



Cisco Connected Mobile Experiences REST API Guide, Release 10.3

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Preface

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Audience

This document is for network administrators who configure Cisco Connected Mobile Experiences (Cisco CMX) services.

Conventions

This document uses the following conventions:

Table 1: Conventions

Convention	Indication
bold font	Commands and keywords and user-entered text appear in bold font .
<i>italic font</i>	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic font</i> .
[]	Elements in square brackets are optional.
{x y z }	Required alternative keywords are grouped in braces and separated by vertical bars.
[x y z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string. Otherwise, the string will include the quotation marks.
<code>courier font</code>	Terminal sessions and information the system displays appear in <code>courier font</code> .
<>	Nonprinting characters such as passwords are in angle brackets.
[]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.



Note Means reader take note. Notes contain helpful suggestions or references to material not covered in the manual.



Tip Means the following information will help you solve a problem.



Caution Means reader be careful. In this situation, you might perform an action that could result in equipment damage or loss of data.

Related Documentation

For more information on coding and specific assistance, see:

<https://developer.cisco.com/site/cmx-mobility-services/>

For more information about Cisco Mobility Services Engine and related products, see:

<http://www.cisco.com/c/en/us/support/wireless/mobility-services-engine/tsd-products-support-series-home.html>

For more information about Cisco Connected Mobile Experiences (Cisco CMX), see:

<http://www.cisco.com/c/en/us/solutions/enterprise-networks/connected-mobile-experiences/index.html>

For more information about Cisco DNA Spaces, see:

<https://support.dnaspaces.io/>

Communications, Services, and Additional Information

- To receive timely, relevant information from Cisco, sign up at [Cisco Profile Manager](#).
- To get the business impact you're looking for with the technologies that matter, visit [Cisco Services](#).
- To submit a service request, visit [Cisco Support](#).
- To discover and browse secure, validated enterprise-class apps, products, solutions and services, visit [Cisco Marketplace](#).
- To obtain general networking, training, and certification titles, visit [Cisco Press](#).
- To find warranty information for a specific product or product family, access [Cisco Warranty Finder](#).

Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a web-based tool that acts as a gateway to the Cisco bug tracking system that maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. BST provides you with detailed defect information about your products and software.



Analytics

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POST: Breakdown of Dwell Times Spent by Devices for a Given Period and Areas

Description

The only parameter (body) is a JSON array containing the parameters. The parameters are described below:

Table 2: Parameter Details

JSON Array Parameter	Description	Allowable Values/Formats
granularity	The desired granularity.	<ul style="list-style-type: none"> • hourly • daily • weekly • monthly • yearly • tag • tag-name • heterarchy level. One can limit to top "n" results (that is, the "n" values with highest count) by adding "[n]", or the "n" bottom results by adding "[n]"
period	The period of interest, specified as either a date range, or one of the predefined names.	<ul style="list-style-type: none"> • yyyy-mm-dd • yyyy-mm-dd;yyyy-mm-dd • today • yesterday • this week • last week • last 2 weeks • this month • last month • last 3 months • this year • last year • forever
timeRange	The time window of interest on each day.	<ul style="list-style-type: none"> • HH:mm-HH:mm
aggregate	Aggregate the dwell time by granularity, for example, showing the total dwell time for each day of the week, instead of individual dates.	<ul style="list-style-type: none"> • none • sum • avg

JSON Array Parameter	Description	Allowable Values/Formats
areas	The list of areas of interest. If none are provided, all are considered.	A comma-separated list of area IDs, or hierarchy levels.
durationCategories	Filter devices by dwell times for which device visits specified areas. If a device's dwell time falls outside of the range, it is filtered out and not considered a visit.	Time (in minutes) in the form nn-mm where nn is the lower limit and mm the upper limit. The maximum upper limit is 1440 minutes; which is 24 hours, or a full day. Accepted Values: <ul style="list-style-type: none"> • 0-240 • 0-480 • 0-1440 • 5-240 • 5-480 • 5-1440 • 10-240 • 10-480 • 10-1440 • 15-240 • 15-480 • 15-1440 • 30-240 • 30-480 • 30-1440 • 45-240 • 45-480 • 45-1440 • 60-240 • 60-480 • 60-1440
includeStationary	Whether to include stationary devices (default=false).	<ul style="list-style-type: none"> • true • false

JSON Array Parameter	Description	Allowable Values/Formats
connectionState	Whether to restrict connection to either connected or detected devices (default=all).	<ul style="list-style-type: none"> connected detected all
percentageOf	If set this parameter, does not report absolute numbers, only relative percentage.	Heterarchy level
dwellLimits	The dwell time limit that specifies how dwellers should be grouped together. Pass -1 to catch all. Example: Light: 100, Medium: 200, Heavy:-1.	<ul style="list-style-type: none"> default minute comma separated limit label:limit value
areaFilter	<p>If set this parameter, restricts the results to areas matching the filter. Use descendantOf to restrict the area selection. This option is used for drill-down reports. Use 'subsetOf' to restrict the granularity. This option is used with tag granularity.</p> <p>For example: descendantOf: Campus C1 has Building B1 which zone Z1 and Z2 Campus C2 has Building B2 which zone Z3 query area=Z1,Z2,Z3 and granularity=Building and areaFilter=descendantOf:C1 will return only Building B1</p> <p>For example: subsetOf: Tag T1,T2 assigned to F1, T2,T3 to F2, T3,T4 to F3 query area=F1,F2,F3 and granularity=tag and areaFilter=subsetOf:T1,T2 will return only T1,T2.</p>	<ul style="list-style-type: none"> descendantOf subsetOf:comma separated ids
expandAll	Include all the elements descendants in the result.	<ul style="list-style-type: none"> true false

HTTP Method

POST

Resource URI

/api/analytics/v1/dwellBreakdown

Requires Basic Auth

N

Parameters*Table 3: Parameter Details*

Name	Required	Default	Type	Location	Description
body	Y	—	JSON array	body	JSON array containing parameters.

Content Type

application/json

Sample Input (JSON)

```
{
  "period": "today",
  "timeRange": "00:00-23:59",
  "granularity": "hourly",
  "areas": "52,75"
}
```

Sample Output (JSON)

```
{
  "startTime": "00:00",
  "startDate": "2017-03-16",
  "results": [
    {
      "id": 53,
      "ancestry": [
        {
          "level": "Building",
          "name": "REQ"
        },
        {
          "level": "Campus",
          "name": "Richfield"
        }
      ],
      "series": [
        "datetime",
        "dwell"
      ],
      "hasChildren": false,
      "area": "2nd Floor",
      "data": []
    },
    {
      "id": 75,
      "ancestry": [
        {
          "level": "Floor",
          "name": "Site 4"
        }
      ],

```

```
{
  "level": "Building",
  "name": "Site 4"
},
{
  "level": "Campus",
  "name": "San Jose Outdoor"
}
],
"series": [
  "datetime",
  "dwell"
],
"hasChildren": false,
"area": "f4:0f:1b:1a:82:90",
"data": []
}
],
"interval": "hourly",
"executionTime": 0,
"insights": {
  "summary": {}
},
"endDate": "2017-03-16",
"maxValues": {},
"endTime": "23:59",
"dataFreshness": "2017-03-16T02:53:58.054-07:00",
"minValues": {}
}
```


POST: Breakdown of Connected and Detected Devices for a Given Period and Areas

Description

This API gives a breakdown of connected and detected devices for a given period and areas. The only parameter (body) is a JSON array containing the parameters. The parameters are described below

Table 4: Parameter Details

JSON array parameter	Description	Allowable values/formats
granularity	The desired granularity. One can limit to top n results (i.e. the n values with highest count) by adding "[n]", or the n bottom results by adding "[-n]". If granularity null is specified, all heterarchy types covered by the areas are returned.	<ul style="list-style-type: none"> • hourly • daily • weekly • monthly • yearly • tag • tag-name • heterarchy level • null
period	The period of interest, either specified as a date range, or one of the predefined names	<ul style="list-style-type: none"> • yyyy-mm-dd • yyyy-mm-dd;yyyy-mm-dd • today • yesterday • this week • last week • last 2 weeks • this month • last month • last 3 months • this year • last year • forever
timeRange	The time window of interest on each day.	<ul style="list-style-type: none"> • HH:mm-HH:mm
aggregate	Whether to aggregate the dwell time by granularity; e.g. showing a total for each day of the week, instead of individual dates	<ul style="list-style-type: none"> • none • sum • avg
areas	The list of areas of interest. If none are given, all are considered	<p>A comma-separated list of area ids, or heterarchy levels</p> <pre><areaId> <areaId-1>,<areaId-2>,<areaId-3></pre>

JSON array parameter	Description	Allowable values/formats
durationCategories	Filter devices by dwell times for which device visits specified areas. If a device's dwell time falls outside of the range, it is filtered out and not considered a visit.	Time (in minutes) in the form nn-mm where nn is the lower limit and mm the upper limit. The maximum upper limit is 1440 minutes; which is 24 hours, or a full day. Accepted Values: <ul style="list-style-type: none"> • 0-240 • 0-480 • 0-1440 • 5-240 • 5-480 • 5-1440 • 10-240 • 10-480 • 10-1440 • 15-240 • 15-480 • 15-1440 • 30-240 • 30-480 • 30-1440 • 45-240 • 45-480 • 45-1440 • 60-240 • 60-480 • 60-1440
includeStationary	Whether to include stationary devices (default=false)	<ul style="list-style-type: none"> • true • false
percentageOf	If set, does not report absolute numbers, but relative percentage	Heterarchy level

JSON array parameter	Description	Allowable values/formats
areaFilter	<p>If set, restricts the results to areas matching the filter. Use 'descendantOf' to restrict the area selection. This option is used for drill down reports. Use 'subsetOf' to restrict the granularity. This option is used with tag granularity.</p> <p>For example: descendantOf: Campus C1 has Building B1 which zone Z1 and Z2 Campus C2 has Building B2 which zone Z3 query area=Z1,Z2,Z3 and granularity=Building and areaFilter=descendantOf:C1 will return only Building B1</p> <p>For example: subsetOf: Tag T1,T2 assigned to F1, T2,T3 to F2, T3,T4 to F3 query area=F1,F2,F3 and granularity=tag and areaFilter=subsetOf:T1,T2 will return only T1,T2.</p>	<ul style="list-style-type: none"> • descendantOf • subsetOf:comma separated ids
expandAll	Include all of the elements descendants in the result	<ul style="list-style-type: none"> • true • false

HTTP Method

POST

Resource URI

/api/analytics/v1/connectedDetected

Requires Basic Auth

N

Parameters*Table 5: Parameter Details*

Name	Required	Default	Type	Location	Description
body	Y	—	JSON array	body	JSON array containing parameters.

Content Type

application/json

Sample Input (JSON)

```
{
  "period": "today",
  "timeRange": "00:00-23:59",
  "granularity": "hourly",
  "areas": "5786"
}
```

Sample Output (JSON)

```
{
  "startTime": "00:00",
  "startDate": "2017-03-16",
  "results": [
    {
      "id": 5786,
      "ancestry": [
        {
          "level": "Campus",
          "name": "Nortech Campus"
        }
      ],
      "startDate": "2017-03-16",
      "series": [
        "datetime"
      ],
      "hasChildren": true,
      "area": "Nortech-1",
      "data": [
        {
          "dwell": null,
          "values": {
            "connected": 0,
            "detected": 0
          },
          "name": null
        },
        {
          "dwell": null,
          "values": {
            "connected": 0,
            "detected": 0
          },
          "name": null
        },
        {
          "dwell": null,
          "values": {
            "connected": 0,
            "detected": 0
          },
          "name": null
        },
        {
          "dwell": null,
          "values": {
            "connected": 0,
            "detected": 0
          },
          "name": null,
          "incomplete": true
        }
      ]
    }
  ]
}
```

```
    }
  ],
  "interval": "hourly",
  "executionTime": 18,
  "insights": {
    "summary": {},
    "connected": {
      "ancestry": [
        {
          "level": "Campus",
          "name": "Nortech Campus"
        }
      ],
      "id": 5786,
      "index": 0,
      "maxDate": "2017-03-16",
      "name": "Nortech-1",
      "maxTime": "00:00",
      "maxValue": 0
    },
    "detected": {
      "ancestry": [
        {
          "level": "Campus",
          "name": "Nortech Campus"
        }
      ],
      "id": 5786,
      "index": 0,
      "maxDate": "2017-03-16",
      "name": "Nortech-1",
      "maxTime": "00:00",
      "maxValue": 0
    }
  },
  "endDate": "2017-03-16",
  "maxValues": {
    "connected": 0,
    "detected": 0
  },
  "endTime": "23:59",
  "dataFreshness": "2017-03-16T02:53:55.919-07:00",
  "minValues": {
    "connected": 0,
    "detected": 0
  }
}
```

POST: Paths for a Given Period and Areas

Description

The only parameter (body) is a JSON array containing the parameters. The parameters are described below:

Table 6: Parameter Details

JSON parameter	Description	Allowable values/formats
period	The period of interest, either specified as a date range, or one of the predefined names	<ul style="list-style-type: none"> • yyyy-mm-dd • yyyy-mm-dd;yyyy-mm-dd • today • yesterday • this week • last week • last 2 weeks • this month • last month • last 3 months • this year • last year • forever
timeRange	The time window of interest on each day.	• HH:mm-HH:mm
targetArea	The ID of the target area for the paths.	The ID of the target area for the paths.
allAreas	The list of areas of interest.	A comma-separated list of area IDs <areaId-1>,<areaId-2>,<areaId-3>
granularity	The desired geographical granularity. This will replace the areas listed in 'allAreas' with their progeny on the appropriate level.	Heterarchy level

JSON parameter	Description	Allowable values/formats
durationCategories	Filter devices by dwell times for which device visits specified areas. If a device's dwell time falls outside of the range, it is filtered out and not considered a visit.	<p>Time (in minutes) in the form nn-mm where nn is the lower limit and mm the upper limit. The maximum upper limit is 1440 minutes; which is 24 hours, or a full day. Accepted Values:</p> <ul style="list-style-type: none"> • 0-240 • 0-480 • 0-1440 • 5-240 • 5-480 • 5-1440 • 10-240 • 10-480 • 10-1440 • 15-240 • 15-480 • 15-1440 • 30-240 • 30-480 • 30-1440 • 45-240 • 45-480 • 45-1440 • 60-240 • 60-480 • 60-1440

HTTP Method

POST

Resource URI

/api/analytics/v1/path

Requires Basic Auth

N

Parameters*Table 7: Parameter Details*

Name	Required	Default	Type	Location	Description
body	Y	—	JSON array	body	JSON array containing parameters.

Content Type

application/json

Sample Input (JSON)

```
{
  "period": "today",
  "timeRange": "00:00-23:59",
  "granularity": "Building",
  "allAreas": "52,75,80"
}
```

Sample Output (JSON)

```
/* Path Output */
{
  "startTime": "00:00",
  "startDate": "2017-03-07",
  "results": [
    {
      "id": 75,
      "total": 0,
      "medianTransitionTime": 0,
      "ancestry": [
        {
          "level": "Campus",
          "name": "TagTest_Campus_1"
        }
      ],
      "area": "TagTest_Building_1",
      "direction": -1,
      "value": 0,
      "averageTransitionTime": 0
    },
    {
      "id": 80,
      "total": 0,
      "medianTransitionTime": 0,
      "ancestry": [
        {
          "level": "Campus",
          "name": "TagTest_Campus_1"
        }
      ],
    }
  ],
}
```



```

        "area": "TagTest_Building_2",
        "direction": -1,
        "value": 0,
        "averageTransitionTime": 0
    },
    {
        "id": 75,
        "total": 0,
        "medianTransitionTime": 0,
        "ancestry": [
            {
                "level": "Campus",
                "name": "TagTest_Campus_1"
            }
        ],
        "area": "TagTest_Building_1",
        "direction": 1,
        "value": 0,
        "averageTransitionTime": 0
    },
    {
        "id": 80,
        "total": 0,
        "medianTransitionTime": 0,
        "ancestry": [
            {
                "level": "Campus",
                "name": "TagTest_Campus_1"
            }
        ],
        "area": "TagTest_Building_2",
        "direction": 1,
        "value": 0,
        "averageTransitionTime": 0
    }
],
"executionTime": 88,
"requestTruncated": false,
"target": {
    "ancestry": [
        {
            "level": "Campus",
            "name": "campus"
        }
    ]
},
"total": 0,
"id": 52,
"area": "Building_0",
"pathsEnded": 0,
"totalVisits": 0,
"pathsStarted": 0,
"avgDwellPerDevice": 0,
"avgDwellPerVisit": 0,
"totalDevices": 0
},
"insights": {},
"endDate": "2017-03-07",
"endTime": "23:59",
"dataFreshness": {
    "dayOfYear": 66,
    "dayOfMonth": 7,
    "dayOfWeek": 2,
    "era": 1,
    "year": 2017,

```

```
    "minuteOfDay": 1277,
    "hourOfDay": 21,
    "weekyear": 2017,
    "monthOfYear": 3,
    "yearOfEra": 2017,
    "yearOfCentury": 17,
    "centuryOfEra": 20,
    "millisOfSecond": 782,
    "millisOfDay": 76673782,
    "secondOfMinute": 53,
    "secondOfDay": 76673,
    "minuteOfHour": 17,
    "weekOfWeekyear": 10,
    "millis": 1488921473782,
    "zone": {
      "fixed": true,
      "id": "Etc/UTC"
    },
    "chronology": {
      "zone": {
        "fixed": true,
        "id": "Etc/UTC"
      }
    },
    "afterNow": false,
    "beforeNow": false,
    "equalNow": true
  }
}
```

GET: All summary KPI

Description

This API retrieves summary of all KPI.

HTTP Method

GET

Resource URI

/api/analytics/v1/summary

Requires Basic Auth

N

Parameters

None.

Sample Output (JSON)

```
{
  "Top Building dwell": {
    "title": "Top Building dwell",
    "value": {
      "primary": "Nortech-1 (5572.52 min)",
      "secondary": [
        "SJC23 (0.00 min)",
        "SJC24 (0.00 min)",
        "Shell- CBuilding (0.00 min)"
      ],
      "supplementary": "SJC23 (0.00 min)<br/>SJC24 (0.00 min)<br/>Shell- CBuilding (0.00 min)<br/>"
    }
  },
  "Notifications Received": {
    "title": "Notifications Received Rate (5 min avg)",
    "value": {
      "primary": "2.04 notifications/s",
      "secondary": [
        "1 min avg: 2.07",
        "15 min avg: 1.84",
        "Avg since boot: 4.23",
        "Total number of events: 3774166"
      ],
      "supplementary": "1 min avg: 2.07<br/>15 min avg: 1.84<br/>Avg since boot: 4.23<br/>Total number of events: 3774166"
    }
  },
  "RSSI experience": {
    "title": "RSSI experience",
    "value": {
      "primary": "No devices detected",
      "secondary": [

```

```

        "No devices detected"
      ],
      "supplementary": "No devices detected"
    }
  },
  "Uptime": {
    "title": "Uptime",
    "value": {
      "primary": "10 days, 07:35",
      "secondary": [
        "Processors: 20",
        "Max mem: 4528 MiB",
        "Memory: 2849/4528 MiB",
        "Threads: 169"
      ]
    },
    "supplementary": "Processors: 20<br/>Max mem: 4528 MiB<br/>Memory: 2849/4528
MiB<br/>Threads: 169"
  }
},
"Connected": {
  "title": "Connected",
  "value": {
    "primary": "1916.33%",
    "secondary": [
      "Total: 392",
      "Detected: -7120 (-1816.33%)",
      "Connected: 7512 (1916.33%)"
    ]
  },
  "supplementary": "Total: 392<br/>Detected: -7120 (-1816.33%)<br/>Connected:
7512 (1916.33%)<br/>"
}
},
"Aggregation performance": {
  "title": "Aggregation performance",
  "value": {
    "primary": "534930964.29 / 0",
    "secondary": [
      "API misses (rate): 166(0) / 0(0) <br/>",
      "API misses as % of total API calls: 9.22/□<br/>",
      "Background updates (rate): 0(0) / 0(0) <br/>"
    ]
  },
  "supplementary": "API misses (rate): 166(0) / 0(0) <br/><br/>API misses as %
of total API calls: 9.22/□<br/><br/>Background updates (rate): 0(0) / 0(0) <br/>"
},
"recordRefreshCounts": {
  "pathRecordsRefreshed": 0,
  "repeatRecordsRefreshed": 0,
  "derivedRecordsRefreshed": 0,
  "hourVisitsUpdated": 121942,
  "areaVisitsUpdated": 119586,
  "crossoverRecordsRefreshed": 0
}
},
"Top Campus count": {
  "title": "Top Campus count",
  "value": {
    "primary": "Nortech Campus (356)",
    "secondary": [
      "Shell (0)",
      "System Campus (0)"
    ]
  },
  "supplementary": "Shell (0)<br/>System Campus (0)<br/>"
}
},

```

```

"Database I/O": {
  "title": "Database I/O Rate (5 min avg)",
  "value": {
    "primary": "0.57 operations/s",
    "secondary": [
      "1 min avg: 0.07",
      "15 min avg: 0.53",
      "Avg since boot: 0.46",
      "Total number of events: 409932"
    ],
    "supplementary": "1 min avg: 0.07<br>15 min avg: 0.53<br>Avg since boot:
0.46<br>Total number of events: 409932"
  }
},
"Top Floor dwell": {
  "title": "Top Floor dwell",
  "value": {
    "primary": "1st Floor (5572.53 min)",
    "secondary": [
      "1st floor (CCW remodel) (0.00 min)",
      "2nd floor (Area Addition) (0.00 min)",
      "2nd floor (CCW remodel) (0.00 min)"
    ],
    "supplementary": "1st floor (CCW remodel) (0.00 min)<br>2nd floor (Area Addition)
(0.00 min)<br>2nd floor (CCW remodel) (0.00 min)<br>"
  }
},
"Active devices": {
  "title": "Active devices",
  "value": {
    "primary": 356,
    "secondary": [
      "Most recent detection: 17s ago"
    ],
    "supplementary": "Most recent detection: 17s ago"
  }
},
"Top Campus dwell": {
  "title": "Top Campus dwell",
  "value": {
    "primary": "Nortech Campus (5572.53 min)",
    "secondary": [
      "Shell (0.00 min)",
      "System Campus (0.00 min)"
    ],
    "supplementary": "Shell (0.00 min)<br>System Campus (0.00 min)<br>"
  }
},
"Analysis API calls": {
  "title": "Analysis API calls",
  "value": {
    "primary": "Meter not active yet",
    "secondary": [
      "Please wait while data is being collected."
    ],
    "supplementary": "Please wait while data is being collected."
  }
},
"Zone API Calls": {
  "title": "Zone API Calls",
  "value": {
    "primary": "Meter not active yet",
    "secondary": [
      "Please wait while data is being collected."
    ]
  }
}

```

```

    ],
    "supplementary": "Please wait while data is being collected."
  }
},
"Top Zone dwell": {
  "title": "Top Zone dwell",
  "value": {
    "primary": "CMX Bar (5959.07 min)",
    "secondary": [
      "School (5763.90 min)",
      "Tm (4175.67 min)",
      "CMX Clinic (1783.57 min)"
    ],
    "supplementary": "School (5763.90 min)<br/>Tm (4175.67 min)<br/>CMX Clinic
(1783.57 min)<br/>"
  }
},
"Top Manufacturer": {
  "title": "Top Manufacturer",
  "value": {
    "primary": "Cisco Systems, Inc (310)",
    "secondary": [
      "Aeroscout Ltd. (78)",
      "G2 Microsystems (44)",
      "Hon Hai Precision Ind. Co.,Ltd. (21)"
    ],
    "supplementary": "Aeroscout Ltd. (78)<br/>G2 Microsystems (44)<br/>Hon Hai
Precision Ind. Co.,Ltd. (21)<br/>"
  }
},
"Top Zone count": {
  "title": "Top Zone count",
  "value": {
    "primary": "CMX Clinic (106)",
    "secondary": [
      "Tm (86)",
      "CMX Bar (44)",
      "School (20)"
    ],
    "supplementary": "Tm (86)<br/>CMX Bar (44)<br/>School (20)<br/>"
  }
},
"Top Building count": {
  "title": "Top Building count",
  "value": {
    "primary": "Nortech-1 (356)",
    "secondary": [
      "SJC23 (0)",
      "SJC24 (0)",
      "Shell- CBuilding (0)"
    ],
    "supplementary": "SJC23 (0)<br/>SJC24 (0)<br/>Shell- CBuilding (0)<br/>"
  }
},
"Overall Analytics API Calls": {
  "title": "Overall Analytics API Calls Rate (5 min avg)",
  "value": {
    "primary": "0.00 calls/s",
    "secondary": [
      "1 min avg: 0.00",
      "15 min avg: 0.00",
      "Avg since boot: 0.00",
      "Total number of events: 0"
    ],
  },

```

```

        "supplementary": "1 min avg: 0.00</br>15 min avg: 0.00</br>Avg since boot:
0.00</br>Total number of events: 0"
    }
},
"Notification processing time": {
    "title": "Notification processing time (avg duration)",
    "value": {
        "primary": "2.13 ms",
        "secondary": [
            "Min: 0 ms",
            "Max: 9 ms",
            "StDev: 0.94"
        ],
        "supplementary": "Min: 0 ms</br>Max: 9 ms</br>StDev: 0.94"
    }
},
"Location API Calls": {
    "title": "Location API Calls",
    "value": {
        "primary": "Meter not active yet",
        "secondary": [
            "Please wait while data is being collected."
        ],
        "supplementary": "Please wait while data is being collected."
    }
},
"Paths API Calls": {
    "title": "Paths API Calls",
    "value": {
        "primary": "Meter not active yet",
        "secondary": [
            "Please wait while data is being collected."
        ],
        "supplementary": "Please wait while data is being collected."
    }
},
"Age of updated aggregation records": {
    "title": "Age of updated aggregation records",
    "value": {
        "primary": "Meter not active yet",
        "secondary": [
            "Please wait while data is being collected."
        ],
        "supplementary": "Please wait while data is being collected."
    }
},
"Top Floor count": {
    "title": "Top Floor count",
    "value": {
        "primary": "1st Floor (356)",
        "secondary": [
            "1st floor (CCW remodel) (0)",
            "2nd floor (Area Addition) (0)",
            "2nd floor (CCW remodel) (0)"
        ],
        "supplementary": "1st floor (CCW remodel) (0)<br/>2nd floor (Area Addition)
(0)<br/>2nd floor (CCW remodel) (0)<br/>"
    }
},
"Heterarchy": {
    "title": "Heterarchy",
    "value": {
        "primary": "199 active elements",
        "secondary": [

```

```
        "Elements: 199/54 [act/inact]",
        "APs: 158/39",
        "POIs: 0/0",
        "PATHs: 0/0",
        "Floors: 8/1",
        "Tags: 19/0",
        "Userlevels: 4/0",
        "Zones: 5/12"
    ],
    "supplementary": "Elements: 199/54 [act/inact]<br/>APs: 158/39<br/>POIs:
0/0<br/>PATHs: 0/0<br/>Floors: 8/1<br/>Tags: 19/0<br/>Userlevels: 4/0<br/>Zones: 5/12"
}
}
}
```


GET: Specific set of Summary KPIs or a list of available ones

Description

This API retrieves a specific set of summary KPIs or a list of available ones.

