	optional	Zone id
	academic_term	required	Academic Term id
	module	required	Module id
	duration	required	duration
	slot_required	required	slot_required
	planned_size	required	Planned size
	real_size	optional	real_size
	staff_requirement_type	optional	Staff requirement type
	staff_requirement	optional	Staff requirement
	location_requirement_type	optional	Location requirement type
	location_require	optional	Location requirement

	ment		
	scheduled_start_time	optional	Scheduled start time
	scheduled_day	optional	Schedule day
	scheduled_start_slot	optional	Scheduled start slop
	suggested_day	optional	Suggested day
	suggested_time	optional	Suggested time
	suggest_time_slot	optional	Suggested time slot
	week_pattern	optional	Week pattern id
	availability	optional	Availability id
	availability_pattern	optional	Availability pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	start_preference	optional	Start preference id
	start_preference_pattern	optional	Start preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	usage_preference	optional	Usage preference id
	usage_preference_pattern	optional	Usage preference pattern (if got id, pattern, always null) (if id and pattern null, pattern will give default pattern)
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	is_jta	required	Is JTA (0: false, 1: true)
	jta_parent	required	JTA parent id
	is_variant	required	Is variant (0: false, 1: true)
	variant_parent	required	Variant parent id
	scheduled	required	Scheduled status
	status	required	Status

	week	optional	Module Week relation (Complete ids relation) (if got week_pattern, week null)
	staff	optional	Activity staff relation (Complete ids relation)
	location	optional	Activity location relation (Complete ids relation)
	student_set	optional	Student set activity relation (Complete ids relation)
	staff_preset	optional	Activity staff preset relation (Complete ids relation)
	staff_suitability	optional	Activity staff suitability relation (Complete ids relation)
	location_preset	optional	Activity location preset relation (Complete ids relation)
	location_suitability	optional	Activity location suitability relation (Complete ids relation)
	tag	optional	Tag relation (Complete ids relation)
update_activity	id	required	Activity id
	is_jta	required	Is Jta
	jta_parent_id	required	Jta parent id

Response Example

```
{
  "session_id": "dev",
  "create_activity": {
    "id": 76,
    "code": "MV0000000035",
    "name": "Test JTA",
    "activity_template": 2,
    "activity_type": 2,
    "academic_term": 1,
    "module": 1,
    "duration": 30,
    "slot_required": 1,
    "planned_size": 90,
    "real_size": 0,
    "staff_requirement_type": 2,
    "staff_requirement": 1,
    "location_requirement_type": 2,
    "location_requirement": 1,
    "availability": 1,
    "start_preference": 1,
    "usage_preference": 1,
    "extra_data_1": "extra1",
    "extra_data_6": "extra6",
  }
}
```

```
"is_jta": 1,
"is_variant": 0,
"scheduled": 0,
"status": 1,
"week": [2, 3, 5],
"student_set": [1, 2, 3, 29],
"staff_preset": [3],
"staff_suitability": [2],
"location_preset": [1],
"location_suitability": [1]
},
"update_activity": [
  {
    "id": 3,
    "is_jta": 1,
    "jta_parent_id": 76
  },
  {
    "id": 4,
    "is_jta": 1,
    "jta_parent_id": 76
  },
  {
    "id": 2,
    "is_jta": 1,
    "jta_parent_id": 76
  }
],
"request_id": "a52f9bb0-c81d-41a4-bbfd-7c07225242c4"
}
```

1.20.3 Split

Header			
method		jta_split	
Response			
session_id		optional	User perform action
request_id		required	Unique id
activity_update	id	required	Activity id
	is_jta	required	Id jta
	jta_parent_id	required	Jta parent id
activity_delete	required		Activity id (to be deleted)
Response Example			
<pre>{ "session_id": "dev", "activity_update": [{ "id": 92, "is_jta": 0, "jta_parent_id": None }, { "id": 93, "is_jta": 0, "jta_parent_id": None }], "activity_delete": 94, "request_id": "1ae9b556-1077-4229-8e67-a22db9a25f49" }</pre>			