HTTP Method

GET

Resource URI

/api/analytics/v1/summary/:summaryItem

Requires Basic Auth

N

Parameters

Table 8: Parameter Details

Name	Required	Default	Type	Location	Description
summaryItem	Y	—	String	pathReplace	A comma-separated list of summary KPI to return, or 'availableMetrics' to see the list of metrics available. Use the title parameter.

Content Type

application/json

Sample Output (JSON)

```
{
  "Top Building dwell": {
    "title": "Top Building dwell",
    "value": {
      "secondary": [],
      "supplementary": "",
      "primary": "Nortech Building (0.00 min)"
    }
  }
}
```

POST: Overview Data for Target Areas for Brochure View

Description

This task retrieves overview Data for Target Areas for Brochure View

Table 9: Parameter Details

JSON body parameter	Description	Allowable values/formats
type	The type of data requested	<ul style="list-style-type: none"> • deviceCount • deviceDwell • grossShopping • deviceCrossover • connectedDetected • dwellBreakdown
period	The period of interest, either specified as a date range, or one of the predefined names	<ul style="list-style-type: none"> • yyyy-mm-dd • yyyy-mm-dd;yyyy-mm-dd • today • yesterday • this week • last week • last 2 weeks • this month • last month • last 3 months • this year • last year • forever
timeRange	The time window of interest on each day	<ul style="list-style-type: none"> • HH:mm-HH:mm
areas	The list of areas of interest. If none are given, all are considered	A comma-separated list of area ids, or heterarchy levels

JSON body parameter	Description	Allowable values/formats
durationCategories	Filter devices by dwell times for which device visits specified areas. If a device's dwell time falls outside of the range, it is filtered out and not considered a visit.	<p>Time (in minutes) in the form nn-mm where nn is the lower limit and mm the upper limit. The maximum upper limit is 1440 minutes; which is 24 hours, or a full day. Accepted Values:</p> <ul style="list-style-type: none"> • 0-240 • 0-480 • 0-1440 • 5-240 • 5-480 • 5-1440 • 10-240 • 10-480 • 10-1440 • 15-240 • 15-480 • 15-1440 • 30-240 • 30-480 • 30-1440 • 45-240 • 45-480 • 45-1440 • 60-240 • 60-480 • 60-1440
includeStationary	Whether to include stationary devices (default=false)	<ul style="list-style-type: none"> • true • false

JSON body parameter	Description	Allowable values/formats
entirePeriod	Whether to include device visits that occur any time during the entire period or only within a single day (default=false). Applicable only to crossover; ignored for the other metrics.	<ul style="list-style-type: none"> • true • false
connectionState	Whether to restrict to either connected or detected devices (default=all). For Connected/Detected metric, this setting is ignored, and "all" is presumed	<ul style="list-style-type: none"> • connected • detected • all
percentageOf	If set, does not report absolute numbers, but relative percentage. Ignored for Crossover report	Heterarchy level
dwelLimits	The dwell time limits that specifies how dwellers should be grouped together. Values are comma seperated as key:value pairs. Key is the series name and value is the upper dwell time limit of the series. For example, Light:5,Medium:20,Heavy:100 would mean that you consider devices that dwell for less than 5 minutes to be Light; from 5 minutes to 20 minutes to be Medium; and from 20 minutes to 100 to be Heavy. If you want to consider all dwells, pass in -1 as the value.	<ul style="list-style-type: none"> • default • minute • Light:<limit>,Medium:<limit>,Heavy:<limit> • comma separated limit label:limit value

HTTP Method

POST

Resource URI

/api/analytics/v1/overview

Requires Basic Auth

N

Parameters

Table 10: Parameter Details

Name	Required	Default	Type	Location	Description
body	Y	—	JSON array	body	JSON array containing parameters

Content Type

application/json

Sample Input (JSON)

```
{
  "period": "today",
  "timeRange": "00:00-23:59",
  "areas": "52",
  "type": "deviceCount"
}
```

Sample Output (JSON)

```
{
  "startTime": "00:00",
  "previousEndDate": null,
  "startDate": "2017-03-16",
  "title": "Visitors",
  "executionTime": 32,
  "value": {
    "primary": {
      "title": "Total Visitors",
      "value": 0,
      "peakValue": 0,
      "breakdown": [
        {
          "title": "Repeat Visitors",
          "value": 0
        },
        {
          "title": "New Visitors",
          "value": 0
        }
      ]
    }
  },
  "average": {
    "title": "Total Visitors",
    "value": 0,
    "peakValue": 0,
    "breakdown": [
      {
        "title": "Repeat Visitors",
        "value": 0
      },
      {
        "title": "New Visitors",
        "value": 0
      }
    ]
  }
}
```

```
    ]
  },
  "previousTimeRange": {
    "title": "Total Visitors",
    "value": 0,
    "peakValue": 0,
    "breakdown": [
      {
        "title": "Repeat Visitors",
        "value": 0
      },
      {
        "title": "New Visitors",
        "value": 0
      }
    ]
  }
},
"areas": [
  {
    "id": 52,
    "name": "f0:25:72:3c:f8:10"
  }
],
"previousStartDate": "2017-03-15",
"endDate": null,
"endTime": "23:59"
}
```

POST: Dwell Time for a Given Period and Areas

Description

This API retrieves dwell Time for a given period and areas. The only parameter is a JSON array containing the parameters. The parameters are described below

Table 11: Parameter Details

JSON array parameter	Description	Allowable values/formats
granularity	The desired granularity. One can limit to top n results (i.e. the n values with highest count) by adding "[n]", or the n bottom results by adding "[-n]". If granularity null is specified, all heterarchy types covered by the areas are returned.	<ul style="list-style-type: none"> hourly daily weekly monthly yearly tag tag-name heterarchy level null
period	The period of interest, either specified as a date range, or one of the predefined names	<ul style="list-style-type: none"> yyyy-mm-dd yyyy-mm-dd;yyyy-mm-dd today yesterday this week last week last 2 weeks this month last month last 3 months this year last year forever
timeRange	The time window of interest on each day	<ul style="list-style-type: none"> HH:mm-HH:mm
aggregate	Whether to aggregate the dwell time by granularity; e.g. showing a total for each day of the week, instead of individual dates	<ul style="list-style-type: none"> none sum avg
areas	The list of areas of interest. If none are given, all are considered	<p>A comma-separated list of area ids, or heterarchy levels</p> <pre><areaId> <areaId-1>,<areaId-2>,<areaId-3></pre>

JSON array parameter	Description	Allowable values/formats
durationCategories	Filter devices by dwell times for which device visits specified areas. If a device's dwell time falls outside of the range, it is filtered out and not considered a visit.	Time (in minutes) in the form nn-mm where nn is the lower limit and mm the upper limit. The maximum upper limit is 1440 minutes; which is 24 hours, or a full day. Accepted Values: <ul style="list-style-type: none"> • 0-240 • 0-480 • 0-1440 • 5-240 • 5-480 • 5-1440 • 10-240 • 10-480 • 10-1440 • 15-240 • 15-480 • 15-1440 • 30-240 • 30-480 • 30-1440 • 45-240 • 45-480 • 45-1440 • 60-240 • 60-480 • 60-1440
includeStationary	Whether to include stationary devices	<ul style="list-style-type: none"> • true • false
connectionState	Whether to restrict to either connected or detected devices (default=all)	<ul style="list-style-type: none"> • connected • detected • all

JSON array parameter	Description	Allowable values/formats
percentageOf	If set, does not report absolute numbers, but relative percentage	Heterarchy level
areaFilter	<p>If set, restricts the results to areas matching the filter. Use 'descendantOf' to restrict the area selection. This option is used for drill down reports. Use 'subsetOf' to restrict the granularity. This option is used with tag granularity.</p> <p>For example: descendantOf: Campus C1 has Building B1 which zone Z1 and Z2 Campus C2 has Building B2 which zone Z3 query area=Z1,Z2,Z3 and granularity=Building and areaFilter=descendantOf:C1 will return only Building B1</p> <p>For example: subsetOf: Tag T1,T2 assigned to F1, T2,T3 to F2, T3,T4 to F3 query area=F1,F2,F3 and granularity=tag and areaFilter=subsetOf:T1,T2 will return only T1,T2.</p>	<ul style="list-style-type: none"> • descendantOf • subsetOf:comma separated ids
expandAll	Include all of the elements descendants in the result	<ul style="list-style-type: none"> • true • false

HTTP Method

POST

Resource URI

/api/analytics/v1/deviceDwell

Requires Basic Auth

N

Parameters*Table 12: Parameter Details*

Name	Required	Default	Type	Location	Description
body	Y	—	JSON array	body	JSON array containing parameters.

Content Type

application/json

Sample Input (JSON)

```
{
  "period": "today",
  "timeRange": "00:00-23:59",
  "granularity": "hourly",
  "areas": "52,75"
}
```

Sample Output (JSON)

```
{
  "startTime": "00:00",
  "startDate": "2017-03-16",
  "connectionState": "all",
  "results": [
    {
      "id": 53,
      "ancestry": [
        {
          "level": "Building",
          "name": "REQ"
        },
        {
          "level": "Campus",
          "name": "Richfield"
        }
      ],
      "series": [
        "datetime"
      ],
      "hasChildren": false,
      "level": "FLOOR",
      "area": "2nd Floor",
      "data": []
    },
    {
      "id": 75,
      "ancestry": [
        {
          "level": "Floor",
          "name": "Site 4"
        },
        {
          "level": "Building",
          "name": "Site 4"
        },
        {
          "level": "Campus",
          "name": "San Jose Outdoor"
        }
      ],
      "series": [
        "datetime"
      ],
      "hasChildren": false,
      "level": "AP",
      "area": "f4:0f:1b:1a:82:90",
      "data": []
    }
  ],
  "interval": "hourly",
  "executionTime": 0,
  "minValue": 2147483647,
}
```

```
"endDate": "2017-03-16",  
"endTime": "23:59",  
"dataFreshness": "2017-03-16T02:58:04.319-07:00",  
"maxValue": 0  
}
```

POST: Device Count for a Given Period and Areas

Description

This API retrieves the device count for a given period and areas.

The only parameter (body) is a JSON array containing the parameters. The parameters are described below

Table 13: Parameter Details

JSON array parameter	Description	Allowable values/formats
granularity	The desired granularity. One can limit to top n results (i.e. the n values with highest count) by adding "[n]", or the n bottom results by adding "[-n]". If granularity null is specified, all heterarchy types covered by the areas are returned.	<ul style="list-style-type: none"> • hourly • daily • weekly • monthly • yearly • tag • tag-name • heterarchy level • null
period	The period of interest, either specified as a date range, or one of the predefined names	<ul style="list-style-type: none"> • yyyy-mm-dd • yyyy-mm-dd;yyyy-mm-dd • today • yesterday • this week • last week • last 2 weeks • this month • last month • last 3 months • this year • last year • forever
timeRange	The time window of interest on each day.	<ul style="list-style-type: none"> • HH:mm-HH:mm

JSON array parameter	Description	Allowable values/formats
aggregate	Whether to aggregate the dwell time by granularity; e.g. showing a total for each day of the week, instead of individual dates	<ul style="list-style-type: none"> • none • sum • avg
areas	The list of areas of interest. If none are given, all are considered	A comma-separated list of area ids, or heterarchy levels
durationCategories	Filter devices by dwell times for which device visits specified areas. If a device's dwell time falls outside of the range, it is filtered out and not considered a visit.	<p>Time (in minutes) in the form nn-mm where nn is the lower limit and mm the upper limit. The maximum upper limit is 1440 minutes; which is 24 hours, or a full day. Accepted Values:</p> <ul style="list-style-type: none"> • 0-240 • 0-480 • 0-1440 • 5-240 • 5-480 • 5-1440 • 10-240 • 10-480 • 10-1440 • 15-240 • 15-480 • 15-1440 • 30-240 • 30-480 • 30-1440 • 45-240 • 45-480 • 45-1440 • 60-240 • 60-480 • 60-1440

JSON array parameter	Description	Allowable values/formats
includeStationary	Whether to include stationary devices (default=false)	<ul style="list-style-type: none"> • true • false
connectionState	Whether to restrict to either connected or detected devices (default=all)	<ul style="list-style-type: none"> • connected • detected • all
percentageOf	If set, does not report absolute numbers, but relative percentage	Heterarchy level
areaFilter	<p>If set, restricts the results to areas matching the filter. Use 'descendantOf' to restrict the area selection. This option is used for drill down reports. Use 'subsetOf' to restrict the granularity. This option is used with tag granularity.</p> <p>For example: descendantOf: Campus C1 has Building B1 which zone Z1 and Z2 Campus C2 has Building B2 which zone Z3 query area=Z1,Z2,Z3 and granularity=Building and areaFilter=descendantOf:C1 will return only Building B1</p> <p>For example: subsetOf: Tag T1,T2 assigned to F1, T2,T3 to F2, T3,T4 to F3 query area=F1,F2,F3 and granularity=tag and areaFilter=subsetOf:T1,T2 will return only T1,T2.</p>	<ul style="list-style-type: none"> • descendantOf • subsetOf:comma separated ids
expandAll	Include all of the elements descendants in the result	<ul style="list-style-type: none"> • true • false

HTTP Method

POST

Resource URI

/api/analytics/v1/deviceCount

Requires Basic Auth

N

Parameters

Table 14: Parameter Details

Name	Required	Default	Type	Location	Description
body	Y	—	JSON array	body	JSON array containing parameters

Content Type

application/json

Sample Input (JSON)

```
{
  "period": "today",
  "timeRange": "00:00-23:59",
  "granularity": "Building",
  "areas": "52,75,80"
}
```

Sample Output (JSON)

```
{
  "startTime": "00:00",
  "startDate": "2017-03-16",
  "connectionState": "all",
  "results": [
    {
      "id": -1,
      "ancestry": [],
      "series": [],
      "hasChildren": false,
      "level": "SUPERZONE",
      "area": "Unknown area",
      "data": []
    }
  ],
  "interval": null,
  "executionTime": 23,
  "minValue": 2147483647,
  "endDate": "2017-03-16",
  "endTime": "23:59",
  "dataFreshness": "2017-03-16T03:00:28.833-07:00",
  "maxValue": 0
}
```

GET: Repeat Device Status for One Area

Description

Returns whether a device was seen as a repeat device in a particular area within the last 6 months.

HTTP Method

GET

Resource URI

/api/analytics/v1/isRepeatDevice/{deviceMac}/{areaId}

Requires OAuth

N

Parameters

Table 15: Parameter Details

Name	Required	Default	Type	Location	Description
deviceMac	Y	—	String	query	MAC address of device. For example, 00:00:00:00:00:00
areaId	Y	—	String	query	Global ID of heterarchy element. For example, 2654

Content Type

application or json

Sample Response

```
{ isRepeat : true }
{ isRepeat : false }
```


GET: Repeat Device Status for All Areas

Description

Returns whether a device was seen as a repeat device in any area within your heirarchy within the last 6 months. .

HTTP Method

GET

Resource URI

/api/analytics/v1/isRepeatDevice/{deviceMac}

Requires Basic Auth

N

Parameters

Table 16: Parameter Details

Name	Required	Default	Type	Location	Description
deviceMac	Y	—	String	query	MAC address of device. For example, 00:00:00:00:00:00

Content Type

application or json

Sample Response

```
{ isRepeat : true }
```

```
{ isRepeat : false }
```

GET: Repeat Device Status for One Area

Description

Returns detailed information of a repeat device within the last 6 months in a given area using the MAC address of the device.

HTTP Method

GET

Resource URI

/api/analytics/v1/repeatDeviceStats/{deviceMac}/{areaId}

Requires Basic Auth

N

Parameters

Table 17: Parameter Details

Name	Required	Default	Type	Location	Description
deviceMac	Y	—	String	query	MAC address of device. For example, 00:00:00:00:00:00
areaId	Y	—	String	query	Global ID of heterarchy element. For example, 5540

Content Type

application or json

Sample Response

```
{
  "results": [
    {
      "id": 5540,
      "lastMonthSeen": "October",
      "name": "SJC-23",
      "userLevel": "Building",
      "children": [
        {
          "id": 5498,
          "lastMonthSeen": "October",
          "name": "2nd floor",
          "userLevel": "Floor",
          "daysSeenInLast30": [
            ]
        }
      ]
    }
  ],
}
```

```

    {
      "id": 5539,
      "lastMonthSeen": "July",
      "name": "3rd Floor",
      "userLevel": "Floor",
      "daysSeenInLast30": [

    ]
  }
],
"daysSeenInLast30": [

]
}
]
}

```

Table 18: Response Description

lastMonthSeen	The name of the latest month the device was seen in a particular area, with the search going as far back as six months
name	The name of the area as seen in the heterarchy.
userLevel	The name of the heterarchy 'level' (i.e. Campus/Building/Floor/Zone)
daysSeenInLast30	List of dates when the device was seen within the past 30 days. If a device has been seen in the past 30 days, a more granular dataset showing all visits for that device within those 30 days is stored in the location tables
children	<p>(if relevant) This is a recursive list of all child area elements. Each item in this list contains the same information as listed in the rows above and will contain their own children arrays if the areas have child elements.</p> <p>A sample heterarchy looks like this: 1 Campus -> 2 Buildings -> 2 Floors each -> 2 Zones each will have children arrays of length 2 -> 2 -> 2 -> no children key/value pair at the respective levels.</p>

GET: Repeat Device Status In Any Area (Detailed)

Description

Returns detailed information of a repeat device within the last 6 months in any area using the MAC address of the device

HTTP Method

GET

Resource URI

/api/analytics/v1/repeatDeviceStats/{deviceMac}/{areaId}

Requires OAuth

N

Parameters

Table 19: Parameter Details

Name	Required	Default	Type	Location	Description
deviceMac	Y	—	String	query	MAC address of device. For example, 00:00:00:00:00:00

Content Type

application or json

Sample Response

```
{
  "results": [
    {
      "id": 4519,
      "lastMonthSeen": "October",
      "name": "System Campus",
      "userLevel": "Campus",
      "children": [
        {
          "id": 5206,
          "lastMonthSeen": "July",
          "name": "SJC-18",
          "userLevel": "Building",
          "children": [
            {
              "id": 5588,
              "lastMonthSeen": "July",
              "name": "3rd Floor",
              "userLevel": "Floor",
              "daysSeenInLast30": [
```

```
    ]
  }
],
"daysSeenInLast30": [
]
},
{
  "id": 5540,
  "lastMonthSeen": "October",
  "name": "SJC-23",
  "userLevel": "Building",
  "children": [
    {
      "id": 5498,
      "lastMonthSeen": "October",
      "name": "2nd floor",
      "userLevel": "Floor",
      "daysSeenInLast30": [

    ]
  },
  {
    "id": 5539,
    "lastMonthSeen": "July",
    "name": "3rd Floor",
    "userLevel": "Floor",
    "daysSeenInLast30": [

  ]
}
],
"daysSeenInLast30": [
]
},
{
  "id": 5635,
  "lastMonthSeen": "October",
  "name": "SJC-24",
  "userLevel": "Building",
  "children": [
    {
      "id": 5636,
      "lastMonthSeen": "October",
      "name": "1st Floor",
      "userLevel": "Floor",
      "daysSeenInLast30": [
        "2016-10-04",
        "2016-09-30",
        "2016-09-27",
        "2016-09-22"
      ]
    }
  ],
  {
    "id": 5637,
    "lastMonthSeen": "October",
    "name": "2nd Floor",
    "userLevel": "Floor",
    "daysSeenInLast30": [
      "2016-10-04",
      "2016-10-03",
      "2016-09-22"
    ]
  ]
}
```

```

    },
    {
      "id": 5638,
      "lastMonthSeen": "October",
      "name": "3rd Floor",
      "userLevel": "Floor",
      "daysSeenInLast30": [
        "2016-10-05",
        "2016-10-04",
        "2016-10-03",
        "2016-09-30",
        "2016-09-27",
        "2016-09-26",
        "2016-09-23",
        "2016-09-22"
      ]
    }
  ],
  "daysSeenInLast30": [
    "2016-10-05",
    "2016-10-04",
    "2016-10-03",
    "2016-09-30",
    "2016-09-27",
    "2016-09-26",
    "2016-09-23",
    "2016-09-22"
  ]
}
]
}
}

```

Table 20: Response Description

Variable	Description
lastMonthSeen	The name of the latest month the device was seen in a particular area, with the search going as far back as six months
name	The name of the area as seen in the heterarchy.
userLevel	The name of the heterarchy 'level' (i.e. Campus/Building/Floor/Zone)
daysSeenInLast30	List of dates when the device was seen within the past 30 days. If a device has been seen in the past 30 days, a more granular dataset showing all visits for that device within those 30 days is stored in the location tables

Variable	Description
children	<p>(if relevant) This is a recursive list of all child area elements. Each item in this list contains the same information as listed in the rows above and will contain their own children arrays if the areas have child elements.</p> <p>A sample heterarchy looks like this: 1 Campus -> 2 Buildings -> 2 Floors each -> 2 Zones each will have children arrays of length 2 -> 2 -> 2 -> no children key/value pair at the respective levels.</p>

GET: Repeat Device Status for One Area (Abridged)

Description

Returns abridged information of a repeat device within the last 6 months in a given area using the MAC address of the device.

HTTP Method

GET

Resource URI

/api/analytics/v1/repeatDeviceStatsLite/{deviceMac}/{areaId}

Requires OAuth

N

Parameters

Table 21: Parameter Details

Name	Required	Default	Type	Location	Description
deviceMac	Y	—	String	query	MAC address of device. For example, 00:00:00:00:00:00
areaId	Y	—	String	query	Global ID of heterarchy element. For example, 5540

Content Type

application or json

Sample Response

```
{
  "results": [
    {
      "id": 2654,
      "lastMonthSeen": "October",
      "name": "System Campus",
      "userLevel": "Campus",
      "daysSeenInLast30": [
        "2016-10-05",
        "2016-10-04",
        "2016-10-03",
        "2016-09-30",
        "2016-09-27",
        "2016-09-26",
        "2016-09-23",
        "2016-09-22"
      ]
    }
  ]
}
```



```
]
}
```

Table 22: Response Description

Variable	Description
lastMonthSeen	The name of the latest month the device was seen in a particular area, with the search going as far back as six months
name	The name of the area as seen in the heterarchy.
userLevel	The name of the heterarchy 'level' (i.e. Campus/Building/Floor/Zone)
daysSeenInLast30	List of dates when the device was seen within the past 30 days. If a device has been seen in the past 30 days, a more granular dataset showing all visits for that device within those 30 days is stored in the location tables

GET: Repeat Device Status In Any Area (Abridged)

Description

Returns abridged information of a repeat device within the last 6 months in any area using the MAC address of the device

HTTP Method

GET

Resource URI

/api/analytics/v1/repeatDeviceStats/{deviceMac}/{areaId}

Requires OAuth

N

Parameters

Table 23: Parameter Details

Name	Required	Default	Type	Location	Description
deviceMac	Y	—	String	query	MAC address of device. For example, 00:00:00:00:00:00

Content Type

application or json

Sample Response

```
{
  "results": [
    {
      "id": 4519,
      "lastMonthSeen": "October",
      "name": "System Campus",
      "userLevel": "Campus",
      "daysSeenInLast30": [
        "2016-10-05",
        "2016-10-04",
        "2016-10-03",
        "2016-09-30",
        "2016-09-27",
        "2016-09-26",
        "2016-09-23",
        "2016-09-22"
      ]
    }
  ]
}
```

Table 24: Response Description

Variable	Description
lastMonthSeen	The name of the latest month the device was seen in a particular area, with the search going as far back as six months
name	The name of the area as seen in the heterarchy.
userLevel	The name of the heterarchy 'level' (i.e. Campus/Building/Floor/Zone)
daysSeenInLast30	List of dates when the device was seen within the past 30 days. If a device has been seen in the past 30 days, a more granular dataset showing all visits for that device within those 30 days is stored in the location tables

GET: Retrieve the count of active clients on a floor or multiple floors right now.

Description

The only parameter (body) is a JSON array containing the parameters.

HTTP Method

GET

Resource URI

/api/analytics/v1/now/clientCount

Requires Basic Auth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
{
  "total": {
    "total": 103,
    "totalNumFloors": 8
  },
  "connectionState": "all",
  "failedFloorIds": [],
  "missingFloorIds": [],
  "executionTime": 147,
  "minValue": 0,
  "data": [
    {
      "floorName": "2nd floor (CCW remodel)",
      "floorId": 207,
      "value": 0
    },
    {
      "floorName": "3rd floor (CCW remodel)",
      "floorId": 157,
      "value": 0
    },
    {
      "floorName": "3rd floor (CCW remodel)",
      "floorId": 232,
      "value": 0
    }
  ]
}
```

```

    {
      "floorName": "1st floor (CCW remodel)",
      "floorId": 106,
      "value": 0
    },
    {
      "floorName": "1st floor (CCW remodel)",
      "floorId": 184,
      "value": 0
    },
    {
      "floorName": "1st Floor",
      "floorId": 11,
      "value": 103
    },
    {
      "floorName": "2nd floor (CCW remodel)",
      "floorId": 132,
      "value": 0
    },
    {
      "floorName": "2nd floor (Area Addition)",
      "floorId": 185,
      "value": 0
    }
  ],
  "date": "2017-12-17",
  "nonFloorIds": [],
  "maxValue": 103
}

```

API History

Table 25: API history

Release	Modification
Cisco CMX Release 10.3	This API is introduced.

POST: Retrieve the count of active clients on a floor or multiple floors right now

Description

This API retrieves the count of active clients on a floor or multiple floors right now. The only parameter (body) is a JSON array containing the parameters.

Parameters

Table 26: Parameter Details

JSON array parameter	Description	Allowable values/formats
floors	The list of floors of interest. If none are given, all are considered.	A comma-separated list of floor ids. <floorId1>,<floorId2>,...
connectionState	Whether to restrict to either connected or detected devices (default = all)	<ul style="list-style-type: none"> • connected • detected • all

HTTP Method

POST

Resource URI

/api/analytics/v1/now/clientCount

Requires Basic Auth

N

Parameters

Table 27: Parameter Details

Name	Required	Default	Type	Location	Description
body	Y	—	JSON array	body	JSON array containing parameters.

Content Type

application/json

Sample Input

```
{
  "floors": "17",
  "connectionState": "all"
}
```

Sample Output

```
{
  "total": {
    "total": 0,
    "totalNumFloors": 0
  },
  "connectionState": "all",
  "failedFloorIds": [],
  "missingFloorIds": [
    "17"
  ],
  "executionTime": 1,
  "minValue": 2147483647,
  "data": [],
  "date": "2017-03-16",
  "nonFloorIds": [],
  "maxValue": -2147483648
}
```

API History

Table 28: API history

Release	Modification
Cisco CMX Release 10.3	This API is introduced.

POST: Retrieve the breakdown of connected and detected devices for a floor right now.

Description

This API retrieve the breakdown of connected and detected devices for a floor right now.

HTTP Method

POST

Resource URI

/api/analytics/v1/now/connectedDetected

Requires Basic Auth

N

Parameters

Table 29: Parameter Details

Name	Required	Default	Type	Location	Description
body	Y		JSON array	body	JSON array containing parameters

Content Type

application/json

Sample Input (JSON)

```
{
  "floors": "17"
}
```

Sample Output (JSON)

```
{
  "total": {
    "totalDetected": 0,
    "totalNumFloors": 0,
    "totalAll": 0,
    "totalConnected": 0
  },
  "startTime": "03:22",
  "startDate": "2017-03-16",
  "failedFloorIds": [],
  "missingFloorIds": [
    "17"
  ]
}
```



```
],
"results": [],
"interval": null,
"executionTime": 2,
"endDate": "2017-03-16",
"endTime": "03:22",
"nonFloorIds": []
}
```

API History

Table 30: API history

Release	Modification
Cisco CMX Release 10.3	This API is introduced.

GET: Retrieve the breakdown of connected and detected devices for a floor right now

Description

The API retrieves the breakdown of connected and detected devices for a floor right now.

HTTP Method

GET

Resource URI

/api/analytics/v1/now/connectedDetected

Requires Basic Auth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
{
  "total": {
    "totalDetected": 98,
    "totalNumAreas": 1,
    "totalAll": 98,
    "totalConnected": 0
  },
  "startDate": "2017-12-17",
  "interval": null,
  "executionTime": 158,
  "endDate": "2017-12-17",
  "endTime": "22:36",
  "startTime": "22:36",
  "invalidLevelIds": [],
  "missingAreaIds": [],
  "results": [
    {
      "ancestry": [],
      "id": 1,
      "series": [
        "dwell"
      ],
      "hasChildren": true,
      "area": "Campus",
      "data": [
        {
```

```
        "dwell": "0-1440",
        "values": {
            "connected": 0,
            "detected": 98,
            "all": 98
        },
        "name": null
    }
}
]
},
"failedAreaIds": [],
"maxValues": {
    "connected": 0,
    "detected": 98
},
"minValues": {
    "connected": 0,
    "detected": 98
}
}
```

API History

Table 31: API history

Release	Modification
Cisco CMX Release 10.3	This API is introduced.

GET: Get Count of Clients in Area

Description

This API gets list of clients for a given area.

HTTP Method

GET

Resource URI

/analytics/v1/now/clientCount/areas

Requires OAuth

N

Parameters

None

Content Type

application/json

Sample Output

```
{
  "invalidLevelIds": [
  ],
  "total": {
    "total": 0,
    "totalNumAreas": 1
  },
  "missingAreaIds": [
  ],
  "connectionState": "all",
  "failedAreaIds": [
  ],
  "executionTime": 47,
  "minValue": 0,
  "data": [
    {
      "areaName": "Campus",
      "value": 0,
      "areaId": 1
    }
  ],
  "date": "2017-06-09",
  "maxValue": 0
}
```

GET: Get Associated, Probing Count of Clients in Area

Description

This API gets list of associated and/or probing client count for a given area.

HTTP Method

GET

Resource URI

/analytics/v1/now/connectedDetected/areas

Requires OAuth

N

Parameters

None

Content Type

application/json

Sample Output

```
{
  "total":{
    "totalDetected":0,
    "totalNumAreas":1,
    "totalAll":0,
    "totalConnected":0
  },
  "startDate":"2017-06-09",
  "interval":null,
  "executionTime":58,
  "endDate":"2017-06-09",
  "endTime":"03:44",
  "startTime":"03:44",
  "invalidLevelIds":[

],
  "missingAreaIds":[

],
  "results":[
    {
      "ancestry":[

],
      "id":1,
      "series":[
        "dwell"
      ],
      "hasChildren":true,
    }
  ]
}
```

```
    "area": "Campus",
    "data": [
      {
        "dwell": "0-1440",
        "values": {
          "connected": 0,
          "detected": 0,
          "all": 0
        },
        "name": null
      }
    ]
  },
  "failedAreaIds": [
  ],
  "maxValues": {
    "connected": 0,
    "detected": 0
  },
  "minValues": {
    "connected": 0,
    "detected": 0
  }
}
```



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GET: Get Supported Northbound Notifications

Description

This API returns all supported northbound notification types and applicable attributes for the notification rules.

HTTP Method

GET

Resource URI

/api/configuration/v1/attributes

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output

```
{
  "networkdesignchanged": {
    "triggerHeterarchyChanged": {
      "name": "triggerHeterarchyChanged",
      "dataType": "BOOLEAN",
      "needValueCheck": false,
      "evaluateByProvider": false,
      "validValueSet": [],
      "nameSpace": "networkdesignchanged"
    },
    "triggerNetworkDesignChanged": {
      "name": "triggerNetworkDesignChanged",
      "dataType": "BOOLEAN",
      "needValueCheck": false,
      "evaluateByProvider": false,
      "validValueSet": [],
      "nameSpace": "networkdesignchanged"
    }
  },
  "servicestatus": {
    "oldStatus": {
      "name": "oldStatus",
      "dataType": "ENUM",
      "needValueCheck": false,
      "evaluateByProvider": false,
      "validValueSet": [
        "STOPPED",
        "RUNNING",

```

```
        "CRASHED",
        "DISABLED"
    ],
    "nameSpace": "servicestatus"
},
"status": {
    "name": "status",
    "dataType": "ENUM",
    "needValueCheck": true,
    "evaluateByProvider": true,
    "validValueSet": [
        "STOPPED",
        "RUNNING",
        "CRASHED",
        "DISABLED"
    ],
    "nameSpace": "servicestatus"
},
"statusChanged": {
    "name": "statusChanged",
    "dataType": "BOOLEAN",
    "needValueCheck": true,
    "evaluateByProvider": false,
    "validValueSet": [],
    "nameSpace": "servicestatus"
}
}
}
```

GET: Current CMX Image Version

Description

This API returns the current version of the CMX Image.

HTTP Method

GET

Resource URI

/api/config/v1/version/image

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
{
  "cmx_image_version": "CISCO_CMX-10.4.0-93.cmx",
  "cmx_rpm_versions": [
    "cisco_cmx_connect-10.4.0-18",
    "cisco_cmx_wips-10.2.0-96",
    "cisco_cmx-10.4.0-1234"
  ]
}
```

GET: Count of Active Alerts

Description

This API returns a count of active alerts.

HTTP Method

GET

Resource URI

/api/config/v1/alerts/count

Requires OAuth

N

Parameters

None.

Content Type

application/json

GET: All Alerts

Description

This API returns all active alerts.

HTTP Method

GET

Resource URI

/api/config/v1/alerts

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
[
  {
    "changedOn": 1490159411911,
    "tenantId": 0,
    "lastNotificationTime": 1490159411918,
    "hashkey": -1446685026,
    "alertType": "NMSP_CONNECTION_STATUS",
    "alertStatus": "Unhandled",
    "severity": "Critical",
    "origin": "cmx-vmdev83 WLC: 10.32.168.50",
    "source": "NMSPLB",
    "alarmDescription": "NMSP connection status is inactive for WLC 10.32.168.50",
    "lastEmail": 0,
    "refId": "NMSPLB"
  }
]
```

POST: Add Role to User

Description

This API adds a role to a user.

HTTP Method

POST

Resource URI

/api/config/v1/aaa/users/:username/role/:rolename

Requires Basic Auth

N

Parameters

Table 32: Parameter Details

Name	Required	Default	Type	Location	Description
username	Y	—	String	pathReplace	Username of the user.
rolename	Y	—	String	pathReplace	Role name to be added to the user.

Content Type

application/json

DELETE: Role from User

Description

Remove role from a user.

HTTP Method

DELETE

Resource URI

/api/config/v1/aaa/users/:username/role/:rolename

Requires OAuth

N

Parameters

Table 33: Parameter Details

Name	Required	Default	Type	Location	Description
username	Y	—	String	pathReplace	Username of user.
rolename	Y	—	String	pathReplace	Role name that needs to be deleted from this user.

Content Type

application/json

GET: All Users in the System

Description

This API gets the details of all users in the system.

HTTP Method

GET

Resource URI

/api/config/v1/aaa/users

Requires Basic Auth

N

Parameters

None.

Content Type

application/json

Sample Output

```
[
  {
    "id": 1,
    "username": "admin",
    "password": "*****",
    "firstname": "Admin",
    "lastname": "User",
    "userGroups": [],
    "roles": [
      {
        "id": 9,
        "name": "Admin",
        "privileges": []
      }
    ],
    "developerkey": "xjPksHwUQm6bUdITCymREKaoShqB2HPQ",
    "lastlogin": 1519852131789
  }
]
```


POST: Create a User

Description

This API enables you to create a user.

HTTP Method

POST

Resource URI

/api/config/v1/aaa/users

Requires Basic Auth

N

Parameters

Table 34: Parameter Details

Name	Required	Default	Type	Location	Description
__username	Y	—	string	body	Username of the user.
password	Y	—	string	body	Password of the user.
firstname	N	—	string	body	First name of the user.
lastname	N	—	string	body	Last name of the user.
roles	N	—	text	body	Roles for this user.
developerkey	N	—	string	body	CMX API Developer Key.
lastlogin	N	—	text	body	User's last login.

Content Type

application/json

POST: Modify User

Description

This API modifies the attributes of a user.

HTTP Method

POST

Resource URI

/api/config/v1/aaa/users/:username

Requires Basic Auth

N

Parameters

Table 35: Parameter Details

Name	Required	Default	Type	Location	Description
username	Y	—	String	pathReplace	Username name of the user
__username	Y	—	string	body	Username of the user.
password	Y	—	string	body	Password of the user.
firstname	N	—	string	body	First name of the user.
lastname	N	—	string	body	Last name of the user.
roles	N	—	text	body	Roles assigned to this user.
developerkey	N	—	string	body	CMX API Developer Key.
lastlogin	N	—	text	body	User's Last Login.

Content Type

application/json

GET: User by Username

Description

This API retrieves user by username.

HTTP Method

GET

Resource URI

/api/config/v1/aaa/users/:username

Requires Basic Auth

N

Parameters

Table 36: Parameter Details

Name	Required	Default	Type	Location	Description
username	Y	—	String	pathReplace	Username

Content Type

application/json

Sample Output (JSON)

10.30.114.188/api/config/v1/aaa/users/admin

```
{
  "id": 102,
  "username": "mika",
  "password": "*****",
  "firstname": "mika",
  "lastname": "mika",
  "userGroups": [],
  "roles": [
    {
      "id": 5,
      "name": "Read Only",
      "privileges": []
    }
  ],
  "developerkey": null,
  "lastlogin": 1507596970322
}
```

DELETE: User by Username

Description

This API deletes a user.

HTTP Method

DELETE

Resource URI

/api/config/v1/aaa/users/:username

Requires Basic Auth

N

Parameters

Table 37: Parameter Details

Name	Required	Default	Type	Location	Description
username	Y	—	String	pathReplace	Username.

Content Type

application/json

GET: All Roles

Description

This API gets all roles.

HTTP Method

GET

Resource URI

/api/config/v1/aaa/roles

Requires Basic Auth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
[
  {
    "id": 1,
    "name": "System",
    "privileges": []
  },
  {
    "id": 2,
    "name": "Manage",
    "privileges": []
  },
  {
    "id": 3,
    "name": "Analytics",
    "privileges": []
  },
  {
    "id": 4,
    "name": "Connect",
    "privileges": []
  },
  {
    "id": 7,
    "name": "Location",
    "privileges": []
  },
  {
    "id": 8,
    "name": "ConnectExperience",
```

```
    "privileges": []
  },
  {
    "id": 9,
    "name": "Admin",
    "privileges": []
  },
  {
    "id": 5,
    "name": "Read Only",
    "privileges": []
  }
]
```

GET: All Campuses

Description

This API gets information about all campuses.

HTTP Method

GET

Resource URI

/api/config/v1/campuses

Requires OAuth

N

Parameters

None.

Content Type

application/json

GET: Campus by Name

Description

This API returns a campus by name.

HTTP Method

GET

Resource URI

/api/config/v1/campuses/:name

Requires OAuth

N

Parameters

Table 38: Parameter Details

Name	Required	Default	Type	Location	Description
name	Y	—	String	pathReplace	Campus Name .

Content Type

application/json

PUT: Add Campus

Description

This API enables you to add a campus.

HTTP Method

PUT

Resource URI

/api/config/v1/campuses

Requires OAuth

N

Parameters

Table 39: Parameter Details

Name	Required	Default	Type	Location	Description
objectVersion	N	—	number	body	objectVersion
name	Y	—	string	body	Name of the campus. This value should be unique.
dimension	N	—	text	body	Dimension
image	N	—	text	body	image
buildingList	N	—	text	body	List of buildings inside the campus.
aesUid	N	—	number	body	aesUid
aesUidString	N	—	string	body	aesUidString
members	N	—	text	body	members

Content Type

application/json

GET: Count of All Map Elements

Description

This API provides count of campuses, buildings, and floors.

HTTP Method

GET

Resource URI

/api/config/v1/maps/count

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
{
  "totalCampuses": 2,
  "totalBuildings": 3,
  "totalFloors": 8,
  "totalAps": 158,
  "campusCounts": [
    {
      "campusName": "Nortech Campus",
      "totalBuildings": 1,
      "buildingCounts": [
        {
          "buildingName": "Nortech-1",
          "totalFloors": 1,
          "floorCounts": [
            {
              "floorName": "1st Floor",
              "apCount": 14
            }
          ]
        }
      ]
    },
    {
      "campusName": "System Campus",
      "totalBuildings": 2,
      "buildingCounts": [
        {
          "buildingName": "SJC23",
          "totalFloors": 3,
```

```
    "floorCounts": [
      {
        "floorName": "1st floor (CCW remodel)",
        "apCount": 25
      },
      {
        "floorName": "2nd floor (CCW remodel)",
        "apCount": 25
      },
      {
        "floorName": "3rd floor (CCW remodel)",
        "apCount": 24
      }
    ]
  },
  {
    "buildingName": "SJC24",
    "totalFloors": 4,
    "floorCounts": [
      {
        "floorName": "2nd floor (CCW remodel)",
        "apCount": 21
      },
      {
        "floorName": "2nd floor (Area Addition)",
        "apCount": 0
      },
      {
        "floorName": "3rd floor (CCW remodel)",
        "apCount": 24
      },
      {
        "floorName": "1st floor (CCW remodel)",
        "apCount": 25
      }
    ]
  }
]
}
```

GET: List of all Building Names.

Description

This API provides a list of all buildings.

HTTP Method

GET

Resource URI

/api/config/v1/maps/building/list/:name

Requires Basic Auth

N

Parameters

Table 40: Parameter Details

Name	Required	Default	Type	Location	Description
name	Y	—	String	pathReplace	Campus Name

Content Type

application/json

API History

Table 41: API History

Release	Modification
Cisco CMX Release 10.4	This API is introduced.

GET: List of all Building Names

Description

This API provides a list of all buildings.

HTTP Method

GET

Resource URI

/api/config/v1/maps/building/list

Requires Basic Auth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
[
  "Nortech Campus>Nortech-1",
  "System Campus>SJC24",
  "System Campus>SJC23"
]
```

API History

Table 42: API History

Release	Modification
Cisco CMX Release 10.4	This API is introduced.

GET: List of all Floor Names

Description

This API provides a list of all Floors in the system.

HTTP Method

GET

Resource URI

/api/config/v1/maps/floor/list/:name

Requires Basic Auth

N

Parameters

Table 43: Parameter Details

Name	Required	Default	Type	Location	Description
name	Y	—	String	pathReplace	Building Name

Content Type

application/json

API History

Table 44: API History

Release	Modification
Cisco CMX Release 10.4	This API is introduced.

GET: List of all Floor Names

Description

This API provides a list of all floors in the system.

HTTP Method

GET

Resource URI

/api/config/v1/maps/floor/list

Requires Basic Auth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
[
  "System Campus>SJC23>3rd floor (CCW remodel)",
  "System Campus>SJC23>2nd floor (CCW remodel)",
  "Nortech Campus>Nortech-1>1st Floor",
  "System Campus>SJC23>1st floor (CCW remodel)",
  "System Campus>SJC24>2nd floor (CCW remodel)",
  "System Campus>SJC24>3rd floor (CCW remodel)",
  "System Campus>SJC24>2nd floor (Area Addition)",
  "System Campus>SJC24>1st floor (CCW remodel)"
]
```

API History

Table 45: API History

Release	Modification
Cisco CMX Release 10.4	This API is introduced.

GET: All Maps

Description

This API returns all maps.