1.21 Schedule

1.21.1 Schedule

Header			
method		schedule	
Response			
session_id		optional	User perform action
request_id		required	Unique id
delete_activity		required	Variant activity need to delete, if not do merging, will be [], if [] means can ignore
activity	id	required	Activity id
	code	required	Code, if got merge variant, code might change, so need to update, Dun remove this row, got used in other microservices
	name	required	Name, if got merge variant, name might change, so need to update, Dun remove this row, got used in other microservices
	desc	required	Description
	department	required	Department name
	department_id	required	Department id
	planned_size	required	Planned size
	real_size	required	Real size
	activity_type_id	required	Activity type id
	activity_type	required	Activity type name
	activity_type_color	required	Activity type color
	scheduled_start_time	required	Scheduled start time
	scheduled_start_slot	required	Scheduled start slot
	scheduled_day	required	Scheduled day
	duration	required	Duration

	slot_required	required	Slot required
	module	required	Module name
	module_id	required	Module id
	location	required	Location name
	staff	required	Staff name
	merge_to_variant_id	required	Merge to variant id
	staff_ids	required	Staff ids
	location_ids	required	Location ids
	is_variant	required	0 - means not variant, 1 - means is variant,Dun remove this row, got used in other microservices
	variant_parent_id	required	Value will be activity id, Is_variant = 1 only have value,Dun remove this row, got used in other microservices
	week_ids	optional	If got perform merge variant, only have this param, this is latest week_id for the activity

Response Example

```
{
  "session_id": "",
  "activity": [
    {
      "code": "MV0000000089",
      "name": "php tut/02",
      "desc": None,
      "department": None,
      "department_id": None,
      "planned_size": 25,
      "real_size": 0,
      "activity_type_id": 8,
      "activity_type": "Semester 1 Tut",
      "activity_type_color": "#7CAEF9",
      "scheduled_start_time": "10:00:00",
      "scheduled_start_slot": 20,
      "scheduled_day": 0,
      "duration": 60,
      "slot_required": 2,
      "module": "Introduce to PHP",
      "module_id": 17,
      "location": ["Lecture Hall 2"],
      "staff": ["Andy (Semester1)"],
    }
  ]
}
```

```
"merge_to_variant_id": None,
"id": 752,
"staff_ids": [19],
"location_ids": [7],
"is_variant": 0,
"variant_parent_id": null,
"week_ids": [53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72]
},
{
  "code": "MV0000000088",
  "name": "php tut/01",
  "desc": None,
  "department": None,
  "department_id": None,
  "planned_size": 25,
  "real_size": 0,
  "activity_type_id": 8,
  "activity_type": "Semester 1 Tut",
  "activity_type_color": "#7CAEF9",
  "scheduled_start_time": "10:00:00",
  "scheduled_start_slot": 20,
  "scheduled_day": 0,
  "duration": 60,
  "slot_required": 2,
  "module": "Introduce to PHP",
  "module_id": 17,
  "location": ["Block A Tutorial Room", "Mayvins Lecture Hall 1"],
  "staff": ["Livia Storm", "Lue (Semester1)"],
  "merge_to_variant_id": None,
  "id": 405,
  "staff_ids": [30, 20],
  "location_ids": [14, 21],
  "is_variant": 1,
  "variant_parent_id": 5,
}
],
"request_id": "05837526-546b-4446-a30d-0dab64f6dc00"
}
```

1.21.2 Unschedule

Header			
method		unschedule	
Response			
session_id		optional	User perform action
request_id		required	unique id
activity	activity_id	required	Activity Id
	scheduled	required	Scheduled status
	staff	required	Staff relation
	location	required	Location relation
	scheduled_start_time	required	Scheduled start time
	scheduled_day	required	Scheduled day
	scheduled_start_slot	required	Scheduled start slot
Response Example			
<pre>{ "session_id": "dev", "activity": [{ "activity_id": 405, "scheduled": 0, "staff": [], "location": [], "scheduled_start_time": None, "scheduled_day": None, "scheduled_start_slot": None }, { "activity_id": 752, "scheduled": 0, "staff": [], "location": [], "scheduled_start_time": None, "scheduled_day": None, "scheduled_start_slot": None }] }</pre>			

"request_id": "81224b5d-8f8f-4526-ace8-06667207ad4a"