HTTP Method

GET

Resource URI

/api/config/v1/maps

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
{
  "version": 0,
  "campuses": [
    {
      "objectVersion": 0,
      "name": "System Campus",
      "dimension": {
        "length": 99999,
        "width": 99999,
        "height": 99999,
        "offsetX": 0,
        "offsetY": 0,
        "unit": "FEET"
      },
      "image": null,
      "buildingList": [
        {
          "aesUId": -6105692415270583000,
          "objectVersion": 0,
          "name": "SJC23",
          "dimension": {
            "length": 300,
            "width": 500,
            "height": 10,
            "offsetX": 0,
            "offsetY": 0,
            "unit": "FEET"
          }
        }
      ]
    }
  ]
}
```



```

"image": null,
"floorList": [
  {
    "aesUid": -5970502993869536000,
    "calibrationModelId": -5970502993867530000,
    "objectVersion": 0,
    "name": "1st floor (CCW remodel)",
    "dimension": {
      "length": 249.9,
      "width": 299.9,
      "height": 10,
      "offsetX": 0,
      "offsetY": 0,
      "unit": "FEET"
    },
    "isOutdoor": false,
    "floorNumber": 1,
    "image": {
      "imageName": "cadConversion_1463400556649_f.jpg",
      "zoomLevel": 5,
      "width": 3276,
      "height": 2715,
      "size": 3276,
      "maxResolution": 16,
      "colorDepth": 8
    },
    "gpsMarkers": null,
    "zones": null,
    "obstacles": [
      {
        "type": "THICK_WALL",
        "attenuation": 0,
        "obstacleCoordinates": [
          {
            "x": 2.0488472,
            "y": 3.2261696,
            "z": 0,
            "unit": "FEET"
          },
          {
            "x": 2.561059,
            "y": 236.22719,
            "z": 0,
            "unit": "FEET"
          }
        ]
      },
      {
        "type": "NORMAL_WALL",
        "attenuation": 0,
        "obstacleCoordinates": [
          {
            "x": 91.68591,
            "y": 233.66675,
            "z": 0,
            "unit": "FEET"
          },
          {
            "x": 93.73476,
            "y": 212.15895,
            "z": 0,
            "unit": "FEET"
          }
        ]
      }
    ]
  }
]

```

```

    }
  ],
  "accessPoints": [
    {
      "floorId": -5970502993869536000,
      "angle": 1.57,
      "apType": 2,
      "switchName": null,
      "name": "sjc23-11-cap1",
      "radioMacAddress": "00:42:68:a2:2a:80",
      "ethMacAddress": null,
      "ipAddress": null,
      "numOfSlots": 2,
      "mapCoordinates": {
        "x": 12.216251,
        "y": 13.826434,
        "z": 10,
        "unit": "FEET"
      },
      "apMode": "LOCAL",
      "apInterfaces": [
        {
          "band": "IEEE_802_11_B",
          "slotNumber": 0,
          "channelAssignment": 1,
          "channelNumber": 1,
          "txPowerLevel": 8,
          "antennaPattern": "Internal-3700-2.4GHz",
          "antennaAngle": 1.5707964,
          "antennaElevAngle": 0,
          "antennaGain": 8,
          "antennaDiversity": 3,
          "antennaMode": 1,
          "antennaType": 1,
          "txPowerControl": 1,
          "unit": "RADIAN",
          "dualBandSlot": false
        },
        {
          "band": "IEEE_802_11_A",
          "slotNumber": 1,
          "channelAssignment": 1,
          "channelNumber": 36,
          "txPowerLevel": 3,
          "antennaPattern": "Internal-3700-5GHz",
          "antennaAngle": 1.5707964,
          "antennaElevAngle": 0,
          "antennaGain": 8,
          "antennaDiversity": 3,
          "antennaMode": 1,
          "antennaType": 1,
          "txPowerControl": 1,
          "unit": "RADIAN",
          "dualBandSlot": false
        }
      ],
      "floorIdString": "-5970502993869536658",
      "geoCoordinate": null,
      "deviceDetails": null
    },
    {
      "floorId": -5970502993869536000,
      "angle": 1.57,
      "apType": 2,

```

```

"switchName": null,
"name": "sjc23-11-cap10",
"radioMacAddress": "00:42:68:ae:2c:20",
"ethMacAddress": null,
"ipAddress": null,
"numOfSlots": 2,
"mapCoordinates": {
  "x": 22.229992,
  "y": 100.062416,
  "z": 10,
  "unit": "FEET"
},
"apMode": "LOCAL",
"apInterfaces": [
  {
    "band": "IEEE_802_11_B",
    "slotNumber": 0,
    "channelAssignment": 1,
    "channelNumber": 1,
    "txPowerLevel": 8,
    "antennaPattern": "Internal-3700-2.4GHz",
    "antennaAngle": 1.5707964,
    "antennaElevAngle": 0,
    "antennaGain": 8,
    "antennaDiversity": 3,
    "antennaMode": 1,
    "antennaType": 1,
    "txPowerControl": 1,
    "unit": "RADIAN",
    "dualBandSlot": false
  },
  {
    "band": "IEEE_802_11_A",
    "slotNumber": 1,
    "channelAssignment": 1,
    "channelNumber": 64,
    "txPowerLevel": 4,
    "antennaPattern": "Internal-3700-5GHz",
    "antennaAngle": 1.5707964,
    "antennaElevAngle": 0,
    "antennaGain": 8,
    "antennaDiversity": 3,
    "antennaMode": 1,
    "antennaType": 1,
    "txPowerControl": 1,
    "unit": "RADIAN",
    "dualBandSlot": false
  }
],
"floorIdString": "-5970502993869536658",
"geoCoordinate": null,
"deviceDetails": null
}
],
"floorIdString": "-5970502993869536658",
"geoCoordinate": null,
"deviceDetails": null
}
],
"referenceMarkers": null,
"exciters": null,
"filterRegions": [
  {
    "regionType": "OUTSIDE",

```

```

        "regionCoordinates": [
          {
            "x": 0,
            "y": 0,
            "z": 0,
            "unit": "FEET"
          },
          {
            "x": 299.9,
            "y": 0,
            "z": 0,
            "unit": "FEET"
          },
          {
            "x": 299.9,
            "y": 249.9,
            "z": 0,
            "unit": "FEET"
          },
          {
            "x": 0,
            "y": 249.9,
            "z": 0,
            "unit": "FEET"
          }
        ],
        "isDefault": false
      }
    ],
    "filterRails": null,
    "hierarchyName": "System Campus>SJC23>1st floor (CCW remodel)",
    "aesUidString": "-5970502993869536658",
    "geoLocationCapable": "NO_GPS_MARKERS_PRESENT",
    "mode": null,
    "floorModeDetails": {
      "mode": "RSSI",
      "requestedModeSet": false
    }
  }
],
"aesUid": 727035700041482200,
"aesUidString": "727035700041482262",
"members": null
}
]
}

```

GET: Campus by Name

Description

This API returns a campus by name.

HTTP Method

GET

Resource URI

/api/config/v1/maps/info/:campusName

Requires OAuth

N

Parameters

Table 46: Parameter Details

Name	Required	Default	Type	Location	Description
campusName	Y	—	String	pathReplace	Campus Name

Content Type

application/json

GET: Building by Name Inside Specific Campus

Description

This API returns a building by name.

HTTP Method

GET

Resource URI

/api/config/v1/maps/info/:campusName/:buildingName

Requires OAuth

N

Parameters

Table 47: Parameter Details

Name	Required	Default	Type	Location	Description
campusName	Y	—	String	pathReplace	Campus Name.
buildingName	Y	—	String	pathReplace	Building Name.

Content Type

application/json

GET: Floor Inside Specific Building and Specific Campus

Description

This API returns a floor by name based on a specific building and campus.

HTTP Method

GET

Resource URI

/api/config/v1/maps/info/:campusName/:buildingName/:floorName

Requires OAuth

N

Parameters

Table 48: Parameter Details

Name	Required	Default	Type	Location	Description
campusName	Y	—	String	pathReplace	Campus Name.
buildingName	Y	—	String	pathReplace	Building Name.
floorName	Y	—	String	pathReplace	Floor Name.

Content Type

application/json

GET: Floor Image

Description

This API returns an image for a given combination of campus, building, and floor name.

HTTP Method

GET

Resource URI

/api/config/v1/maps/image/:campusName/:buildingName/:floorName

Requires Basic Auth

N

Parameters

Table 49: Parameter Details

Name	Required	Default	Type	Location	Description
campusName	Y	—	String	pathReplace	Campus Name.
buildingName	Y	—	String	pathReplace	Building Name.
floorName	Y	—	String	pathReplace	Floor Name.

Content Type

application/json

GET: Image by Name

Description

This API returns an image by image name.

HTTP Method

GET

Resource URI

/api/config/v1/maps/imagesource/:imageName

Requires OAuth

N

Parameters

Table 50: Parameter Details

Name	Required	Default	Type	Location	Description
imageName	Y	—	String	pathReplace	Image Name.

Content Type

application/json

GET: All Sites

Description

This API returns all the presence sites.

HTTP Method

GET

Resource URI

/api/config/v1/sites

Requires OAuth

N

Parameters

None.

Content Type

application/json

Example

```
[{"changedOn":0,"aesUID":1487056035936,"name":"PSL  
28, 2017 3:37:50  
28, 2017 3:37:50 PM","objectVersion":0}]
```

GET: Site Details by ID or Name

Description

This API returns the presence site for the specified ID or Name.

HTTP Method

GET

Resource URI

/api/config/v1/sites/:id

Requires OAuth

N

Parameters

None.

Content Type

application/json

GET: System Settings Preferences

Description

This API retrieves system settings.

HTTP Method

GET

Resource URI

/api/config/v1/system/preferences/:component/:key

Requires OAuth

N

Parameters

Table 51: Parameter Details

Name	Required	Default	Type	Location	Description
component	Y	—	String	pathReplace	The component.
key	N	—	String	pathReplace	The key to retrieve. If not set, retrieves all keys for the given component.

Content Type

application/json

PUT: System Settings

Description

This API enable you to store system settings. This operation can only be performed by users in the 'Admin' group.

HTTP Method

PUT

Resource URI

/api/config/v1/system/preferences/:component/:key

Requires OAuth

N

Parameters

Table 52: Parameter Details

Name	Required	Default	Type	Location	Description
component	Y	—	String	pathReplace	The component.
key	Y	—	String	pathReplace	The key.
String	Y	—	string	body	Value.

Content Type

application/json


```

"rules": [
  {
    "conditions": [
      {
        "condition": "bletagupdate.isBle == true"
      },
      {
        "condition": "bletagupdate.deviceType == tag"
      }
    ]
  }
],
"subscribers": [
  {
    "receivers": [
      {
        "uri":
https://c2f8pk.execute-api.us-west-2.amazonaws.com/43/tag/listener/5f59768-0f4674-925-86510e72c3cmxidentifier-a191c30-8-fd-11e7451c432368834/,
        "messageFormat": "JSON",
        "headers": null,
        "qos": "AT_MOST_ONCE"
      }
    ]
  }
],
"enabled": true,
"internal": true,
"cloud": true,
"enableMacScrambling": false,
"macScramblingSalt": "",
"notificationType": "BleTagUpdate"
},
{
  "name": "gateway-blemgmtadmin-mapChange-io89bg",
  "userId": "local-user",
  "rules": [
    {
      "conditions": []
    }
  ],
  "subscribers": [
    {
      "receivers": [
        {
          "uri":
https://c2f8pk.execute-api.us-west-2.amazonaws.com/43/tag/listener/5f59768-0f4674-925-86510e72c3cmxidentifier-a191c30-8-fd-11e7451c432368834/,
          "messageFormat": "JSON",
          "headers": null,
          "qos": "AT_MOST_ONCE"
        }
      ]
    }
  ]
},
"enabled": true,
"internal": true,
"cloud": true,
"enableMacScrambling": false,
"macScramblingSalt": "",
"notificationType": "NetworkDesignChanged"
},
{
  "name": "gateway-blemanager.cmxcis.co-bleinfo-io89bg",

```

```

"userId": "local-user",
"rules": [
  {
    "conditions": [
      {
        "condition": "bletagupdate.isBle == true"
      },
      {
        "condition": "bletagupdate.deviceType == tag"
      }
    ]
  }
],
"subscribers": [
  {
    "receivers": [
      {
        "uri": "https://127.0.0.1:9094/api/ble/v1/notify/v1/absence",
        "messageFormat": "JSON",
        "headers": null,
        "qos": "AT_MOST_ONCE"
      }
    ]
  }
],
"enabled": true,
"internal": true,
"cloud": true,
"enableMacScrambling": false,
"macScramblingSalt": "",
"notificationType": "BleTagUpdate"
},
{
  "name": "CMX_Api_Server_Notification_2",
  "userId": "admin",
  "rules": [
    {
      "conditions": []
    }
  ],
  "subscribers": [
    {
      "receivers": [
        {
          "uri": "http://127.0.0.1:9094/api/notify/v1/absence",
          "messageFormat": "JSON",
          "headers": null,
          "qos": "AT_MOST_ONCE"
        }
      ]
    }
  ],
  "enabled": true,
  "internal": true,
  "cloud": false,
  "enableMacScrambling": false,
  "macScramblingSalt": "",
  "notificationType": "Absence"
},
{
  "name": "PythonAW",
  "userId": "admin",

```

```

"rules": [
  {
    "conditions": [
      {
        "condition": "locationupdate.macAddressList == 98:07:2d:8d:75:e8;"
      },
      {
        "condition": "locationupdate.deviceType == tag"
      }
    ]
  }
],
"subscribers": [
  {
    "receivers": [
      {
        "uri": "http://dsladden.pythonanywhere.com:80",
        "messageFormat": "JSON",
        "headers": null,
        "qos": "AT_MOST_ONCE"
      }
    ]
  }
],
"enabled": true,
"internal": false,
"cloud": false,
"enableMacScrambling": false,
"macScramblingSalt": "",
"notificationType": "LocationUpdate"
},
{
  "name": "PythonAWN",
  "userId": "admin",
  "rules": [
    {
      "conditions": []
    }
  ],
  "subscribers": [
    {
      "receivers": [
        {
          "uri": "http://taibrahi.pythonanywhere.com:80",
          "messageFormat": "JSON",
          "headers": null,
          "qos": "AT_MOST_ONCE"
        }
      ]
    }
  ],
  "enabled": false,
  "internal": false,
  "cloud": false,
  "enableMacScrambling": true,
  "macScramblingSalt": "",
  "notificationType": "NetworkDesignChanged"
},
{
  "name": "HeaderDone",
  "userId": "admin",
  "rules": [
    {
      "conditions": []
    }
  ]
}

```

```
    }
  ],
  "subscribers": [
    {
      "receivers": [
        {
          "uri": "http://10.41.32.235:8000",
          "messageFormat": "JSON",
          "headers": null,
          "qos": "AT_MOST_ONCE"
        }
      ]
    }
  ],
  "enabled": false,
  "internal": false,
  "cloud": false,
  "enableMacScrambling": false,
  "macScramblingSalt": "",
  "notificationType": "LocationUpdate"
}
]
```

GET: Notifications by Name

Description

This API returns a notification subscription by name.

HTTP Method

GET

Resource URI

/api/config/v1/notifications/:name

Requires OAuth

N

Parameters

Table 53: Parameter Details

Name	Required	Default	Type	Location	Description
name	Y	—	String	pathReplace	Notification Name.

Content Type

application/json

GET: Notification Subscription Availability

Description

This API checks if a notification subscription exists. It returns FOUND(302) if exists, 404 is not found.

HTTP Method

GET

Resource URI

/api/config/v1/notifications/exists/:name

Requires OAuth

N

Parameters

Table 54: Parameter Details

Name	Required	Default	Type	Location	Description
name	Y	—	String	pathReplace	Notification Name.

Content Type

application/json

PUT: Add Notification Subscription

Description

This API allows you to add a notification subscription.

HTTP Method

PUT

Resource URI

/api/config/v1/notification

Requires OAuth

N

Parameters

Table 55: Parameter Details

Name	Required	Default	Type	Location	Description
userId	Y	—	string	body	User ID.
rules	Y	—	text	body	List of rules.
subscribers	Y	—	text	body	Subscribers

Name	Required	Default	Type	Location	Description
notificationType	Y	—	enumerated	body	<p>Choose one of the following notification types:</p> <ul style="list-style-type: none"> • Any • Absence • AreaChange • Association • BatteryLife • Chokepoint • Containment • Emergency • Movement • Presence • LocationUpdate • Zone • Location • ServiceStatus • NetworkDesignChanged • CpuUsage • MemoryUsage • DiskUsage • BeaconMovement • BeaconAbsence • Update • InOut • PasserbyDetected • PasserbyBecameVisitor • VisitorWentAway • SiteEntryChanged
enabled	N	—	enumerated	body	<p>enabled</p> <ul style="list-style-type: none"> • true • false

Name	Required	Default	Type	Location	Description
enableMacScrambling	N	—	enumerated	body	enableMacScrambling <ul style="list-style-type: none"> • true • false

Content Type

application/json

Sample Input (JSON)

application/json

```
{
  "name": "locupdate",
  "userId": "admin",
  "rules": [
    {
      "conditions": [
        {
          "condition": "locationupdate.macAddressList ==
00:0c:cc:4f:5f:ba;00:24:d7:37:68:d8;00:24:d7:59:8f:2c;00:0b:6b:a8:56:9f;"
        }
      ]
    }
  ],
  "subscribers": [
    {
      "receivers": [
        {
          "uri": "http://172.19.35.203:7123",
          "messageFormat": "JSON",
          "headers": null,
          "qos": "AT_MOST_ONCE"
        }
      ]
    }
  ],
  "enabled": true,
  "internal": false,
  "cloud": false,
  "enableMacScrambling": false,
  "macScramblingSalt": "",
  "notificationType": "LocationUpdate"
}
```

PUT: List of Notification Subscriptions

Description

This API allows you to add a list of notification subscriptions.

HTTP Method

PUT

Resource URI

/api/config/v1/notifications

Requires OAuth

N

Parameters

None.

Content Type

application/json

DELETE: Notification Subscription by Notification Name

Description

This API allows you to delete a notification subscription.

HTTP Method

DELETE

Resource URI

/api/config/v1/notifications/:name

Requires OAuth

N

Parameters

Table 56: Parameter Details

Name	Required	Default	Type	Location	Description
name	Y	—	String	pathReplace	Notification Name.

Content Type

application/json

GET: System Alert Subscription

Description

This API returns a system alert notification subscription by name.

HTTP Method

GET

Resource URI

/api/config/v1/notifications/alerts

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
[
  {
    "name": "serviceIsCrashed",
    "userId": "admin",
    "rules": [
      {
        "conditions": [
          {
            "condition": "servicestatus.status == CRASHED"
          }
        ]
      }
    ],
    "subscribers": [
      {
        "receivers": [
          {
            "uri": "local://local",
            "messageFormat": "JSON",
            "headers": null,
            "qos": "AT_MOST_ONCE"
          }
        ]
      }
    ],
    "enabled": true,
    "internal": false,
    "cloud": false,
    "enableMacScrambling": false,
  }
]
```

```
    "macScramblingSalt": "",
    "severity": "Critical",
    "notificationType": "ServiceStatus"
  },
  {
    "name": "serviceIsDown",
    "userId": "admin",
    "rules": [
      {
        "conditions": [
          {
            "condition": "servicestatus.status == STOPPED"
          }
        ]
      }
    ],
    "subscribers": [
      {
        "receivers": [
          {
            "uri": "local://local",
            "messageFormat": "JSON",
            "headers": null,
            "qos": "AT_MOST_ONCE"
          }
        ]
      }
    ],
    "enabled": true,
    "internal": false,
    "cloud": false,
    "enableMacScrambling": false,
    "macScramblingSalt": "",
    "severity": "Info",
    "notificationType": "ServiceStatus"
  }
]
```

GET: Notifications by Name

Description

This API returns a system alert notification subscription by name.

HTTP Method

GET

Resource URI

/api/config/v1/notifications/alerts/:name

Requires OAuth

N

Parameters

Table 57: Parameter Details

Name	Required	Default	Type	Location	Description
name	Y	—	String	pathReplace	Notification Name.

Content Type

application/json

PUT: System Alert Subscription

Description

This API allows you to add a system alert subscription.

HTTP Method

PUT

Resource URI

/api/config/v1/notifications/alert

Requires OAuth

N

Parameters

Table 58: Parameter Details

Name	Required	Default	Type	Location	Description
severity	Y	—	enumerated	body	Choose one of the following severity levels: <ul style="list-style-type: none"> • Critical • Major • Minor • Warning • Info • Cleared
userId	Y	—	string	body	User ID.
rules	Y	—	text	body	List of rules.
subscribers	Y	—	text	body	Subscribers

Name	Required	Default	Type	Location	Description
notificationType	Y	—	enumerated	body	<p>Choose one of the following notification types:</p> <ul style="list-style-type: none"> • Any • Absence • AreaChange • Association • BatteryLife • Chokepoint • Containment • Emergency • Movement • Presence • LocationUpdate • Zone • Location • ServiceStatus • NetworkDesignChanged • CpuUsage • MemoryUsage • DiskUsage • BeaconMovement • BeaconAbsence • Update • InOut • PasserbyDetected • PasserbyBecameVisitor • VisitorWentAway • SiteEntryChanged
enabled	N	—	enumerated	body	<p>enabled</p> <ul style="list-style-type: none"> • true • false

Name	Required	Default	Type	Location	Description
enableMacScrambling	N	—	enumerated	body	enableMacScrambling <ul style="list-style-type: none">• true• false

Content Type

application/json

DELETE: Notification Alert Subscription

Description

This API allows you to delete a system alert notification subscription.

HTTP Method

DELETE

Resource URI

/api/config/v1/notifications/alerts/:name

Requires OAuth

N

Parameters

Table 59: Parameter Details

Name	Required	Default	Type	Location	Description
name	Y	—	String	pathReplace	Notification Name.

Content Type

application/json

POST: Change Status of Notification by Name

Description

This API enable/disable a notification subscription by name.

HTTP Method

POST

Resource URI

/api/config/v1/notifications/:name/:action

Requires OAuth

N

Parameters

Table 60: Parameter Details

Name	Required	Default	Type	Location	Description
name	Y	—	String	pathReplace	Notification Name.
action	Y	—	String	pathReplace	Enable/Disable

Content Type

application/json

GET: Unique Alerts by Time Interval

Description

This API returns a list of unique alerts by time interval.

HTTP Method

GET

Resource URI

/api/config/v1/history/alerts/unique

Requires Basic Auth

N

Parameters

Table 61: Parameter Details

Name	Required	Default	Type	Location	Description
startTime	Y	—	Number	query	Specifies the start time in milliseconds.
endTime	Y	—	Number	query	Specifies the end time in milliseconds.

Content Type

application/json

Table 62: API History

Release	Modification
Cisco CMX Release 10.4	This command is deprecated.

GET: Alert by Time Interval

Description

This API returns a list of alerts by time interval.

HTTP Method

GET

Resource URI

/api/config/v1/history/alerts

Requires OAuth

N

Parameters

Table 63: Parameter Details

Name	Required	Default	Type	Location	Description
startTime	Y	—	Number	query	Specifies the start time in milliseconds.
endTime	Y	—	Number	query	Specifies the end time in milliseconds.

Content Type

application/json

GET: Alerts by Time Interval and Hashkey

Description

This API returns a list of alerts by time interval and hashkey.

HTTP Method

GET

Resource URI

/api/config/v1/history/alerts/:key

Requires Basic Auth

N

Parameters

Table 64: Parameter Details

Name	Required	Default	Type	Location	Description
key	Y	—	String	pathReplace	Alert Hashkey which could be obtained by calling /config/v1/alerts.
startTime	Y	—	Number	query	Specifies the start time in milliseconds.
endTime	Y	—	Number	query	Specifies the end time in milliseconds.

Content Type

application/json

Table 65: API History

Release	Modification
Cisco CMX Release 10.4	This command is deprecated.

GET: Total Alerts Created for a Given Alert Key

Description

This API returns number of alerts for a given alert key.

HTTP Method

GET

Resource URI

/api/config/v1/history/alert/count/:key

Requires Basic Auth

N

Parameters

Table 66: Parameter Details

Name	Required	Default	Type	Location	Description
key	Y	—	String	pathReplace	Alert Hashkey which could be obtained by calling /config/v1/alerts.

Content Type

application/json

Table 67: API History

Release	Modification
Cisco CMX Release 10.4	This command is deprecated.

GET: All APs

Description

This API returns all APs.

HTTP Method

GET

Resource URI

/api/config/v1/aps

Requires OAuth

N

Parameters

None.

Content Type

application/json

GET: Access Point by MAC Address

Description

This API returns access point by given ap MAC address.

HTTP Method

GET

Resource URI

/api/config/v1/aps/:mac

Requires OAuth

N

Parameters

Table 68: Parameter Details

Name	Required	Default	Type	Location	Description
mac	Y	—	String	pathReplace	Access point MAC address.

Content Type

application/json

GET: Settings for a Given User

Description

This API retrieves settings for a given user.

HTTP Method

GET

Resource URI

/api/config/v1/user/preferences/:userid/:component/:key

Requires OAuth

N

Parameters

Table 69: Parameter Details

Name	Required	Default	Type	Location	Description
userid	Y	—	String	pathReplace	The user ID.
component	Y	—	String	pathReplace	The component.
key	N	—	String	pathReplace	The key to retrieve. If not set, retrieves all keys for the given component.

Content Type

application/json

PUT: Setting for a Given User

Description

This API stores the settings of a given user.

HTTP Method

PUT

Resource URI

/api/config/v1/user/preferences/:userid/:component/:key

Requires OAuth

N

Parameters

Table 70: Parameter Details

Name	Required	Default	Type	Location	Description
userid	Y	—	String	pathReplace	The user ID.
component	Y	—	String	pathReplace	The component.
key	Y	—	String	pathReplace	The key.
json	N	—	String	query	Whether the data passed is JSON - if set, this will validate the data and reject malformed JSON Allowed values/formats: true or false.
String	Y	—	string	body	Value

Content Type

application/json

GET: All Cisco WLC Controllers

Description

This API provides a list of all Cisco WLC Controllers.

HTTP Method

GET

Resource URI

/api/config/v1/controllers

Requires OAuth

N

Parameters

None.

Content Type

application/json

GET: Get Cisco WLC Controllers by IP address

Description

This API returns a controller given an IP address.

HTTP Method

GET

Resource URI

/api/config/v1/controllers/:ipAddress

Requires OAuth

N

Parameters

Table 71: Parameter Details

Name	Required	Default	Type	Location	Description
ipAddress	Y	—	String	pathReplace	IP Address.

Content Type

application/json

Sample Output

http://10.68.40.131/api/config/v1/controllers/10.68.40.124

```
{ "name": null, "ipAddress": "10.68.40.124", "readOnlyComm": null, "writeComm":
"iuBXuWikK4nfg52YKODcUg==", "snmpVersion": 1, "version": "8.1.131", "userName": "admin",
"authType": 0, "authPassword": null, "privType": 0, "privPassword": null, "macAddress": null,
"sysUpTime": 0, "unauthenticatedConnection": false, "applicableServices": [0], "aesUID":
1448982516930, "objectVersion": 0, "tagNotificationInterval": 0, "wlanConfigList": [],
"deviceVersion": null, "type": "WLC", "enablePassword": null, "peerMode": false, "members":
null }
```

PUT: Controller

Description

This API allows you to add a controller.