}

1.21.3 Swap

Header			
method		swap	
Response			
session_id		optional	User perform action
request_id		required	Unique id
delete_activity		required	Variant activity need to delete, if not do merging, will be [], if [] means can ignore
activity	id	required	Activity id
	name	optional	Name, when is merge variant only have value
	code	optional	Code, when is merge variant only have value
	staff_ids	required	Staff ids, if [] means this swap is want to remove staff from activity
	location_ids	required	Location ids, if [] means this swap is want to remove location from activity
	is_variant	optional	0 - means not variant, 1 - means is variant, when is merge variant only have value
	variant_parent_id	optional	Value will be activity id, Is_variant = 1 only have value else will be null
	week_ids	optional	If got perform merge variant, only have this param, this is latest week_id for the activity
Response Example			
<pre>{ "session_id": "", "activity": [{ "Id": 402 "code": "MV00000000085", "name": "php lec/01", "staff_ids": [19], "location_ids": [7], "Is_variant": 0, "variant_parent_id": null, "week_ids": [53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72] }], {</pre>			

```
"code": "MV0000000088",  
  "id": 403,  
  "staff_ids": [14],  
  "location_ids": []  
},  
  ],  
  "delete_activity": [1101],  
  "request_id": "05837526-546b-4446-a30d-0dab64f6dc00"  
}
```

1.21 Suitability

1.21.1 Create

Header			
method		suitability_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
suitability	id	required	Created id
	code	required	Code
	name	required	Name
	desc	required	Description
	department	required	Department id
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	status	required	Status
	staff	optional	Staff relation (Complete ids relation)
	location	optional	Location relation (Complete ids relation
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "suitability": { "id": 4, "code": "S11123", "name": "S1", "desc": "This is suitability 1", "department": 1, "extra_data_1": "extra1", "extra_data_6": "extra6", "status": 1, "staff": [5, 6, 7],</pre>			

```
"location": [2, 3, 4],  
  "tag": [1, 2]  
},  
"request_id": "4c77cac2-40b6-4a7b-810c-08b50d758ab4"  
}
```

1.22.2 Update

Header			
method		suitability_update	
Response			
session_id		optional	User perform action
request_id		required	Unique id
suitability	id	required	Created id
	code	required	Code (will only update code if single item update)
	name	required	Name
	desc	required	Description
	department	required	Department id
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	staff	optional	Staff relation (Complete ids relation)
	location	optional	Location relation (Complete ids relation)
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id": "dev", "suitability": [{ "id": 3, "name": "S4", "desc": "This is suitability", "department_id": 69, "extra_data_1": "extra1", "extra_data_2": None, "extra_data_3": None, "extra_data_4": None, "extra_data_5": "exrta5", "extra_data_6": None, "extra_data_7": "extra7", "extra_data_8": None, "extra_data_9": None, "extra_data_10": None, "staff": [5, 6],</pre>			

```
    "location": [5, 6],
    "tag": [1]
  },
  {
    "id": 4,
    "name": "S4",
    "desc": "This is suitability",
    "department_id": 69,
    "extra_data_1": "extra1",
    "extra_data_2": None,
    "extra_data_3": None,
    "extra_data_4": None,
    "extra_data_5": "exrta5",
    "extra_data_6": None,
    "extra_data_7": "extra7",
    "extra_data_8": None,
    "extra_data_9": None,
    "extra_data_10": None,
    "staff": [5, 6],
    "location": [5, 6],
    "tag": [1]
  }
],
"request_id": "b830150e-909f-4ebe-883b-ae6bf4167be4"
}
```


1.22.3 Delete

Header		
method		suitability_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
suitability_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "suitability_ids": [1,2,3,4], "request_id": "4b8f84d8-199f-4b9d-be1a-ea478fe6d4ed" }</pre>		

1.22 Resources

1.22.1 Update requirement

Header			
method		resources_update_requirement	
Response			
session_id		optional	User perform action
request_id		required	unique id
activity	id	required	Activity Id
	suggested_day	required	Suggested day
	suggested_time	required	Suggested Time
	suggested_time_slot	required	Suggested Time slot
	staff_requirement	required	Staff requirement
	location_requirement	required	Location Requirement
	staff_requirement_type	required	Staff requirement type
	location_requirement_type	required	Location requirement type
	staff_preset	required	Staff preset
	location_preset	required	Location preset
	staff_suitability	required	Staff suitability
	location_suitability	required	Location suitability
Response Example			
<pre>{ "session_id": "dev", "tag": [{ "id": 5,</pre>			

```
    "code": "tag1-code",
    "name": "Tag 1-rename",
    "desc": "This is Tag-change",
    "department_id": 69,
  },
  {
    "id": 6,
    "code": "tag1-code",
    "name": "Tag 1-rename",
    "desc": "This is Tag-change",
    "department_id": 69
  }
],
"request_id": "10e2d02f-8ab2-4439-bc37-14bbc267e9b2"
}
```


1.23 Booking

1.23.1 Create

Header			
method		booking_create	
Response			
session_id		optional	User perform action
request_id		required	Unique id
activity	id	required	Created Id
	code	required	Code name
	name	required	Name
	desc	optional	Description
	activity_type	required	Activity Type id
	department	optional	Department id
	zone	optional	Zone id
	duration	required	duration
	slot_required	required	slot_required
	planned_size	required	Planned size
	staff_requirement_type	optional	Staff requirement type
	staff_requirement	optional	Staff requirement
	location_requirement_type	optional	Location requirement type
	location_requirement	optional	Location requirement
	suggested_day	optional	Suggested day
	start_preference	optional	Start preference id
	start_preference	optional	Start preference pattern

[illegible]

1.23.2 Update

Header			
method		booking_update	
Response			
session_id		optional	User perform action
request_id		required	Unique id
activity	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	desc	optional	Description
Response Example			
<pre>{ "session_id": "dev", "activity": [{ "id": 1143, "code": "Booking1", "name": "Booking 1 Edit", "desc": "This is Booking Activity Edit" }], "request_id": "90075317-048f-4012-b30e-16a2c5901171" }</pre>			

1.23.3 Delete

Header		
method		booking_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
activity_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "activity_ids": [1150, 1151, 1152], "request_id": "6b4f43e2-de20-4777-8421-899a3db782b6" }</pre>		

1.23.4 Schedule

Header			
method		booking_schedule	
Response			
session_id		optional	User perform action
request_id		required	Unique id
delete_activity		required	Variant activity need to delete, if not do merging, will be [], if [] means can ignore
activity	id	required	Activity id
	code	required	Code, if got merge variant, code might change, so need to update, Dun remove this row, got used in other microservices
	name	required	Name, if got merge variant, name might change, so need to update, Dun remove this row, got used in other microservices
	desc	required	Description
	department	required	Department name
	department_id	required	Department id
	planned_size	required	Planned size
	real_size	required	Real size
	activity_type_id	required	Activity type id
	activity_type	required	Activity type name
	activity_type_color	required	Activity type color
	scheduled_start_time	required	Scheduled start time
	scheduled_start_slot	required	Scheduled start slot
	scheduled_day	required	Scheduled day
	duration	required	Duration

	slot_required	required	Slot required
	module	required	Module name
	module_id	required	Module id
	location	required	Location name
	staff	required	Staff name
	staff_ids	required	Staff ids
	location_ids	required	Location ids
	week_ids	optional	If got perform merge variant, only have this param, this is latest week_id for the activity

Response Example

```
{
  "session_id": "dev",
  "activity": {
    "code": "MV0000000325",
    "name": "Booking 1",
    "desc": "This is Booking Activity",
    "department": null,
    "department_id": null,
    "planned_size": 5,
    "real_size": 0,
    "activity_type_id": 3,
    "activity_type": "Lecture",
    "activity_type_color": "#66E6CC",
    "scheduled_start_time": "00:00:00",
    "scheduled_start_slot": 96,
    "scheduled_day": 2,
    "duration": 120,
    "slot_required": 4,
    "location": [],
    "staff": ["Andy"],
    "id": 1149,
    "staff_ids": [19],
    "location_ids": [],
    "week_ids": [74, 75, 76, 77, 78]
  }
  "request_id": "7701d354-bf2d-4f5d-9c57-9e18286fc160"
}
```

1.23.5 Swap

Header			
method		booking_swap	
Response			
session_id		optional	User perform action
request_id		required	Unique id
activity	id	required	Activity id
	staff_ids	required	Staff ids, if [] means this swap is want to remove staff from activity
	location_ids	required	Location ids, if [] means this swap is want to remove location from activity
Response Example			
<pre>{ "session_id": "dev", "activity": { "id": 1149, "staff_ids": [14], "location_ids": [] }, "request_id": "a58706fb-cd03-4d42-b672-ddfb25348c02" }</pre>			