HTTP Method

PUT

Resource URI

/api/config/v1/controllers

Requires OAuth

N

Parameters

Table 72: Parameter Details

Name	Required	Default	Type	Location	Description
name	Y	—	string	body	Name of the Wireless LAN controller.
ipAddress	Y	—	string	body	IP address of the Wireless LAN controller.
readOnlyComm	Y	—	string	body	SNMP Read Community.
writeComm	Y	—	string	body	SNMP Write Community.
snmpVersion	N	—	number	body	SNMP Version.
version	Y	—	string	body	Software version of the WLC Controller.
userName	Y	—	string	body	User name for the telnet connection.
authType	Y	—	number	body	SNMP v3 Auth Type.
authPassword	N	—	string	body	Authentication Password.
privType	N	—	number	body	Privacy Type.
privPassword	N	—	string	body	Password.
macAddress	N	—	string	body	MAC Address.
sysUpTime	N	—	number	body	System Up time.

Name	Required	Default	Type	Location	Description
unauthenticatedConnection	N	—	enumerated	body	Authentication to connect to the WLC Controller. <ul style="list-style-type: none"> • true • false
applicableServices	Y	—	array	body	Services to subscribe to the controller.
aesUId	Y	—	number	body	Cisco Prime Infrastructure generated unique ID. If not generated by Cisco Prime Infrastructure, please use a unique value.
objectVersion	N	—	number	body	Object version.
tagNotificationInterval	N	—	number	body	Tag notification interval.
wlanConfigList	N	—	text	body	WLC Controller Configuration list.
deviceVersion	N	—	string	body	Version of the device.
type	N	—	enumerated	body	type <ul style="list-style-type: none"> • WLC • NGWC
enablePassword	N	—	string	body	enablePassword
peerMode	N	—	enumerated	body	peerMode <ul style="list-style-type: none"> • true • false
members	N	—	text	body	Members.

Content Type

application/json

DELETE: All opt-out Devices

Description

This API allows to delete ALL opt-out devices from opt-out service.

HTTP Method

DELETE

Resource URI

/api/configuration/v1/optout/devices/all

Requires OAuth

N

Parameters

None.

Content Type

application/json

GET: List of Opt-out Devices Within a Date Range

Description

This API return a full list of opt-out devices within a date range.

HTTP Method

GET

Resource URI

/api/configuration/v1/optout/devices

Requires OAuth

N

Parameters

Table 73: Parameter Details

Name	Required	Default	Type	Location	Description
validFrom	N	—	String	query	Start date of range Allowed values/formats: yyyy-mm-dd hh:mm:ss
validTo	N	—	String	query	End date of range Allowed values/formats: yyyy-mm-dd hh:mm:ss

Content Type

application/json

GET: Count of opt-out Devices

Description

This API return a count of opt-out devices.

HTTP Method

GET

Resource URI

/api/configuration/v1/optout/count

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output

```
{"Opt-out Device count":0}
```

DELETE: Opt-out Devices Within a Date Range

Description

This API deletes opt-out devices.

HTTP Method

DELETE

Resource URI

/api/configuration/v1/optout/devices/date

Requires OAuth

N

Parameters

Table 74: Parameter Details

Name	Required	Default	Type	Location	Description
validFrom	N	—	String	query	Start date of range Allowed values/formats: yyyy-mm-dd hh:mm:ss.
validTo	N	—	String	query	End date of range Allowed values/formats: yyyy-mm-dd hh:mm:ss.

Content Type

application/json

GET: List of Children Superzone IDs of a Heterarchy Element

Description

The call retrieves children superzone IDs of a heterarchy element and, under them, the AES IDs of the nested children floors. The element is identified by the path of the API call (either the full path or the id of the element—see Add/Update zones or tags for details on obtaining the element id).

HTTP Method

GET

Resource URI

/api/config/v1/heterarchy/:pathSegments/childrenfloors

Requires Basic Auth

N

Parameters

Table 75: Parameter Details

Name	Required	Default	Type	Location	Description
pathSegments	N	—	String	pathReplace	Full path to the element or element id.
validDate	N	—	String	query	Show elements valid at given date (yyyy-mm-dd HH:mm:ss) Allowed values/formats: yyyy-mm-dd HH:mm:ss.
level	N	—	String	query	Level name (SUPERZONE, FLOOR, AP, POI, or ZONE) Allowed values/formats: SUPERZONE FLOOR AP ZONE POI.

Content Type

application/json

API History*Table 76: API History*

Release	Modification
Cisco CMX Release 10.4	This API is introduced.

GET: Children Superzone IDs of Hierarchy Element

Description

The call retrieves children superzone IDs of an hierarchy element and, under them, the counts of all the nested children elements. The element is identified by the path of the API call (either the full path or the ID of the element- see Add/Update zones or tags for details on obtaining the element id). Specifying a level retrieves only children of that level.

HTTP Method

GET

Resource URI

/api/config/v1/hierarchy/:pathSegments/childrencounts

Requires Basic Auth

N

Parameters

Table 77: Parameter Details

Name	Required	Default	Type	Location	Description
pathSegments	N	—	String	pathReplace	Full path to the element or element ID.
validDate	N	—	String	query	Show elements valid from given date (yyyy-mm-dd HH:mm:ss) Allowed values/formats: yyyy-mm-dd HH:mm:ss.
level	N	—	String	query	Level name (SUPERZONE, FLOOR, AP, POI, or ZONE) Allowed values/formats: SUPERZONE FLOOR AP ZONE POI.

Content Type

application/json

API History

Table 78: API History

Release	Modification
Cisco CMX Release 10.4	This API is introduced.

GET: Gets the System Time

Description**HTTP Method**

GET

Resource URI

/api/config/v1/system/time

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
{
  "ISO8601Utils": "2017-12-18T08:56:16Z",
  "timeZoneOffset": -28800000,
  "serverTimeUTC": 1513587376429,
  "serverTime": "Mon Dec 18 00:56:16 PST 2017",
  "timeZone": "Pacific Standard Time"
}
```


DELETE: Removes all registered zones

Description

This API removes all registered zones.

HTTP Method

DELETE

Resource URI

/api/config/v1/zoneCountParams/:clusterId

Requires Basic Auth

N

Parameters

Table 79: Parameter Details

Name	Required	Default	Type	Location	Description
clusterId	Y	1	String	pathReplace	clusterId (default 1)

Content Type

application/json

GET: Returns All Registered Zones

Description

This API returns details of all registered zones.

HTTP Method

GET

Resource URI

/api/config/v1/zoneCountParams/:clusterId

Requires OAuth

N

Parameters

Table 80: Parameter Details

Name	Required	Default	Type	Location	Description
clusterId	Y	1	Number	pathReplace	clusterId (default 1)

Content Type

application/json

Usage Guidelines

`http://<cmx-ip-address>/api/config/v1/zoneCountParams/<cluster-id>`
 For Example:
`http://10.0.0.1/api/config/v1/zoneCountParams/1`

Sample Output

```
{
  name: "ZoneCountParams",
  zoneHierarchy: [
    "Simulator-2201-Campus0/Building2/Floor2/Zone2",
    "Simulator-2201-Campus0/Building4/Floor4/Zone4",
    "Simulator-2201-Campus0/Building7/Floor2/Zone3"
  ],
  zoneIds: [ ],
  zoneDetails: [
    {
      id: 65811,
      hierarchy: "Simulator-2201-Campus0/Building2/Floor2/Zone2",
      name: "Zone2",
      active: true
    },
    {
      id: 66475,
```

```
hierarchy: "Simulator-2201-Campus0/Building4/Floor4/Zone4",
name: "Zone4",
active: true
},
{
id: 67192,
hierarchy: "Simulator-2201-Campus0/Building7/Floor2/Zone3",
name: "Zone3",
active: true
}
],
totalZones: 3,
debug: false
}
```

POST: Add New Zone

Description

This API adds a zone to the existing list of zones. For all hierarchies, system tries to find them in the heterarchy and if the match is successful we have an ID for every zone specified. When the zone is not found, we drop that zone from the configuration.

HTTP Method

POST

Resource URI

/api/config/v1/zoneCountParams/:clusterId

Requires OAuth

N

Parameters

Table 81: Parameter Details

Name	Required	Default	Type	Location	Description
clusterId	Y	1	String	pathReplace	clusterId (default 1)
zoneHierarchy	Y		array	body	List of exact zone hierarchy separated by /, i.e. Campus/Building/Floor/Zone. (including spaces, if any of the campus / building /floor /zone has spaces in the name) Ensure zones hierarchy are nested within the square brackets [] to be considered as list, otherwise this operation would fail For specifying single zone, ["Campus/Building/Floor/Zone1"] For specifying multiple zones, ["Campus/Building/Floor/Zone1", "Campus/Building/Floor/Zone2"]
zoneIds	N		array	body	List of zoneids, Ensure zoneIds are nested within the square brackets [] to be considered as list, otherwise this operation would fail for e.g. single zone as [391] multiple zones as [391,392]

Name	Required	Default	Type	Location	Description
zoneDetails	N		text	body	Populated by API after parsing zoneHierarchy or zoneIds input
totalZones	N		number	body	Total registered zones, Populated by API after parsing zoneHierarchy or zoneIds input
debug	N	false	enumerated	body	debug flag to enable recording macaddresses for registered zones <ul style="list-style-type: none"> • true • false

Content Type

application/json

Sample Input (JSON)

```
{
  "name": "ZoneCountParams",
  "zoneHierarchy": ["Nortech Campus/Nortech Building/Security Floor/zone1",
    "Nortech Campus/Nortech Building/Security Floor/zone2",
    "System Campus/SJC-24/3rd Floor/Zone_2",
    "System Campus/SJC-24/3rd Floor/Zone_1"
  ]
}
```

PUT: Add (Overwrite) New Zone

Description

This API is similar to the POST: Add New Zone API, but replaces rather than appends the new zone(s) to the resigtered zone(s) list.

HTTP Method

PUT

Resource URI

/api/config/v1/zoneCountParams/:clusterId

Requires Basic Auth

N

Parameters

Table 82: Parameter Details

Name	Required	Default	Type	Location	Description
clusterId	Y	1	String	pathReplace	clusterId (default 1)
zoneHierarchy	Y		array	body	List of exact zone hierarchy separated by /, i.e. Campus/Building/Floor/Zone. (including spaces, if any of the campus / building /floor /zone has spaces in the name)</p> Ensure zones hierarchy are nested within the square brackets [] to be considered as list, otherwise this operation would fail</p> For specifying single zone, ["Campus/Building/Floor/Zone1"]</p> For specifying multiple zones, ["Campus/Building/Floor/Zone1", "Campus/Building/Floor/Zone2"]</p>
zoneIds	N		array	body	List of zoneids Ensure zoneIds are nested within the square brackets [] to be considered as list, otherwise this operation would fail for e.g. single zone as [391] multiple zones as [391,392]

Name	Required	Default	Type	Location	Description
zoneDetails	N		text	body	Populated by API after parsing zoneHierarchy or zoneIds input
totalZones	N		number	body	Total registered zones, Populated by API after parsing zoneHierarchy or zoneIds input
debug	N	false	enumerated	body	debug flag to enable recording macaddresses for registered zones <ul style="list-style-type: none"> • true • false

Content Type

application/json

API History*Table 83: API History*

Release	Modification
Cisco CMX Release 10.4	This API is introduced.

GET: Get All Subscriptions

Description

This API returns all subscriptions.

HTTP Method

GET

Resource URI

/config/v1/partnerStreamNotification

Requires OAuth

N

Parameters

None

Content Type

application/json

Sample Output

```
{
  "name": null,
  "subs": {
    "abc2": {
      "name": "abc2",
      "host": "127.0.0.1",
      "port": 8001,
      "enabled": false
    }
  },
  "lastActedSubs": [
    {
      "name": "abc2",
      "host": "127.0.0.1",
      "port": 8001,
      "enabled": false
    }
  ]
}
```


POST: Add or Update Subscriptions

Description

This API adds new or updates existing subscriptions. Subscriptions can not share a name. Their destinations (host+port combination) must be unique. You can have a maximum of five subscriptions (including disabled subscriptions).

HTTP Method

POST

Resource URI

/api/config/v1/partnerStreamNotification

Requires OAuth

N

Content Type

application/json

Sample Input

```
{"name": "abc2", "host": "127.0.0.1", "port": 8001, "enabled": false}
```

Sample Output

Output is successful if the response code is 200.

DELETE: Delete All Subscriptions

Description

This API deletes a subscription.

HTTP Method

DELETE

Resource URI

/api/config/v1/partnerStreamNotification

Requires OAuth

N

Parameters

None

Content Type

application/json

Sample Input

```
{ "name": "abc2" }
```

Sample Output

Output is successful if the response code is 200.

GET: Get Floors Managed by Controller

Description

This API gets a list of floors managed by Cisco WLC Controller.

HTTP Method

GET

Resource URI

/config/v1/controllers/:ipAddress/floor

Requires OAuth

N

Parameters

None

Content Type

application/json

Sample Output



Connect

- [Operations to query visitor user session data, on page 162](#)

Operations to query visitor user session data

GET: Query User Sessions

Description

Query user session data based on the filter criteria. The results are sorted by last login time in descending order. The search can be performed on MAC addresses, last session time, status, and any or all fields. The query is paged using index and count parameters with maximum size in 1000. The returned JSON object includes the number of records returned and next index to query if more. You can also download the queried result in CSV file with URL `/api/connect/v1/clients/export`. The export query does not have maximum size limit.

HTTP Method

GET

Resource URI

`/api/connect/v1/clients`

Requires OAuth

N

Parameters

Table 84: Parameter Details

Name	Required	Default	Type	Location	Description
start	N	—	String	query	Session start time based on last login time in UTC epoch format. Use the Epoch Converter. https://www.epochconverter.com/
end	N	—	String	query	Session end time based on last login time in UTC epoch format. Use the Epoch Converter. https://www.epochconverter.com/
index	N	—	String	query	Starting index of the query based on 0.
count	N	—	String	query	Number of records to query with the limit of 1000 at maximum.
status	N	—	String	query	Status of the users. Allowed: all,active.

Name	Required	Default	Type	Location	Description
authtype	N	—	String	query	Authentication type used by the user. Allowed values/formats: registration, SMS, social.
mac	N	—	String	query	MAC address in 00:11:22:33:44:55:66 format. If MAC address is used, all other parameters will be ignored.
device	N	—	String	query	Type of user's device.
os	N	—	String	query	Operating system of user's device.
language	N	—	String	query	Language served to the user. It can search by full language name or two-letter language code.
all	N	—	String	query	The search applies to all fields.

Content Type

application/json

Sample Input (JSON)

10.122.141.178/api/connect/v1/clients?start=1534108572&end=2534108572

Sample Output (JSON)

```
{
  "nextIndex": 0,
  "timeZoneOffset": -14400000,
  "queryRecordCount": 1000,
  "timeZone": "Eastern Standard Time",
  "records": [],
  "returnRecordCount": 0
}
```




Location

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- [GET: Supported Northbound Notifications](#), on page 173
- [GET: Count of all the Beacons](#), on page 176
- [PUT: Place a Beacon at Detected Location on Map](#), on page 177
- [PUT: Updates Name of a Given Beacon](#), on page 178
- [GET: List of Beacons Matching Filter Criteria](#), on page 179
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- [GET: Beacons with Minimum Information for a Floor ID](#), on page 181
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- [GET: Active Clients Count](#), on page 192
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- [GET: Get Configuration Compliance Rules \(By Floor ID\)](#), on page 209
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- [GET : Get Active APs](#), on page 221
- [GET: Get Count of Active APs](#), on page 222
- [GET: Get List of Missing APs](#), on page 223
- [GET: Get Count of Missing APs](#), on page 224

RFID Tags Information API

GET: RFID Tag by MAC Address

Description

This API returns an RFID tag by its MAC address.

HTTP Method

GET

Resource URI

/api/location/v1/tags/:macaddress

Requires OAuth

N

Parameters

Table 85: Parameter Details

Name	Required	Default	Type	Location	Description
macaddress	Y	—	String	pathReplace	RFID Tag MAC address.

Content Type

application/json

Sample Output

http://10.68.40.131/api/location/v1/tags/00:18:8e:28:24:26

```
{
  "macAddress": "00:18:8e:28:24:26",
  "mapInfo": {
    "mapHierarchyString": "Singapore>SINGAPORE UE BIZHUB EAST
(SNG11)>SNG11-5F1>SingZone",
    "floorRefId": "739764660256899136",
    "floorDimension": {
      "length": 118.11024,
      "width": 184.05511,
      "height": 9.84252,
      "offsetX": 0,
      "offsetY": 0,
      "unit": "FEET"
    },
    "image": {
      "imageName": "domain_0_1380690706964.png",

```

```
        "zoomLevel": 4,
        "width": 1440,
        "height": 900,
        "size": 1440,
        "maxResolution": 8,
        "colorDepth": 8
    },
    },
    "mapCoordinate": {
        "x": 108.84515,
        "y": 68.62626,
        "z": 0,
        "unit": "FEET"
    },
    "currentlyTracked": true,
    "confidenceFactor": 72,
    "statistics": {
        "currentServerTime": "2016-06-16T02:20:42.974+0800",
        "firstLocatedTime": "1970-01-01T07:30:00.000+0730",
        "lastLocatedTime": "2016-06-16T02:20:39.336+0800",
        "maxDetectedRssi": {
            "apMacAddress": "64:f6:9d:2a:05:00",
            "band": "IEEE_802_11_B",
            "slot": 0,
            "rssi": -58,
            "antennaIndex": 0,
            "lastHeardInSeconds": 1
        }
    },
    },
    "historyLogReason": null,
    "geoCoordinate": {
        "latitude": 1.3347778969996247,
        "longitude": 103.96366325767761,
        "unit": "DEGREES"
    },
    },
    "networkStatus": "ACTIVE",
    "changedOn": 1466014839336,
    "telemetryList": null,
    "batteryInfo": {
        "tolerance": 70,
        "percentRemaining": 100,
        "daysRemaining": 0,
        "batteryAge": 0,
        "lastReceivedTime": "2016-06-09T06:38:29.748+0800",
        "lastReceivedSeqNum": 2221
    },
    },
    "vendorData": {
        "vendorId": 6286,
        "elementId": 0,
        "data": "AAMAAQEABABAQ==",
        "lastReceivedTime": "2016-06-09T06:38:29.748+0800",
        "lastReceivedSeqNum": 2221
    },
    },
    "sortedEmergencyList": null,
    "sortedChokepointList": null,
    "lastBeaconTime": null,
    "lastBeaconSequenceNumber": 2221,
    "manufacturer": "Ekahau"
}
```

GET: Active RFID Tags Count

Description

This API returns active RFID tags count.

HTTP Method

GET

Resource URI

/api/location/v1/tags/count

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output

```
{
  "deviceType": "Tag",
  "deviceQueryString": null,
  "count": 8
}
```

GET: All Tags

Description

This API returns all tags.

HTTP Method

GET

Resource URI

/api/location/v1/tags

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
[
  {
    "macAddress": "98:07:2d:2a:13:f0",
    "mapInfo": {
      "mapHierarchyString": "Nortech Campus>Nortech-1>1st Floor>Tm",
      "floorRefId": "727035700041482264",
      "floorDimension": {
        "length": 49.9,
        "width": 81,
        "height": 10,
        "offsetX": 0,
        "offsetY": 0,
        "unit": "FEET"
      },
      "image": {
        "imageName": "domain_0_1461628766707.png",
        "zoomLevel": 4,
        "width": 2008,
        "height": 1097,
        "size": 2008,
        "maxResolution": 8,
        "colorDepth": 8
      }
    },
    "mapCoordinate": {
      "x": 46.621124,
      "y": 43.95517,
      "z": 0,
      "unit": "FEET"
    },
    "currentlyTracked": true,
    "confidenceFactor": 88,
    "locComputeType": "RSSI",
    "statistics": {
      "currentServerTime": "2017-12-04T00:05:41.824-0800",
      "firstLocatedTime": "2017-12-04T00:05:30.305-0800",
      "lastLocatedTime": "2017-12-04T00:05:36.315-0800",
      "maxDetectedRssi": {
        "apMacAddress": "cc:16:7e:32:63:60",
        "band": "IEEE_802_11_B",
        "slot": 0,
        "rssi": -59,
        "antennaIndex": 0,
        "lastHeardInSeconds": 6
      }
    },
    "historyLogReason": null,
    "geoCoordinate": {
      "latitude": 37.42250281440575,
      "longitude": -121.95978545449093,
      "unit": "DEGREES"
    },
    "rawLocation": {
```

```

        "rawX": -999,
        "rawY": -999,
        "unit": "FEET"
    },
    "networkStatus": "ACTIVE",
    "changedOn": 1512374736315,
    "telemetryList": null,
    "batteryInfo": null,
    "vendorData": null,
    "sortedEmergencyList": null,
    "sortedChokepointList": null,
    "lastBeaconTime": null,
    "lastBeaconSequenceNumber": 0,
    "deviceSubtype": "BLE",
    "bleAttributesList": [
        {
            "profileType": "IBEACON",
            "deviceName": "",
            "uuid": "20CAE8A0A9CF11E3A5E20800200C9A66",
            "major": 42,
            "minor": 5104,
            "power": -70,
            "frequency": 0,
            "revision": 0,
            "battery": 0,
            "firmware": null,
            "hardware": null,
            "eddyStoneURL": "",
            "eddyStoneNamespace": "",
            "eddyStoneInstanceid": "",
            "batteryObject": [
                {
                    "sourceIndex": 1,
                    "percentage": 0,
                    "milliVolts": 0
                },
                {
                    "sourceIndex": 2,
                    "percentage": 0,
                    "milliVolts": 0
                },
                {
                    "sourceIndex": 3,
                    "percentage": 0,
                    "milliVolts": 0
                }
            ]
        }
    ],
    "manufacturer": "Texas Instruments"
},
{
    "macAddress": "98:07:2d:2a:11:c0",
    "mapInfo": {
        "mapHierarchyString": "Nortech Campus>Nortech-1>1st Floor>CMX Bar",
        "floorRefId": "727035700041482264",
        "floorDimension": {
            "length": 49.9,
            "width": 81,
            "height": 10,
            "offsetX": 0,
            "offsetY": 0,
            "unit": "FEET"
        }
    },

```

```

    "image": {
      "imageName": "domain_0_1461628766707.png",
      "zoomLevel": 4,
      "width": 2008,
      "height": 1097,
      "size": 2008,
      "maxResolution": 8,
      "colorDepth": 8
    },
    "tagList": [
      "Lobby"
    ]
  },
  "mapCoordinate": {
    "x": 52.03835,
    "y": 23.021484,
    "z": 0,
    "unit": "FEET"
  },
  "currentlyTracked": true,
  "confidenceFactor": 120,
  "locComputeType": "RSSI",
  "statistics": {
    "currentServerTime": "2017-12-04T00:05:41.825-0800",
    "firstLocatedTime": "2017-12-04T00:05:36.306-0800",
    "lastLocatedTime": "2017-12-04T00:05:36.306-0800",
    "maxDetectedRssi": {
      "apMacAddress": "f8:0b:cb:3c:01:80",
      "band": "IEEE_802_11_B",
      "slot": 0,
      "rssi": -68,
      "antennaIndex": 0,
      "lastHeardInSeconds": 1
    }
  },
  "historyLogReason": null,
  "geoCoordinate": {
    "latitude": 37.4224445499256,
    "longitude": -121.9598048699379,
    "unit": "DEGREES"
  },
  "rawLocation": {
    "rawX": -999,
    "rawY": -999,
    "unit": "FEET"
  },
  "networkStatus": "ACTIVE",
  "changedOn": 1512374736306,
  "telemetryList": null,
  "batteryInfo": null,
  "vendorData": null,
  "sortedEmergencyList": null,
  "sortedChokepointList": null,
  "lastBeaconTime": null,
  "lastBeaconSequenceNumber": 0,
  "deviceSubtype": "BLE",
  "bleAttributesList": [
    {
      "profileType": "IBEACON",
      "deviceName": "",
      "uuid": "20CAE8A0A9CF11E3A5E20800200C9A66",
      "major": 42,
      "minor": 4544,
      "power": -70,
    }
  ]
}

```

```
    "frequency": 0,
    "revision": 0,
    "battery": 0,
    "firmware": null,
    "hardware": null,
    "eddyStoneURL": "",
    "eddyStoneNamespace": "",
    "eddyStoneInstanceid": "",
    "batteryObject": [
      {
        "sourceIndex": 1,
        "percentage": 0,
        "milliVolts": 0
      },
      {
        "sourceIndex": 2,
        "percentage": 0,
        "milliVolts": 0
      },
      {
        "sourceIndex": 3,
        "percentage": 0,
        "milliVolts": 0
      }
    ]
  },
  "manufacturer": "Texas Instruments"
}
```


GET: Supported Northbound Notifications

Description

This API returns all supported notification types and applicable attributes for the notification rules.

HTTP Method

GET

Resource URI

/api/location/v1/attributes

Requires Basic Auth

N

Content Type

application/json

Sample Output

```
{
  "notifications": [
    {
      "notificationType": "locationupdate",
      "subscriptionName": "asdasdasd",
      "eventId": 1259951,
      "locationMapHierarchy": "Simulator-1212-Campus0>Building1>Floor8>Zone4",
      "locationCoordinate": {
        "x": 65.32642,
        "y": 302.04172,
        "z": 0.0,
        "unit": "FEET"
      },
      "geoCoordinate": {
        "latitude": -999.0,
        "longitude": -999.0,
        "unit": "DEGREES"
      },
      "confidenceFactor": 64.0,
      "apMacAddress": "NOT APPLICABLE",
      "associated": false,
      "username": "NOT APPLICABLE",
      "ipAddress": [
        "NOT APPLICABLE"
      ],
      "ssid": "NOT APPLICABLE",
      "band": "NOT APPLICABLE",
      "floorId": 1721918422,
      "entity": "WIRELESS_CLIENTS",
      "deviceId": "10:00:00:00:0f:5e",
      "lastSeen": "2017-06-06T13:42:51.798-0700",
      "rawLocation": {
        "rawX": -999.0,
```

```

        "rawY":-999.0,
        "unit":"FEET"
    },
    "areaGlobalidList":[
        6343,
        2759,
        2758,
        2757,
        6399,
        6400,
        6289,
        6342
    ],
    "tagVendorData":null,
    "manufacturer":"Private",
    "timestamp":1496781771798
}
]
}

```

Output Field Descriptions

Table 86: Output Field Descriptions

Field	Description
Notification Type	What type of notification this output describes (For example, locationupdate)
Subscription Name	The name of the notification created in CMX (user provided)
Event ID	Unique for notification identification per event
Location Map Hierarchy	The Hierarchy string that shows campus, building, floor, and zone (if applicable)
Location Coordinate	XY location for the device
Geo Coordinate	GPS location for device, if GPS markers are set
Confidence Factor	Represents a square box of where the client should be, lower means better location accuracy
AP Mac Address	The AP that the client is connected to
Associated	is this device Associated or not
Username	The username of this Associated client if using 802.11x
IP address	If this client is associated, what IP address(es) are assigned to it, can include IPv4 and IPv6 addresses
SSID	The SSID of the client is Associated
Band	802.11 band the device is it connected to

Field	Description
Floor Id	Long value representing hieracrchy, would not use
Floor Ref Id	Represents a long for what hierarchy it is on (Floor Id might be rounded if the number is large enough due to a conversion from long to double), only is filled in for location update, recommended for use
Entity	What type of device is it, Client (normal devices), RFID Tag (these are devices that send a chirp on an interval), Interferers (Devices that are connected to APs or are APs that aren't on the network controlled by a controller on this CMX)
Device Id	MAC address of device
Last Seen	Timestamp of packet last received from controller for this device
Raw Location	-
Area Global Id List	-
Tag Vendor Data	For RFID tags, information that was encoded in packets we received like battery life or something like that.
Manufacturer	Based on the first half of the MAC address of this device
Timestamp	When the notification generated
status	Refers to what the status of the device is - IDLE(0), AAA_PENDING(1), AUTHENTICATED(2), ASSOCIATED(3), POWERSAVE(4), DISASSOCIATED(5), TO_BE_DELETED(6), PROBING(7), WAIT_ASSOCIATED(257);

Table 87: API History

Release	Modification
Cisco CMX Release 10.3	Output field descriptor Floor Ref Id was introduced.

GET: Count of all the Beacons

Description

This API returns count of all beacons.

HTTP Method

GET

Resource URI

/api/location/v1/beacon/count

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output

http://10.68.40.131/api/location/v1/beacon/count

28

PUT: Place a Beacon at Detected Location on Map

Description

This API places a beacon at detected location on the map.

HTTP Method

PUT

Resource URI

/api/location/v1/beacon/replace/:macaddress

Requires OAuth

N

Parameters

Table 88: Parameter Details

Name	Required	Default	Type	Location	Description
macaddress	Y	—	String	pathReplace	Mac address of beacon.

Content Type

application/json

PUT: Updates Name of a Given Beacon

Description

This API updates the name of a given Beacon.

HTTP Method

PUT

Resource URI

/api/location/v1/beacon/name/:macaddress/:name

Requires OAuth

N

Parameters

Table 89: Parameter Details

Name	Required	Default	Type	Location	Description
macaddress	Y	—	String	pathReplace	Mac address of beacon.
name	Y	—	String	pathReplace	New values to be used as name.

Content Type

application/json

GET: List of Beacons Matching Filter Criteria

Description

This API returns list of Beacons matching to filter criteria present on the given floor. filterString format :mac={mac} name={name} uuid={uuid} major={major} minor={minor} example :
api/location/v1/veacon/search/{floorrefid}/mac=11:22:33:44:55:66 name=abc

HTTP Method

GET

Resource URI

/api/location/v1/beacon/search/:floorrefid/:filterString

Requires OAuth

N

Parameters

Table 90: Parameter Details

Name	Required	Default	Type	Location	Description
floorrefid	Y	—	Number	pathReplace	Reference id of the floor.
filterString	Y	—	String	pathReplace	Value of the filterString.

Content Type

application/json

POST: Add Beacon with Minimum Fields

Description

This API adds a beacon with minimum fields to the store. Example query string `/info/mac={mac}` and `name={name}` and `uuid={uuid}` and `major={major}` and `minor={minor}`.

HTTP Method

POST

Resource URI

`/api/location/v1/beacon/info/:queryString`

Requires OAuth

N

Parameters

Table 91: Parameter Details

Name	Required	Default	Type	Location	Description
queryString	Y	—	String	pathReplace	Value of the queryString.

Content Type

application/json

GET: Beacons with Minimum Information for a Floor ID

Description

This API returns beacons with minimum information for a floor ID.

HTTP Method

GET

Resource URI

/api/location/v1/beacon/info/:floorrefid

Requires OAuth

N

Parameters

Table 92: Parameter Details

Name	Required	Default	Type	Location	Description
floorrefid	Y	—	Number	pathReplace	Reference ID of the floor.

Content Type

application/json

Sample Output

http://10.68.40.131/api/location/v1/beacon/info/739764660256899136

```
[{"MAC- c8:69:cd:54:2c:3a UUID-null MAJOR-null MINOR-null TYPE-Rogue STATUS-Active
RSSI-null"}, {"MAC- e7:8e:65:42:7b:5e UUID-b9:40:7f:30:f5:f8:46:6e:af:f9:25:55:6b:57:fe:6d MAJOR-31582
MINOR-25922 TYPE-Rogue STATUS-Active RSSI--74"}, {"MAC- f8:25:1d:38:5f:df
UUID-b9:40:7f:30:f5:f8:46:6e:af:f9:25:55:6b:57:fe:6d MAJOR-24543 MINOR-7480 TYPE-Rogue
STATUS-Active RSSI--74"}, {"MAC- c8:69:cd:50:29:de UUID-null MAJOR-null MINOR-null TYPE-Rogue
STATUS-Active RSSI-null"}]
```

GET: List of Beacons

Description

This API returns list of Beacons.

HTTP Method

GET

Resource URI

/api/location/v1/beacon

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output

http://10.68.40.131/api/location/v1/beacon

```
[{"macAddress":"c8:69:cd:54:2c:3a","name":null,"type":"Rogue",
"detectedOn":1465384031100,"status":"Active","lastUpdatedOn":1466015949748,
"currentServerTime":1466016244167,"expectedHierarchyString":null,"actualHierarchyString":
null,"uuid":null,"major":null,"minor":null,"manufacturerId":null,"rssi":null,"mapInfo":
{"mapHierarchyString":"Singapore>SINGAPORE UE BIZHUB EAST (SNG11)>SNG11-5F1>IOT Demo,
SingZone","floorRefId":"739764660256899136"},"mapCoordinate":{"x":79.47438,"y":60.84791,
"z":0.0,"unit":"FEET"},"detectedLocation":null,"configuredLocation":null,"lastUpdatedTime":
1466015949748},"macAddress":"e7:8e:65:42:7b:5e","name":null,"type":"Rogue","detectedOn":
1466007673699,"status":"Active","lastUpdatedOn":0,"currentServerTime":1466016244167,
"expectedHierarchyString":null,"actualHierarchyString":null,"uuid":
"b9:40:7f:30:f5:f8:46:6e:af:f9:25:55:6b:57:fe:6d","major":"31582","minor":"25922",
"manufacturerId":"4c00","rssi":"-74","mapInfo":{"mapHierarchyString":"Singapore>
SINGAPORE UE BIZHUB EAST (SNG11)>SNG11-5F1>SingZone","floorRefId":"739764660256899136"},
"mapCoordinate":{"x":110.90741,"y":62.45491,"z":0.0,"unit":"FEET"},"detectedLocation":
null,"configuredLocation":null,"lastUpdatedTime":0},
.....
{"mapHierarchyString":"Bangalore_Cessna>Building 11>Customer Experience Center",
"floorRefId":"739764720386534870"},"mapCoordinate":{"x":91.889755,"y":161.0643,"z":0.0,
"unit":"FEET"},"detectedLocation":null,"configuredLocation":null,"lastUpdatedTime":0},
{"macAddress":"34:c0:59:36:71:1d","name":null,"type":"Rogue","detectedOn":1466015514702,
"status":"Active","lastUpdatedOn":0,"currentServerTime":1466016244167,
"expectedHierarchyString":null,"actualHierarchyString":null,"uuid":null,"major":null,
"minor":null,"manufacturerId":null,"rssi":null,"mapInfo":{"mapHierarchyString":
"Bangalore_Cessna>Building 11>Customer Experience Center","floorRefId":
```

```
"739764720386534870"},"mapCoordinate":{"x":91.889755,"y":161.0643,"z":0.0,"unit":"FEET"},  
"detectedLocation":null,"configuredLocation":null,"lastUpdateTime":0}]
```

GET: Beacon by MAC Address

Description

This API returns Beacon by macaddress.

HTTP Method

GET

Resource URI

/api/location/v1/beacon/:macaddress

Requires OAuth

N

Parameters

Table 93: Parameter Details

Name	Required	Default	Type	Location	Description
macaddress	Y	—	String	pathReplace	Mac address of beacon.

Content Type

application/json

Sample Output

http://10.68.40.131/api/location/v1/beacon/c8:69:cd:54:2c:3a

```
{ "macAddress": "c8:69:cd:54:2c:3a", "name": null, "type": "Rogue",
  "detectedOn": 1465384031100, "status": "Active", "lastUpdatedOn": 1466015949748,
  "currentServerTime": 1466016328698, "expectedHierarchyString": null, "actualHierarchyString":
  null, "uuid": null, "major": null, "minor": null, "manufacturerId": null, "rssi": null, "mapInfo":
  { "mapHierarchyString": "Singapore>SINGAPORE UE BIZHUB EAST (SNG11)>SNG11-5F1>SingZone",
    "floorRefId": "739764660256899136"}, "mapCoordinate": { "x": 76.43114, "y": 58.149662, "z": 0.0,
    "unit": "FEET"}, "detectedLocation": null, "configuredLocation": null, "lastUpdateTime":
  1466015949748 }
```

DELETE: Delete Beacon by MAC Address

Description

This API deletes a Beacon by macaddress.

HTTP Method

DELETE

Resource URI

/api/location/v1/beacon/:macaddress

Requires OAuth

N

Parameters

Table 94: Parameter Details

Name	Required	Default	Type	Location	Description
macaddress	Y	—	String	pathReplace	Mac address of beacon to be deleted.

Content Type

application/json

PUT: Update Beacon

Description

This API updates a given Beacon.

HTTP Method

PUT

Resource URI

/api/location/v1/beacon

Requires OAuth

N

Parameters

Table 95: Parameter Details

Name	Required	Default	Type	Location	Description
macAddress	Y	—	string	body	MAC Address.
name	Y	—	string	body	Name
type	N	—	enumerated	body	<ul style="list-style-type: none"> • Known • Rogue • Unplaced
detectedOn	N	—	number	body	detectedOn
status	N	—	enumerated	body	<ul style="list-style-type: none"> • Active • Missing • Misplaced • Inactive • NeverDetected
lastUpdatedOn	N	—	number	body	Last updated on.
expectedHierarchyString	N	—	string	body	Expected Hierarchy String.
actualHierarchyString	N	—	string	body	Actual Hierarchy String.

Name	Required	Default	Type	Location	Description
uuid	Y	—	string	body	UUID
major	Y	—	string	body	Major.
minor	Y	—	string	body	Minor
manufacturerId	N	—	string	body	Manufacturer ID
rsssi	N	—	string	body	RSSI value.
mapInfo	N	—	text	body	Map Information.
mapCoordinate	N	—	text	body	Map coordinate.
detectedLocation	N	—	text	body	Detected Location.
configuredLocation	N	—	text	body	Configured Location.

Content Type

application/json

GET: List of Beacons Present on a Floor

Description

This API returns list of Beacons present on the given floor.

HTTP Method

GET

Resource URI

/api/location/v1/beacon/floor/:floorrefid

Requires OAuth

N

Parameters

Table 96: Parameter Details

Name	Required	Default	Type	Location	Description
floorrefid	Y	—	Number	pathReplace	Reference ID of the floor.

Content Type

application/json

Sample Output

```
[{"macAddress":"c8:69:cd:54:2c:3a","name":null,"type":"Rogue","detectedOn":1465384031100,"status":"Active","lastUpdatedOn":1466015949748,"currentServerTime":1466016486617,"expectedHierarchyString":null,"actualHierarchyString":null,"uuid":null,"major":null,"minor":null,"manufacturerId":null,"rssi":null,"mapInfo":{"mapHierarchyString":"Singapore>SINGAPORE UE BIZHUB EAST (SNG11)>SNG11-5Fl>SingZone","floorRefId":"739764660256899136"},"mapCoordinate":{"x":76.43114,"y":58.149662,"z":0.0,"unit":"FEET"},"detectedLocation":null,"configuredLocation":null,"lastUpdatedTime":1466015949748}, {"macAddress":"e7:8e:65:42:7b:5e","name":null,"type":"Rogue","detectedOn":1466007673699,"status":"Active","lastUpdatedOn":0,"currentServerTime":1466016486617,"expectedHierarchyString":null,"actualHierarchyString":null,"uuid":"b9:40:7f:30:f5:f8:46:6e:af:f9:25:55:6b:57:fe:6d","major":"31582","minor":"25922","manufacturerId":"4c00","rssi":"-74","mapInfo":{"mapHierarchyString":"Singapore>SINGAPORE UE BIZHUB EAST (SNG11)>SNG11-5Fl>SingZone","floorRefId":"739764660256899136"},"mapCoordinate":{"x":110.90741,"y":62.45491,"z":0.0,"unit":"FEET"},"detectedLocation":null,"configuredLocation":null,"lastUpdatedTime":0}, {"macAddress":"f8:25:1d:38:5f:df","name":null,"type":"Rogue","detectedOn":1465803834008,"status":"Active","lastUpdatedOn":1466012481898,"currentServerTime":1466016486617,"expectedHierarchyString":null,"actualHierarchyString":null,"uuid":"b9:40:7f:30:f5:f8:46:6e:af:f9:25:55:6b:57:fe:6d","major":"24543","minor":"7480","manufacturerId":"4c00","rssi":"-74","mapInfo":{"mapHierarchyString":"Singapore>SINGAPORE UE BIZHUB EAST (SNG11)>SNG11-5Fl>SingZone","floorRefId":"739764660256899136"},"mapCoordinate":{"x":106.88582,"y":70.93849,"z":0.0,"unit":"FEET"}},
```



```
"detectedLocation":null,"configuredLocation":null,"lastUpdatedTime":1466012481898},
{"macAddress":"c8:69:cd:50:29:de","name":null,"type":"Rogue","detectedOn":1465860354185,
"status":"Active","lastUpdatedOn":1466010229973,"currentServerTime":1466016486617,
"expectedHierarchyString":null,"actualHierarchyString":null,"uuid":null,"major":null,
"minor":null,"manufacturerId":null,"rssi":null,"mapInfo":{"mapHierarchyString":
"Singapore>SINGAPORE UE BIZHUB EAST (SNG11)>SNG11-5Fl>MainDemo Theater,SingZone",
"floorRefId":"739764660256899136"},"mapCoordinate":{"x":83.58248,"y":96.976616,"z":0.0,
"unit":"FEET"},"detectedLocation":null,"configuredLocation":null,
"lastUpdatedTime":1466010229973}]
```

POST: Add Beacon to the Store

Description

This API adds a Beacon to the store.

HTTP Method

POST

Resource URI

/api/location/v1/beacon

Requires OAuth

N

Parameters

Table 97: Parameter Details

Name	Required	Default	Type	Location	Description
macAddress	Y	—	string	body	MAC Address.
name	Y	—	string	body	
type	N	—	enumerated	body	<ul style="list-style-type: none"> • Known • Rogue • Unplaced
detectedOn	N	—	number	body	Detected On.
status	N	—	enumerated	body	<ul style="list-style-type: none"> • Active • Missing • Misplaced • Inactive • NeverDetected
lastUpdatedOn	N	—	number	body	Last Updated on.
expectedHierarchyString	N	—	string	body	Expected Hierarchy String.
actualHierarchyString	N	—	string	body	Actual Hierarchy String.
uuid	Y	—	string	body	UUID

Name	Required	Default	Type	Location	Description
major	Y	—	string	body	Major
minor	Y	—	string	body	Minor
manufacturerId	N	—	string	body	Manufacturer ID
rsssi	N	—	string	body	RSSI value.
mapInfo	N	—	text	body	Map Info.
mapCoordinate	N	—	text	body	Map coordinate.
detectedLocation	N	—	text	body	Detected Location.
configuredLocation	N	—	text	body	Configured Location.

Content Type

application/json

GET: Active Clients Count

Description

This API returns active clients count.



Note

This includes sleeping static devices which do not send probes, but are still active.

HTTP Method

GET

Resource URI

/api/location/v2/clients/count

Requires OAuth

N

Parameters

None.

Sample Output

```
{
  macAddress:"b8:e9:37:3c:69:d8",
  mapInfo:{
    mapHierarchyString:"Nortech Campus>Nortech-1>1st Floor",
    floorRefId:"727035700041482264",
    floorDimension:{
      length:49.9,
      width:81,
      height:10,
      offsetX:0,
      offsetY:0,
      unit:"FEET"
    },
    image:{
      imageName:"domain_0_1461628766707.png",
      zoomLevel:4,
      width:2008,
      height:1097,
      size:2008,
      maxResolution:8,
      colorDepth:8
    },
    tagList:[
      "Land side"
    ]
  },
  mapCoordinate:{
    x:50,
```

```

        y:22,
        z:0,
        unit:"FEET"
    },
    currentlyTracked:true,
    confidenceFactor:96,
    statistics:{
        currentServerTime:"2016-06-13T16:52:25.646-0700",
        firstLocatedTime:"1969-12-31T16:00:00.000-0800",
        lastLocatedTime:"2016-06-13T16:52:21.191-0700",
        maxDetectedRssi:{
            apMacAddress:"b8:38:61:a8:bc:60",
            band:"IEEE_802_11_B",
            slot:2,
            rssi:-37,
            antennaIndex:0,
            lastHeardInSeconds:0
        }
    },
    historyLogReason:null,
    geoCoordinate:{
        latitude:37.42245292884372,
        longitude:-121.95980375308643,
        unit:"DEGREES"
    },
    networkStatus:"ACTIVE",
    changedOn:1465861941191,
    ipAddress:[
        "10.22.243.128"
    ],
    userName:"",
    ssid:"cmx",
    sourceTimestamp:null,
    band:"IEEE_802_11_B",
    apMacAddress:"b8:38:61:a8:bc:60",
    dot11Status:"ASSOCIATED",
    manufacturer:"Sonos",
    areaGlobalIdList:[
        118,
        75,
        74,
        73,
        110,
        119,
        120,
        115
    ],
    detectingControllers:"10.22.243.56",
    bytesSent:7094,
    bytesReceived:19919,
    guestUser:false
}
]

```

API History

Table 98: API History

Release	Modification
Cisco CMX Release 10.4	This API is introduced.

GET: Collection of Active Clients MAC Address

Description

This API returns a collection of active client's MAC Address.

HTTP Method

GET

Resource URI

/api/location/v2/clients/active

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output

```
["c0:8a:de:bd:e5:3a", "5c:59:48:59:29:21", "40:88:05:b2:6c:ec",  
"c0:8a:de:3d:e5:30", "98:d6:bb:03:58:d5", "e8:4e:84:8b:9f:90", "48:45:20:0c:73:58",  
"f0:25:b7:36:db:83", "c8:69:cd:50:29:dd", "78:da:6e:f6:3f:ff", "80:ed:2c:44:e5:ca",  
"08:3d:88:a7:67:6f", "d0:4f:7e:34:b1:f2", "3c:15:c2:c7:05:c6", "ec:35:86:ce:15:94",  
"d8:50:e6:2e:ed:39", "fc:e9:98:19:87:6f", "40:a6:d9:77:2a:77", "60:fe:c5:dc:57:5d",  
"cc:44:63:b7:c9:06", "bc:14:85:ac:ba:30", "a8:86:dd:ac:1b:f7", "a4:34:d9:f8:0f:cf",  
"30:10:e4:c2:9f:04", "64:00:f1:79:55:c5", "64  
  
.....  
"00:23:33:41:5f:80", "90:a4:de:29:0d:1d", "b4:ce:f6:09:2b:e3"]
```

GET: Compact History of Client by Date, Username

Description

This API returns compact history of client like number of logins and MAC address of device. The parameters given are date and username.

If the same username was used to login at multiple devices, the MAC address of only one of the devices is returned. To return all MAC addresses, set allMacs parameter to true.

HTTP Method

GET

Resource URI

/api/location/v1/historylite/byusername/:username

Requires Basic Auth

N

Parameters

Table 100: Parameter Details

Name	Required	Default	Type	Location	Description
date	Y	—	String	query	Date in format of yyyy/mm/dd
username	Y	—	String	pathReplace	User name.
allMacs	N	—	String	query	Return all macaddresses associated with this Username for given date Allowed values/formats: true false
allResults	N		String	query	Return all results Allowed values/formats: true false

Content Type

application/json

Sample Output

`http://<ip-address>/api/location/v1/historylite/byusername/sharangp?date=2017/06/12`

```
{
  Count: 591,
  Date: "2017/06/12",
  Username: "sharangp",
  Macaddress: "3c:a9:f4:6c:ee:44"
}
```

`http://<ip-address>/api/location/v1/historylite/byusername/sharangp?date=2017/06/12&allMacs=true`

```
{
  Count: 2,
  Date: "2017/06/12",
  Username: "sharangp",
  Macaddress: [
    "3c:a9:f4:6c:4c:7c",
    "3c:a9:f4:6c:ee:44"
  ]
}
```

GET: Unique MAC Address Seen on a Given Day on a Floor or Zone

Description

This API returns the unique MAC address seen on a given date on a floor or zone. It expects parameters, date and hierarchy. Hierarchy can be up to floor level or zone level. For example, floor level would include: campus-name, building-name, and floor-name. Zone level would be campus-name, building-name, floor-name, and zone-name. If you know the floor ID or the zone ID, then hierarchy is optional and you can specify date and floor ID or date and zone ID parameters.

When the date parameter is not specified, the API would use current date as default. Specifying either of the parameters like hierarchy or floor ID or zone ID is mandatory. This API also supports filter by time and filter by distance criteria. For filtering by time, use fromHour and toHour (both in 24 hr format) parameters. For filtering by distance queries, using filtering by time is mandatory and only a difference of one hour is allowed between toHour and fromHour is one hour.

For example:

By hierarchy:

/api/location/v1/history/uniqueclientsbyhierarchy?hierarchy=System%20Campus/Floor-19/1st%20Floor.
Floor ID:/api/location/v1/history/uniqueclientsbyhierarchy?floorid=730297895206534073.

By zoneid and date:/api/location/v1/history/uniqueclientsbyhierarchy?zoneid=23 and date=2016/02/29. By hierarchy and filter by time:

/api/location/v1/history/uniqueclientsbyhierarchy?hierarchy=System%20Campus/BGLD-19/1st%20Floor and fromHour=13 and toHour=14.