1.24 Student

1.24.1 Create

Header				
method		student_create		
Response				
session_id		optional	User perform action	
request_id		required	Unique id	
student_set	id	required	Created Id	
	code	required	Code	
	name	required	Name	
	desc	optional	Description	
	email	optional	Email	
	department	optional	Department Id	
	academic_term	optional	Array of Academic Term id	
	pos	optional	Array of pos id	
	student_set	optional	Array of student set id	
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept	
	status	required	Status	
	pos_module	optional	Array have multiple Set of data include module group id, pos id and module id	
	tag	optional	Tag relation (Complete ids relation)	
Response Example				
<pre>{ "session_id": "dev", "student": { "id": 21, "pos": [47], "code": "MV0000000010",</pre>				

```
{
  "department": 1,
  "email": "student3@gmail.com",
  "name": "Student 3",
  "status": 1,
  "pos_module": [
    {"pos_id": 47, "module_id": 120, "module_group_id": 1, "pos_module_group_module_id": 47840},
    {"pos_id": 47, "module_id": 123, "module_group_id": 1, "pos_module_group_module_id": 47845},
    {"pos_id": 47, "module_id": 121, "module_group_id": 1, "pos_module_group_module_id": 47852},
    {"pos_id": 47, "module_id": 122, "module_group_id": 1, "pos_module_group_module_id": 47856},
    {"pos_id": 47, "module_id": 85, "module_group_id": 1, "pos_module_group_module_id": 47858},
    {"pos_id": 47, "module_id": 938, "module_group_id": 1, "pos_module_group_module_id": 47864},
    {"pos_id": 47, "module_id": 945, "module_group_id": 1, "pos_module_group_module_id": 47867},
    {"pos_id": 47, "module_id": 937, "module_group_id": 1, "pos_module_group_module_id": 47868}],
  "student_set": [1, 2, 3],
  "academic_term": [1]
}
"request_id": "1bff7585-ab27-4131-9dad-e61ee13084e2"
}
```

1.24.2 Update

Header			
method		student_update	
Response			
session_id		optional	User perform action
request_id		required	Unique id
student_set	id	required	Updated Id
	code	optional	Code name (will only update code if single item update)
	name	optional	Name
	desc	optional	Description
	email	optional	Email
	department_id	optional	Department Id
	academic_term	optional	Array of Academic Term id
	pos	optional	Array of pos id
	extra_data_1 - 10	optional	Extra data from 1 until 10, all are the same concept
	pos_module	optional	Array have multiple Set of data include module group id, pos id, pos module group module id and module id
	tag	optional	Tag relation (Complete ids relation)
Response Example			
<pre>{ "session_id":"dev", "student":[{ "id":7, "code":"hello", "name":"student 4", "desc":"This is student4", "email":"student4@tt.com", "department_id":1 "pos":[4,5], "academic_term":[1,2], "tag":[1], "pos_module":[</pre>			

```
{
  "pos_id":4,"module_id":2,"module_group_id":1,"pos_module_group_module_id":23},
  {"pos_id":4,"module_id":3,"module_group_id":2,"pos_module_group_module_id":27},
  {"pos_id":4,"module_id":8,"module_group_id":2,"pos_module_group_module_id":26},
  {"pos_id":4,"module_id":5,"module_group_id":2,"pos_module_group_module_id":28},
  {"pos_id":4,"module_id":6,"module_group_id":1,"pos_module_group_module_id":25},
  {"pos_id":5,"module_id":12,"module_group_id":1,"pos_module_group_module_id":29},
  {"pos_id":5,"module_id":13,"module_group_id":2,"pos_module_group_module_id":30},
  {"pos_id":5,"module_id":14,"module_group_id":2,"pos_module_group_module_id":31}
],
}
],
"request_id":"5988b8dc-f9d2-49a5-a6d1-df8f6c448f66"
}
```

1.24.3 Delete

Header		
method		student_delete
Response		
session_id	optional	User perform action
request_id	required	unique id
student_ids		An array of ids to be deleted
Response Example		
<pre>{ "session_id": "dev", "student_ids": [8, 9], "request_id": "ef116647-b963-453b-a17b-e2c4b45ce111" }</pre>		