By hierarchy, filter by time and filter by distance:

/api/location/v1/history/uniqueclientsbyhierarchy?hierarchy=System%20Campus/BGLD-19/1st%20Floor and fromHour=13 and toHour=14 and x=30 and y=50 and distance=10.

HTTP Method

GET

Resource URI

/api/location/v1/history/uniqueclientsbyhierarchy

Requires Basic Auth

N

Parameters

Table 101: Parameter Details

Name	Required	Default	Type	Location	Description
hierarchy	Y	—	String	query	Hierarchy in format campus-name/building-name/floor-name.

Name	Required	Default	Type	Location	Description
date	N	—	String	query	Date in format of yyyy/mm/dd.
floorid	N	—	String	query	Floor ID.
zoneid	N	—	String	query	Zone ID.
fromHour	N	—	String	query	FromHour, HH in 24 hour format.
toHour	N	—	String	query	ToHour, HH in 24 hour format
x	N	—	String	query	x
y	N	—	String	query	y
distance	N	—	String	query	Distance in feet

Content Type

application/json

GET: Compact History of Client By Date and IPv4 Address

Description

This API returns compact history of client by date and IPv4 address.

HTTP Method

GET

Resource URI

/api/location/v1/historylite/byipaddress/:ipv4address

Requires Basic Auth

N

Parameters

Table 102: Parameter Details

Name	Required	Default	Type	Location	Description
date	Y	—	String	query	Date in format of yyyy/mm/dd.
ipv4address	Y	—	String	pathReplace	IPv4 Address.

Content Type

application/json

Sample Output

http://10.68.40.131/api/location/v1/historylite/byipaddress/10.68.41.186

```
{
  "Macaddress": null,
  "Ipv4address": "10.22.243.125",
  "Data": [],
  "Count": 0,
  "Date": "2018/07/13"
}
```

GET: All Client History

Description

This API returns the history of all active clients. This does not include sleeping static devices that do not send probes. It does not support pagination, but you can extract small chunks of data by specifying parameters **locatedAfterTime** and **locatedBeforeTime** (in milliseconds).

This API would use the current date as date range from midnight to current time: `/api/location/v1/history/clients`. This would use the passed date as date range from passed date + fromHour to passed date + toHour: `/api/location/v1/history/clients?date=2016/03/02` and `fromHour=14` and `toHour=15`. This would use the date range as mentioned by parameters: `locatedAfterTime` (1456894800000) milliseconds equivalent to `YYYY/MM/DD HH:MM:SS 2016/03/01 21:00:00`. `locatedBeforeTime` (1456896600000) milliseconds equivalent to `YYYY/MM/DD HH:MM:SS 2016/03/01 21:30:00`: `/api/location/v1/history/clients?locatedAfterTime=1456894800000` and `locatedBeforeTime=1456896600000`.

With CSCuz69078, when `locatedAfterTime` and `locatedBeforeTime` specified in API is more than a day and less than an hour, the API returns the following error.

ERROR - Cassandra timeout during read query at consistency ONE (1 responses were required but only 0 replica responded)

For example,

`https://<ip-address>/api/location/v1/history/clients?locatedAfterTime=1459468800000&locatedBeforeTime=1459636800000` returns the ERROR.

This API response returns a maximum of 5000 records without pagination and is sorted based by the MAC address. Therefore, without using the parameters such as **locatedAfterTime** and **locatedBeforeTime** to limit the number of records of a specific MAC Address, the API response for client history will return only one MAC Address. The sort order should be by date/time of occurrence.



Note

- This API can only support queries when the number of clients is less than 5000 per minute.
- Do not use this API if there are more than 2000 records. For larger datasets, it is recommended to use Northbound Notifications.

HTTP Method

GET

Resource URI

`/api/location/v1/history/clients`

Requires OAuth

N

Parameters

None.

Content Type

application/json

Sample Output (JSON)

```
[
  {
    "macAddress": "ac:cf:85:29:53:5f",
    "mapInfo": {
      "mapHierarchyString": "Nortech Campus>Nortech-1>1st Floor",
      "mapHierarchyDetails": {
        "campus": "Nortech Campus",
        "building": "Nortech-1",
        "floor": "1st Floor",
        "floorAesUid": 727035700041482200,
        "zones": ""
      }
    },
    "mapCoordinate": {
      "x": 78.017624,
      "y": 38.217056,
      "z": 0,
      "unit": "FEET"
    },
    "currentlyTracked": true,
    "confidenceFactor": 160,
    "locComputeType": "RSSI",
    "statistics": {
      "currentServerTime": "2017-12-06T22:31:17.730-0800",
      "firstLocatedTime": "2017-12-06T12:57:13.469-0800",
      "lastLocatedTime": "2017-12-06T12:57:13.469-0800"
    },
    "historyLogReason": "FLOOR_CHANGE",
    "geoCoordinate": {
      "latitude": 37.42248685324713,
      "longitude": -121.95989831612766,
      "unit": "DEGREES"
    },
    "rawLocation": null,
    "networkStatus": "ACTIVE",
    "changedOn": 1512593833469,
    "ipAddress": [],
    "userName": "",
    "ssId": "",
    "sourceTimestamp": "1512593833469",
    "band": "UNKNOWN",
    "apMacAddress": "",
    "dot11Status": "UNKNOWN",
    "manufacturer": "HUAWEI TECHNOLOGIES CO.,LTD",
    "areaGlobalIdList": null,
    "detectingControllers": "10.22.243.211",
    "bytesSent": 0,
    "bytesReceived": 0,
    "guestUser": false
  },
  {
    "macAddress": "08:cc:68:b4:1c:1f",
    "mapInfo": {
```

```

    "mapHierarchyString": "Nortech Campus>Nortech-1>1st Floor>CMX Clinic",
    "mapHierarchyDetails": {
      "campus": "Nortech Campus",
      "building": "Nortech-1",
      "floor": "1st Floor",
      "floorAesUid": 727035700041482200,
      "zones": "CMX Clinic"
    }
  },
  "mapCoordinate": {
    "x": 22.515627,
    "y": 15.5579815,
    "z": 0,
    "unit": "FEET"
  },
  "currentlyTracked": true,
  "confidenceFactor": 32,
  "locComputeType": "RSSI",
  "statistics": {
    "currentServerTime": "2017-12-06T22:31:17.731-0800",
    "firstLocatedTime": "2017-12-06T19:09:30.430-0800",
    "lastLocatedTime": "2017-12-06T19:09:30.430-0800"
  },
  "historyLogReason": "NETWORK_STATUS_CHANGE",
  "geoCoordinate": {
    "latitude": 37.42242376668243,
    "longitude": -121.95969870663463,
    "unit": "DEGREES"
  },
  "rawLocation": null,
  "networkStatus": "ACTIVE",
  "changedOn": 1512616170430,
  "ipAddress": [],
  "userName": "",
  "ssId": "",
  "sourceTimestamp": "1512616170430",
  "band": "UNKNOWN",
  "apMacAddress": "",
  "dot11Status": "UNKNOWN",
  "manufacturer": "Cisco Systems, Inc",
  "areaGlobalIdList": null,
  "detectingControllers": "10.22.243.211",
  "bytesSent": 0,
  "bytesReceived": 0,
  "guestUser": false
},
{
  "macAddress": "08:cc:68:b4:1c:1f",
  "mapInfo": {
    "mapHierarchyString": "Nortech Campus>Nortech-1>1st Floor>CMX Clinic",
    "mapHierarchyDetails": {
      "campus": "Nortech Campus",
      "building": "Nortech-1",
      "floor": "1st Floor",
      "floorAesUid": 727035700041482200,
      "zones": "CMX Clinic"
    }
  },
  "mapCoordinate": {
    "x": 21.428608,
    "y": 16.509167,
    "z": 0,
    "unit": "FEET"
  },
},

```

```
    "currentlyTracked": false,
    "confidenceFactor": 48,
    "locComputeType": "RSSI",
    "statistics": {
      "currentServerTime": "2017-12-06T22:31:17.731-0800",
      "firstLocatedTime": "2017-12-06T19:09:03.079-0800",
      "lastLocatedTime": "2017-12-06T19:09:05.082-0800"
    },
    "historyLogReason": "NETWORK_STATUS_CHANGE",
    "geoCoordinate": {
      "latitude": 37.422426413833385,
      "longitude": -121.95969480129244,
      "unit": "DEGREES"
    },
    "rawLocation": null,
    "networkStatus": "INACTIVE",
    "changedOn": 1512616145082,
    "ipAddress": [],
    "userName": "",
    "ssId": "",
    "sourceTimestamp": "1512616145082",
    "band": "UNKNOWN",
    "apMacAddress": "",
    "dot11Status": "UNKNOWN",
    "manufacturer": "Cisco Systems, Inc",
    "areaGlobalIdList": null,
    "detectingControllers": "10.22.243.211",
    "bytesSent": 0,
    "bytesReceived": 0,
    "guestUser": false
  }
}
```

1

GET: Compact History of Client by MAC Address

Description

This API returns the history of an active client by its MAC address.

HTTP Method

GET

Resource URI

/api/location/v1/history/clients/:macaddress

Requires OAuth

N

Parameters

Table 103: Parameter Details

Name	Required	Default	Type	Location	Description
macaddress	Y	—	String	pathReplace	Client Macaddress.
date	Y	—	String	query	Date in format of yyyy/mm/dd.

Content Type

application/json

Sample Output (JSON)

```
[
  {
    "macAddress": "98:01:a7:de:cd:35",
    "mapInfo": {
      "mapHierarchyString": "Nortech Campus>Nortech-1>1st Floor>CMX Clinic",
      "mapHierarchyDetails": {
        "campus": "Nortech Campus",
        "building": "Nortech-1",
        "floor": "1st Floor",
        "floorAesUid": 727035700041482200,
        "zones": "CMX Clinic"
      }
    },
    "mapCoordinate": {
      "x": 26.908728,
      "y": 14.038175,
      "z": 0,
      "unit": "FEET"
    }
  }
]
```

```

    },
    "currentlyTracked": true,
    "confidenceFactor": 16,
    "locComputeType": "RSSI",
    "statistics": {
      "currentServerTime": "2017-12-06T22:41:49.631-0800",
      "firstLocatedTime": "2017-12-06T12:19:31.509-0800",
      "lastLocatedTime": "2017-12-06T22:41:48.696-0800"
    },
    "historyLogReason": "DISTANCE_CHANGE",
    "geoCoordinate": {
      "latitude": 37.422419537914266,
      "longitude": -121.9597144965198,
      "unit": "DEGREES"
    },
    "rawLocation": null,
    "networkStatus": "ACTIVE",
    "changedOn": 1512628908696,
    "ipAddress": [],
    "userName": "",
    "ssId": "",
    "sourceTimestamp": "1512628908696",
    "band": "UNKNOWN",
    "apMacAddress": "",
    "dot11Status": "UNKNOWN",
    "manufacturer": "Apple, Inc.",
    "areaGlobalIDList": null,
    "detectingControllers": "10.22.243.211",
    "bytesSent": 0,
    "bytesReceived": 0,
    "guestUser": false
  },
  {
    "macAddress": "98:01:a7:de:cd:35",
    "mapInfo": {
      "mapHierarchyString": "Nortech Campus>Nortech-1>1st Floor",
      "mapHierarchyDetails": {
        "campus": "Nortech Campus",
        "building": "Nortech-1",
        "floor": "1st Floor",
        "floorAesUid": 727035700041482200,
        "zones": ""
      }
    },
    "mapCoordinate": {
      "x": 25.287996,
      "y": 25.027487,
      "z": 0,
      "unit": "FEET"
    },
    "currentlyTracked": true,
    "confidenceFactor": 24,
    "locComputeType": "RSSI",
    "statistics": {
      "currentServerTime": "2017-12-06T22:41:49.632-0800",
      "firstLocatedTime": "2017-12-06T12:19:31.509-0800",
      "lastLocatedTime": "2017-12-06T22:41:46.346-0800"
    },
    "historyLogReason": "DISTANCE_CHANGE",
    "geoCoordinate": {
      "latitude": 37.42245012473281,
      "longitude": -121.9597087015209,
      "unit": "DEGREES"
    },
  },

```

```

"rawLocation": null,
"networkStatus": "ACTIVE",
"changedOn": 1512628906346,
"ipAddress": [],
"userName": "",
"ssId": "",
"sourceTimestamp": "1512628906346",
"band": "UNKNOWN",
"apMacAddress": "",
"dot11Status": "UNKNOWN",
"manufacturer": "Apple, Inc.",
"areaGlobalIdList": null,
"detectingControllers": "10.22.243.211",
"bytesSent": 0,
"bytesReceived": 0,
"guestUser": false
},
{
"macAddress": "98:01:a7:de:cd:35",
"mapInfo": {
"mapHierarchyString": "Nortech Campus>Nortech-1>1st Floor>CMX Clinic",
"mapHierarchyDetails": {
"campus": "Nortech Campus",
"building": "Nortech-1",
"floor": "1st Floor",
"floorAesUid": 727035700041482200,
"zones": "CMX Clinic"
}
},
"mapCoordinate": {
"x": 26.385386,
"y": 18.708204,
"z": 0,
"unit": "FEET"
},
"currentlyTracked": true,
"confidenceFactor": 16,
"locComputeType": "RSSI",
"statistics": {
"currentServerTime": "2017-12-06T22:41:49.632-0800",
"firstLocatedTime": "2017-12-06T12:19:31.509-0800",
"lastLocatedTime": "2017-12-06T22:40:44.342-0800"
},
"historyLogReason": "DISTANCE_CHANGE",
"geoCoordinate": {
"latitude": 37.42243253617424,
"longitude": -121.95971262854559,
"unit": "DEGREES"
},
"rawLocation": null,
"networkStatus": "ACTIVE",
"changedOn": 1512628844342,
"ipAddress": [],
"userName": "",
"ssId": "",
"sourceTimestamp": "1512628844342",
"band": "UNKNOWN",
"apMacAddress": "",
"dot11Status": "UNKNOWN",
"manufacturer": "Apple, Inc.",
"areaGlobalIdList": null,
"detectingControllers": "10.22.243.211",
"bytesSent": 0,
"bytesReceived": 0,

```

```

    "guestUser": false
  },
  {
    "macAddress": "98:01:a7:de:cd:35",
    "mapInfo": {
      "mapHierarchyString": "Nortech Campus>Nortech-1>1st Floor>CMX Bar",
      "mapHierarchyDetails": {
        "campus": "Nortech Campus",
        "building": "Nortech-1",
        "floor": "1st Floor",
        "floorAesUid": 727035700041482200,
        "zones": "CMX Bar"
      }
    },
    "mapCoordinate": {
      "x": 28.39643,
      "y": 35.002888,
      "z": 0,
      "unit": "FEET"
    },
    "currentlyTracked": true,
    "confidenceFactor": 24,
    "locComputeType": "RSSI",
    "statistics": {
      "currentServerTime": "2017-12-06T22:41:49.633-0800",
      "firstLocatedTime": "2017-12-06T12:19:31.509-0800",
      "lastLocatedTime": "2017-12-06T22:40:41.877-0800"
    },
    "historyLogReason": "DISTANCE_CHANGE",
    "geoCoordinate": {
      "latitude": 37.4224778909874,
      "longitude": -121.95971990610984,
      "unit": "DEGREES"
    },
    "rawLocation": null,
    "networkStatus": "ACTIVE",
    "changedOn": 1512628841877,
    "ipAddress": [],
    "userName": "",
    "ssId": "",
    "sourceTimestamp": "1512628841877",
    "band": "UNKNOWN",
    "apMacAddress": "",
    "dot11Status": "UNKNOWN",
    "manufacturer": "Apple, Inc.",
    "areaGlobalIdList": null,
    "detectingControllers": "10.22.243.211",
    "bytesSent": 0,
    "bytesReceived": 0,
    "guestUser": false
  }
]

```

GET: Get Configuration Compliance Rules (By Floor ID)

Description

This API uses the Floor ID to get all configuration compliance rules by floor for client troubleshooting.

HTTP Method

GET

Resource URI

/api/location/v1/compliance/clientcompliance/rules/:floorid

Requires Basic Auth

N

Parameters

Table 104: Parameter Details

Name	Required	Default	Type	Location	Description
floorid	Y		String	pathReplace	Reference id of the floor

Content Type

application/json

API History

Table 105: API History

Release	Modification
Cisco CMX Reelase 10.3	This command is introduced.

GET: Get Configuration Compliance Rules (using MAC Address)

Description

This API uses the MAC address of a client to get all configuration compliance rules for client-side troubleshooting.

HTTP Method

GET

Resource URI

/api/location/v1/compliance/clientcompliance/rules/mac/:macaddr/:floorid

Requires OAuth

N

Parameters

Table 106: Parameter Details

Name	Required	Default	Type	Location	Description
macaddr	Y		Number	pathReplace	Reference id of the floor

Content Type

application/json

API History

Table 107: API History

Release	Modification
Cisco CMX Release 10.3	This command is introduced.

POST: Execute a compliance rule for troubleshooting

Description

Executes a compliance rule for client troubleshooting

HTTP Method

POST

Resource URI

/api/location/v1/compliance/client/run

Requires OAuth

N

Parameters

Table 108: Parameter Details

Name	Required	Default	Type	Location	Description
ruleid	N		string	body	ruleid
uname	N		string	body	uname
passwd	N		string	body	passwd
controllerip	N		string	body	controllerip
connectiontype	N		string	body	connectiontype
apuname	N		string	body	apuname
appasswd	N		string	body	appasswd
floorid	N		string	body	floorid
macaddr	N		string	body	macaddr
testname	N		string	body	testname
starttime	N		number	body	starttime
endtime	N		number	body	endtime
markerx	N		string	body	markerx
markery	N		string	body	markery

Content Type

application/json

Interferers API

GET: Get interferer by macaddress

Description

This API returns an interferer by macaddress

HTTP Method

GET

Resource URI

/api/location/v1/interferers/:macaddress

Requires OAuth

N

Parameters

Table 109: Parameter Details

Name	Required	Default	Type	Location	Description
macaddress	Y		String	pathReplace	Interferer Macaddress

Content Type

application/json

GET: Get total number of interferers

Description

This API returns number of interferers

HTTP Method

GET

Resource URI

/api/location/v1/interferers/count

Requires OAuth

N

Parameters

None.

Content Type

application/json

GET: Get all interferers

Description

This API returns all interferers and also supports searching by floor. .

HTTP Method

GET

Resource URI

/api/location/v1/interferers

Requires OAuth

N

Parameters

None.

Content Type

application/json

Content Type

application/json

Usage Guidelines

Search by Floor:

```
http://<cmx-ip-address>/api/location/v1/interferers/floorrefid=<floorrefid>
```

For Example:

```
http://10.0.0.1/api/location/v1/interferers/floorrefid=1
```

Search by Page and Page Number: (As long as there is data you can keep paginating by incrementing the page and the pageSize numbers)

```
http://<cmx-ip-address>/api/location/v1/interferers?page=<pagenumber>&pageSize=<pagesize>
```

For Example:

```
http://10.0.0.1/api/location/v1/interferers/page=1&pageSize=2
```

GET: This API returns all RFID tags with minimal information

Description

This API returns all RFID tags.

HTTP Method

GET

Resource URI

/api/location/v1/tags/summary

Requires OAuth

N

Parameters

None.

Content Type

application/json

GET: Returns active clients count and mac addresses for each registered zone

Description

This API returns the count of active clients along with their macaddresses for each registered zone. This API expects the debug flag to be turned on in the POST: Add New Zone API (`/api/config/v1/zoneCountParams/<cluster-id>`)

HTTP Method

GET

Resource URI

`/api/location/v1/clients/count/byzone/detail`

Requires OAuth

N

Parameters

Table 110: Parameter Details

Name	Required	Default	Type	Location	Description
zoneId	Y		String	query	zoneId

Content Type

application/json

Usage Guidelines



Note This API expects the debug flag turned on in the Zone Count Register API under configuration service `/api/config/v1/zoneCountParams/1`.

`http://<cmx-ip-address>/api/location/v1/clients/count/byzone/detail?zoneid=<zoneid>`

For Example:

`http://10.0.0.1/api/location/v1/clients/count/byzone/detail?zoneid=145`

Sample Output

```
{
  MacAddress: [
    "6c:40:08:a5:d2:d0",
  ]
}
```

```
"a4:b8:05:9c:a0:d0",  
"a0:8d:16:f3:58:ab",  
"cc:3d:82:52:4b:8a",  
"20:7d:74:1a:c2:ba",  
"34:a3:95:8d:43:ac",  
"d8:d1:cb:a4:13:7a",  
"3c:a9:f4:7f:29:4c",  
"38:ca:da:24:15:05",  
"a4:b8:05:bf:58:d5",  
"5c:e0:c5:c7:1b:54",  
"ac:5f:3e:b9:84:b8",  
"60:f1:89:12:f7:6d",  
"d8:bb:2c:15:27:1a",  
"a4:b8:05:d1:4e:0b",  
"10:4a:7d:34:da:ff",  
"64:bc:0c:49:18:6a",  
"60:f4:45:77:a4:47",  
"78:fd:94:1b:ad:b7",  
"ac:cf:85:01:2c:22",  
"88:1f:a1:72:e4:3f",  
"70:81:eb:e6:f1:c8",  
"e8:50:8b:60:d0:bc",  
"e8:91:20:a9:df:c1",  
"e8:b1:fc:d3:1f:3f",  
"a0:18:28:a7:f5:2d",  
"70:48:0f:88:0e:65",  
"b8:53:ac:34:5d:1a",  
"98:01:a7:ac:8c:c9",  
"60:f1:89:35:c7:2a",  
"60:f1:89:86:9e:19",  
"cc:3a:61:27:75:3d",  
"c8:e0:eb:18:74:4d",  
"c0:cc:f8:2c:dd:70",  
"20:3c:ae:af:36:de",  
"88:07:4b:b2:03:7f",  
"e8:50:8b:f0:6e:ba",  
"64:89:9a:33:f2:e1",  
"60:f1:89:47:0d:1f",  
"ec:1f:72:af:98:6c",  
"a0:99:9b:14:8b:bd",  
"f4:5c:89:bc:47:61",  
"e8:f2:e2:e3:d4:50",  
"fc:db:b3:22:b8:cf",  
"70:81:eb:95:d0:5b",  
"cc:20:e8:09:50:64",  
"64:a3:cb:51:89:fc",  
"18:65:90:0b:e5:32",  
"78:fd:94:b0:90:af",  
"5c:e0:c5:07:a7:56",  
"e4:a7:a0:b3:70:6d",  
"a4:b8:05:9e:80:70",  
"60:f1:89:7e:cd:48",  
"34:36:3b:d2:01:42",  
"2c:33:61:84:fe:51",  
"48:59:29:a6:df:9a",  
"b8:44:d9:ae:fd:2e",  
"44:85:00:69:1a:4a",  
"bc:3b:af:1f:53:0d",  
"a0:91:69:df:a6:0d",  
"18:65:90:21:a6:17",  
"a4:b8:05:dd:5a:19",  
"98:01:a7:a0:fa:a7",  
"24:df:6a:0d:05:39",  
"2c:0e:3d:13:08:87"
```

GET: Returns active clients count and mac addresses for each registered zone

```
    "e8:2a:ea:77:ec:0a",
    "f4:5c:89:8f:0f:a3",
    "ac:bc:32:b4:02:0f",
    "d0:e1:40:9f:1f:88",
    "e8:2a:ea:06:fe:be",
    "24:a0:74:f2:c5:b8",
    "70:3e:ac:19:dd:db",
    "a0:99:9b:14:f3:cb",
    "e4:a4:71:51:fc:2f",
    "e8:b1:fc:c5:0f:80",
    "70:3e:ac:15:b0:0d",
    "b8:53:ac:78:5a:62",
    "90:3c:92:e0:cf:e7",
    "98:5a:eb:8f:00:14",
    "c8:1e:e7:8b:d7:25",
    "34:36:3b:d1:ec:ec",
    "98:01:a7:aa:9a:45",
    "90:72:40:e8:80:83",
    "cc:79:4a:fa:be:47",
    "78:7e:61:52:60:90",
    "b4:8b:19:e8:a8:07",
    "a0:0b:ba:e7:3c:57",
    "a0:99:9b:08:18:bf",
    "60:f1:89:e6:48:66",
    "a0:99:9b:08:7c:f9",
    "c0:64:c6:fb:3a:54",
    "b4:18:d1:32:67:75",
    "c8:e0:eb:17:3b:8b",
    "b8:53:ac:7d:b5:f0",
    "50:1a:c5:ec:b8:11",
    "60:f1:89:0b:6b:d2",
    "5c:c5:d4:11:24:52",
    "d0:a6:37:a8:24:c5",
    "f0:99:bf:e2:1a:ec",
    "24:77:03:25:c6:28"
  ],
  Duration : {
    start: "2016/11/08 15:34:41",
    end: "2016/11/08 15:44:41",
  },
  Count : 100
}
```

GET: Returns active clients count for each registered zone

Description

This API returns the list of active clients for each registered zones. Zones are registered using POST: Add New Zone (/api/config/v1/zoneCountParams/:clusterID)

HTTP Method

GET

Resource URI

/api/location/v1/clients/count/byzone

Requires OAuth

N

Parameters

None.

Content Type

application/json

Usage Guidelines

http://<cmx-ip-address>/api/location/v1/clients/count/byzone
For Example:
http://10.0.0.1/api/location/v1/clients/count/byzone

Sample Output

```
{
  ZoneCounts: {
    zoneCountList: [
      {
        zoneId: 13,
        hierarchy: "Nortech Campus/Nortech Building/Security Floor/zone1",
        zoneName: "zone1",
        zoneCount: 4
      },
      {
        zoneId: 145,
        hierarchy: "System Campus/SJC-24/3rd Floor/Zone-2",
        zoneName: "Zone-2",
        zoneCount: 83
      },
      {
        zoneId: 12,
        hierarchy: "Nortech Campus/Nortech Building/Security Floor/sharang-zone",
        zoneName: "sharang-zone",
        zoneCount: 5
      },
      {
```

GET: Returns active clients count for each registered zone

```
        zoneId: 144,  
        hierarchy: "System Campus/SJC-24/3rd Floor/Zone-1",  
        zoneName: "Zone-1",  
        zoneCount: 107  
    }  
],  
totalZones: 4,  
duration: {  
    start: "2016/11/08 16:23:51",  
    end: "2016/11/08 16:33:51",  
}  
}  
}
```


GET : Get Active APs

Description

This API gets list of all active access points.

HTTP Method

GET

Resource URI

/location/v1/activeaps

Requires OAuth

N

Parameters

None

Content Type

application/json

Sample Output

GET: Get Count of Active APs

Description

This API gets count of all active access points.

HTTP Method

GET

Resource URI

/location/v1/activeaps/count

Requires OAuth

N

Parameters

None

Content Type

application/json

Sample Output

GET: Get List of Missing APs

Description

This API gets list of all missing APs.

HTTP Method

GET

Resource URI

/location/v1/missingaps

Requires OAuth

N

Parameters

None

Content Type

application/json

Sample Output

GET: Get Count of Missing APs

Description

This API gets the count of all missing APs.

HTTP Method

GET

Resource URI

/location/v1/missingaps/count

Requires OAuth

N

Parameters

None

Content Type

application/json

Sample Output



Presence

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Connected Visitors API

GET: Count of Connected Visitors for a Date

Description

This API returns the count of connected visitors seen on a given day.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/count

https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/count?siteId=<Site ID>&date=<date in yyyy-mm-dd>

Requires Basic Auth

N

Parameters

Table 111: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date in yyyy-mm-dd format

Content Type

application/json

Sample Output

3

GET: Count of Connected Visitors Seen today Until Now

Description

This API returns the count of connected visitors seen today until now.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/count/today

Requires OAuth

N

Parameters*Table 112: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/count/today?siteId=<Site ID>

Sample Output

Number

GET: Count of Connected Visitors Seen Yesterday

Description

This API returns the count of connected visitors seen yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/count/yesterday

Requires OAuth

N

Parameters*Table 113: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/count/yesterday?siteId=<Site ID>

Sample Output

Number

GET: Average Count of Connected Visitors Seen in Last 3 Days

Description

This API returns the average count of connected visitors seen in the last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/count/3days

Requires OAuth

N

Parameters*Table 114: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/count/3days?siteId=<Site ID>

Sample Output

Number

GET: Average Count of Connected Visitors Seen in Last 7 Days

Description

This API returns the average count of connected visitors seen in the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/count/lastweek

Requires OAuth

N

Parameters*Table 115: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/count/lastweek?siteId=<Site ID>

Sample Output

Number

GET: Average Count of Connected Visitors seen in last 30 Days

Description

This API returns the average count of connected visitors seen in the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/count/lastmonth

Requires OAuth

N

Parameters*Table 116: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/count/lastmonth?siteId=<Site ID>

Sample Output

Number

GET: Sum of Connected Visitor Counts in Last 3 days

Description

This API returns the the sum of connected visitor counts for each day in the last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/total/3days

Requires Basic Auth

N

Parameters*Table 117: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/total/3days?siteId=<Site ID>

Sample Output

Number

GET: Sum of Connected Visitor Counts in Last 7 days

Description

This API returns the the sum of connected visitor counts for each day in the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/total/lastweek

Requires OAuth

N

Parameters*Table 118: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/total/lastweek?siteId=<Site ID>

Sample Output

Number

GET: Sum of Connected Visitor Counts in Last 30 days

Description

This API returns the the sum of connected visitor counts for each day in the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/total/lastmonth

Requires OAuth

N

Parameters*Table 119: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/total/lastmonth?siteId=<Site ID>

Sample Output

Number

GET: Sum of Connected Visitor Counts in the Specified Date Range

Description

This API returns the sum of connected visitor counts for each day in the specified date range.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/total

Requires OAuth

N

Parameters*Table 120: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/total/?siteId=<Site ID>&startDate=<date in yyyy-mm-dd>&endDate=<date in yyyy-mm-dd>>

Sample Output

Number

GET: Hourly Count of Connected Visitors Today

Description

This API returns the hourly count of connected visitors today until now.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/hourly/today

Requires OAuth

N

Parameters*Table 121: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/hourly/today/?siteId=<Site ID>>

Sample Output

```
{
  "0":0,
  "1":0,
  "2":0,
  "3":0,
  "4":0,
  "5":0,
  "6":0,
  "7":0,
  "8":0,
  "9":0
}
```

GET: Hourly Count of Connected Visitors Yesterday

Description

This API returns the hourly count of connected visitors yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/hourly/yesterday

Requires OAuth

N

Parameters

Table 122: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/hourly/yesterday/?siteId=<Site ID>>

Sample Output

```
{
  "0":0,
  "1":0,
  "2":0,
}
```

```

    "3":0,
    "4":0,
    "5":0,
    "6":0,
    "7":0,
    "8":0,
    "9":0
  }

```

GET: Hourly Count of Connected Visitors in Last 3 Days

Description

This API returns the hourly count of connected visitors in the last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/hourly/3days

Requires OAuth

N

Parameters

Table 123: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site Id

Content Type

application/json

GET: Hourly Count of Connected Visitors for the Specified Day

Description

This API returns the hourly count of connected visitors for the specified date.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/hourly

Requires OAuth

N

Parameters*Table 124: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site Id
date	N	—	String	query	Date

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/hourly/?siteId=<Site ID>&date=<date in yyyy-mm-dd>>

Sample Output

```
{
  "0": 0,
  "1": 0,
  "2": 0,
  "3": 0,
  "4": 0,
  "5": 0,
  "6": 0,
  "7": 0,
  "8": 0,
  "9": 0
}
```

GET: Daily Count of Connected Visitors for the Specified Date Range

Description

This API returns the daily count of connected visitors for the specified date range.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/daily

Requires OAuth

N

Parameters*Table 125: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/daily/?siteId=<Site ID>&startDate=<date in yyyy-mm-dd>&endDate=<date in yyyy-mm-dd>>

Sample Output

```
{
  "2017-03-01":0,
  "2017-03-02":0,
  "2017-03-03":0,
  "2017-03-04":0,
  "2017-03-05":0,
  "2017-03-06":0,
  "2017-03-07":0,
  "2017-03-08":0,
  "2017-03-09":0,
  "2017-03-10":0
}
```

GET: Daily Count of Connected Visitors for Last 7 days

Description

This API returns the daily count of connected visitors for the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/daily/lastweek

Requires OAuth

N

Parameters*Table 126: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Daily Count of Connected Visitors for last 30 Days

Description

This API returns the daily count of connected visitors for the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/daily/lastmonth

Requires OAuth

N

Parameters*Table 127: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Daily Count of Connected Visitors by Hour for the Specified Date Range

Description

This API returns the daily count of connected visitors by hour category for the specified date range.

HTTP Method

GET

Resource URI

/api/presence/v1/connected/daily/hourcategory

Requires OAuth

N

Parameters

Table 128: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/daily/hourcategory/?siteId=<Site ID>&startDate=<date in yyyy-mm-dd>&endDate=<date in yyyy-mm-dd>

Sample Output

```
{
  "2017-03-01":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-03-02":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-03-03":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-03-04":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-03-05":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-03-06":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  }
}
```

```
    },
    "2017-03-07":{
      "business_hours":null,
      "evening_hours":null,
      "morning_hours":null
    },
    "2017-03-08":{
      "business_hours":null,
      "evening_hours":null,
      "morning_hours":null
    },
    "2017-03-09":{
      "business_hours":null,
      "evening_hours":null,
      "morning_hours":null
    },
    "2017-03-10":{
      "business_hours":null,
      "evening_hours":null,
      "morning_hours":null
    }
  }
}
```

Repeat Visitors API

GET: Average Count of Repeat Visitors for Last 7 Days

Description

This API returns the average count of repeat visitors seen in last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/average/lastweek

Requires OAuth

N

Parameters

Table 129: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Count of Repeat Visitors for Last 30 days

Description

This API returns the average count of repeat visitors seen in last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/average/lastmonth

Requires OAuth

N

Parameters*Table 130: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Sum of Repeat Visitor Counts for Last 3 days

Description

This API returns the sum of repeat visitor counts for each day in last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/count/3days

Requires OAuth

N

Parameters*Table 131: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Sum of Repeat Visitor Counts for Last 7 days

Description

This API returns the sum of repeat visitor counts for each day in last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/count/lastweek

Requires OAuth

N

Parameters

Table 132: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Sum of Repeat Visitor Counts for Last 30 days

Description

This API returns the sum of repeat visitor counts for each day in last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/count/lastmonth

Requires OAuth

N

Parameters

Table 133: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Hourly Count of Repeat Visitors for a Day

Description

This API returns the hourly count of repeat visitors for the specified date.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/hourly

Requires OAuth

N

Parameters

Table 134: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date

Content Type

application/json

GET: Hourly Count of Repeat Visitors Today

Description

This API returns the hourly count of repeat visitors seen today until now.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/hourly/today

Requires OAuth

N

Parameters*Table 135: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Hourly Count of Repeat Visitors Yesterday

Description

This API returns the hourly count of repeat visitors seen yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/hourly/yesterday

Requires OAuth

N

Parameters*Table 136: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Count of Repeat Visitors for a Date or Date Range

Description

This API returns the count of repeat visitors seen on a given day or date range.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/count

Requires OAuth

N

Parameters

Table 137: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/repeatvisitors/count/?siteId=<Site ID>&startDate=<date in yyyy-mm-dd>&endDate=<date in yyyy-mm-dd>

Sample Output

```
{
  "DAILY": 0,
  "WEEKLY": 0,
  "OCCASIONAL": 0,
  "FIRST_TIME": 0,
  "YESTERDAY": 0
}
```

GET: Count of Repeat Visitors for Today

Description

This API returns the count of repeat visitors seen today until now.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/count/today

Requires OAuth

N

Parameters*Table 138: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Count of Repeat Visitors for Yesterday

Description

This API returns the count of repeat visitors seen yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/count/yesterday

Requires OAuth

N

Parameters*Table 139: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Count of Repeat Visitors for Last 3 days

Description

This API returns the average count of repeat visitors seen in last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/average/3days

Requires OAuth

N

Parameters*Table 140: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Count of Repeat Visitors for Specified Date Range

Description

This API returns the average count of repeat visitors seen for the specified date range.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/average

Requires OAuth

N

Parameters*Table 141: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/repeatvisitors/average/?siteId=<Site ID>&startDate=<date in yyyy-mm-dd>&endDate=<date in yyyy-mm-dd>

Sample Output

```
{
  "DAILY": 0,
  "WEEKLY": 0,
  "OCCASIONAL": 0,
  "FIRST_TIME": 0,
  "YESTERDAY": 0
}
```

GET: Hourly Count of Repeat Visitors for Last 3 Days

Description

This API returns the hourly count of repeat visitors for the last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/hourly/3days

Requires OAuth

N

Parameters*Table 142: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Repeat Visitor Summary for a Day

Description

This API returns the repeat visitor summary for the specified date.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/daysummary

Requires OAuth

N

Parameters*Table 143: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date

Content Type

application/json

GET: Repeat Visitor Summary for a Week

Description

This API returns the repeat visitor summary for the week of specified date.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/weeksummary

Requires OAuth

N

Parameters*Table 144: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date

Content Type

application/json

GET: Repeat Visitor Summary for a Month

Description

This API returns the repeat visitor summary for the month of specified date.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/monthsummary

Requires OAuth

N

Parameters*Table 145: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date

Content Type

application/json

GET: Daily Count of Repeat Visitors for Specified Date Range

Description

This API returns the daily count of repeat visitors for the specified date range.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/daily

Requires OAuth

N

Parameters*Table 146: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date

Content Type

application/json

Usage Guidelines

`https://<tenant-id>.cmxcisco.com/api/presence/v1/repeatvisitors/daily/?siteId=<Site ID>&startDate=<date in yyyy-mm-dd>&endDate=<date in yyyy-mm-dd>`

Sample Output

```
{
  "2017-03-01":null,
  "2017-03-02":null,
  "2017-03-03":null,
  "2017-03-04":null,
  "2017-03-05":null,
  "2017-03-06":null,
  "2017-03-07":null,
  "2017-03-08":null,
  "2017-03-09":null,
  "2017-03-10":{
    "DAILY":0,
    "WEEKLY":0,
    "OCCASIONAL":0,
    "FIRST_TIME":0,
    "YESTERDAY":0
  }
}
```

GET: Daily Count of Repeat Visitors for Last 7 Days

Description

This API returns the daily count of repeat visitors for the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/daily/lastweek

Requires OAuth

N

Parameters

Table 147: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Daily Count of Repeat Visitors for Last 30 days

Description

This API returns the daily count of repeat visitors for the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/repeatvisitors/daily/lastmonth

Requires OAuth

N

Parameters

Table 148: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Dwell API

GET: Count of Visitors by Dwell Level for a Date or Date Range

Description

This API returns the count of visitors categorized by dwell level seen on a given day or date range.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/count

Requires OAuth

N

Parameters

Table 149: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date
startDate	Y	—	String	query	Start Date
endDate	N	—	String	query	End Date

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/dwell/count/?siteId=<Site ID>&date=<date in yyyy-mm-dd>>

Sample Output

```
{
  "FIVE_TO_THIRTY_MINUTES":0,
  "THIRTY_TO_SIXTY_MINUTES":0,
  "ONE_TO_FIVE_HOURS":0,
  "FIVE_TO_EIGHT_HOURS":0,
  "EIGHT_PLUS_HOURS":0
}
```

GET: Count of Visitors by Dwell Level for Today

Description

This API returns the count of visitors categorized by dwell level seen today until now.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/count/today

Requires OAuth

N

Parameters

Table 150: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Count of Visitors by Dwell Level for Yesterday

Description

This API returns the count of visitors categorized by dwell level seen yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/count/yesterday

Requires OAuth

N

Parameters*Table 151: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Count of Visitors by Dwell Level for Last 3 Days

Description

This API returns the count of visitors categorized by dwell level seen in the last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/count/3days

Requires OAuth

N

Parameters*Table 152: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Count of Visitors by Dwell Level for Last 7 Days

Description

This API returns the count of visitors categorized by dwell level seen in the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/count/lastweek

Requires OAuth

N

Parameters*Table 153: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Count of Visitors by Dwell Level for Last 30 Days

Description

This API returns the count of visitors categorized by dwell level seen in the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/count/lastmonth

Requires OAuth

N

Parameters*Table 154: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Count of Visitors by Dwell Level for Last 7 Days

Description

This API returns the average count of visitors categorized by dwell level seen in the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/averagecount/lastweek

Requires OAuth

N

Parameters

Table 155: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Count of Visitors by Dwell Level for Last 30 Days

Description

This API returns the average count of visitors categorized by dwell level seen in the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/averagecount/lastmonth

Requires OAuth

N

Parameters*Table 156: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Hourly Count of Visitors by Dwell Level for a Specific Day

Description

This API returns the hourly count of visitors categorized by dwell level seen in the specified date.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/hourly

Requires OAuth

N

Parameters*Table 157: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date

Content Type

application/json

GET: Hourly Count of Visitors by Dwell Level for Today

Description

This API returns the hourly count of visitors categorized by dwell level seen today until now.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/hourly/today

Requires OAuth

N

Parameters*Table 158: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Visitor Dwell Time by Dwell Level for Last 7 Days

Description

This API returns the average visitor dwell time in minutes categorized by dwell level for last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/averagebylevel/lastweek

Requires OAuth

N

Parameters*Table 159: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Visitor Dwell Time by Dwell Level for Last 30 Days

Description

This API returns the average visitor dwell time in minutes categorized by dwell level for last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/averagebylevel/lastmonth

Requires OAuth

N

Parameters*Table 160: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Daily Average Visitor Dwell Time by Dwell Level for a Specific Date Range

Description

This API returns the daily average visitor dwell time in minutes categorized by dwell level for the specified date range.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/dailyaverage

Requires OAuth

N

Parameters*Table 161: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/dwell/dailyaverage/?siteId=<Site ID>&date=<date in yyyy-mm-dd>>

Sample Output

```
{
  "2017-03-01":null,
  "2017-03-02":null,
  "2017-03-03":null,
  "2017-03-04":null,
  "2017-03-05":null,
  "2017-03-06":null,
  "2017-03-07":null,
  "2017-03-08":null,
  "2017-03-09":null,
  "2017-03-10":{
    "FIVE_TO_THIRTY_MINUTES":0.0,
    "THIRTY_TO_SIXTY_MINUTES":0.0,
    "ONE_TO_FIVE_HOURS":0.0,
    "FIVE_TO_EIGHT_HOURS":0.0,
    "EIGHT_PLUS_HOURS":0.0
  }
}
```

GET: Daily Average Visitor Dwell Time by Dwell Level for Last 7 Days

Description

This API returns the daily average visitor dwell time in minutes categorized by dwell level for the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/dailyaverage/lastweek

Requires OAuth

N

Parameters*Table 162: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Daily Average Visitor Dwell Time by Dwell Level for Last 30 Days

Description

This API returns the daily average visitor dwell time in minutes categorized by dwell level for the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/dailyaverage/lastmonth

Requires OAuth

N

Parameters*Table 163: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Hourly Count of Visitors by Dwell level for Yesterday

Description

This API returns the hourly count of visitors categorized by dwell level seen yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/hourly/yesterday

Requires OAuth

N

Parameters

Table 164: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site Id

Content Type

application/json

GET: Hourly Count of Visitors by Dwell Level for Last 3 Days

Description

This API returns the hourly count of visitors categorized by dwell level seen in the last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/hourly/3days

Requires OAuth

N

Parameters*Table 165: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Daily Count of Visitors by Dwell Level for a Specific Date Range

Description

This API returns the daily count of visitors categorized by dwell level seen during the specified date range

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/daily

Requires OAuth

N

Parameters*Table 166: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/dwell/daily/?siteId=<Site ID>&date=<date in yyyy-mm-dd>>

Sample Output

```

{
  "2017-03-01":{
    "FIVE_TO_THIRTY_MINUTES":0,
    "THIRTY_TO_SIXTY_MINUTES":0,
    "ONE_TO_FIVE_HOURS":0,
    "FIVE_TO_EIGHT_HOURS":0,
    "EIGHT_PLUS_HOURS":0
  },
  "2017-03-02":{
    "FIVE_TO_THIRTY_MINUTES":0,
    "THIRTY_TO_SIXTY_MINUTES":0,
    "ONE_TO_FIVE_HOURS":0,
    "FIVE_TO_EIGHT_HOURS":0,
    "EIGHT_PLUS_HOURS":0
  },
  "2017-03-03":{
    "FIVE_TO_THIRTY_MINUTES":0,
    "THIRTY_TO_SIXTY_MINUTES":0,
    "ONE_TO_FIVE_HOURS":0,
    "FIVE_TO_EIGHT_HOURS":0,
    "EIGHT_PLUS_HOURS":0
  },
  "2017-03-04":{
    "FIVE_TO_THIRTY_MINUTES":0,
    "THIRTY_TO_SIXTY_MINUTES":0,
    "ONE_TO_FIVE_HOURS":0,
    "FIVE_TO_EIGHT_HOURS":0,
    "EIGHT_PLUS_HOURS":0
  },
  "2017-03-05":{
    "FIVE_TO_THIRTY_MINUTES":0,
    "THIRTY_TO_SIXTY_MINUTES":0,
    "ONE_TO_FIVE_HOURS":0,
    "FIVE_TO_EIGHT_HOURS":0,
    "EIGHT_PLUS_HOURS":0
  },
  "2017-03-06":{
    "FIVE_TO_THIRTY_MINUTES":0,
    "THIRTY_TO_SIXTY_MINUTES":0,
    "ONE_TO_FIVE_HOURS":0,
    "FIVE_TO_EIGHT_HOURS":0,
    "EIGHT_PLUS_HOURS":0
  },
  "2017-03-07":{
    "FIVE_TO_THIRTY_MINUTES":0,
    "THIRTY_TO_SIXTY_MINUTES":0,
    "ONE_TO_FIVE_HOURS":0,
    "FIVE_TO_EIGHT_HOURS":0,
    "EIGHT_PLUS_HOURS":0
  },
  "2017-03-08":{
    "FIVE_TO_THIRTY_MINUTES":0,
    "THIRTY_TO_SIXTY_MINUTES":0,
    "ONE_TO_FIVE_HOURS":0,
    "FIVE_TO_EIGHT_HOURS":0,
    "EIGHT_PLUS_HOURS":0
  },
  "2017-03-09":{
    "FIVE_TO_THIRTY_MINUTES":0,
    "THIRTY_TO_SIXTY_MINUTES":0,
    "ONE_TO_FIVE_HOURS":0,
    "FIVE_TO_EIGHT_HOURS":0,
  }
}

```

```

      "EIGHT_PLUS_HOURS":0
    },
    "2017-03-10":{
      "FIVE_TO_THIRTY_MINUTES":0,
      "THIRTY_TO_SIXTY_MINUTES":0,
      "ONE_TO_FIVE_HOURS":0,
      "FIVE_TO_EIGHT_HOURS":0,
      "EIGHT_PLUS_HOURS":0
    }
  }
}

```

GET: Daily Count of Visitors by Dwell Level for Last 7 Days

Description

This API returns the daily count of visitors categorized by dwell level seen during the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/daily/lastweek

Requires OAuth

N

Parameters

Table 167: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Daily Count of Visitors by Dwell Level for Last 30 Days

Description

This API returns the daily count of visitors categorized by dwell level seen during the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/daily/lastmonth

Requires OAuth

N

Parameters*Table 168: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Visitor Dwell Time for the Specific Date or Date Range

Description

This API returns the average visitor dwell time in minutes for the specified date or date range.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/average

Requires OAuth

N

Parameters*Table 169: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date
date	N	—	String	query	Date

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/dwell/average/?siteId=<Site ID>&date=<date in yyyy-mm-dd>

Sample Output

0.0

GET: Average Visitor Dwell Time for Today

Description

This API returns the average visitor dwell time in minutes for today until now.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/average/today

Requires OAuth

N

Parameters*Table 170: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Visitor Dwell Time for Yesterday

Description

This API returns the average visitor dwell time in minutes for yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/average/yesterday

Requires OAuth

N

Parameters

Table 171: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Visitor Dwell Time for Last 3 Days

Description

This API returns the average visitor dwell time in minutes for last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/average/3days

Requires OAuth

N

Parameters

Table 172: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Visitor Dwell Time for Last 7 Days

Description

This API returns the average visitor dwell time in minutes for the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/average/lastweek

Requires OAuth

N

Parameters

Table 173: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Visitor Dwell Time for Last 30 Days

Description

This API returns the average visitor dwell time in minutes for the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/average/lastmonth

Requires OAuth

N

Parameters*Table 174: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Visitor Dwell Time by Dwell Level for a Specific Date or Date Range

Description

This API returns the average visitor dwell time in minutes categorized by dwell level for the specified date or date range.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/averagebylevel

Requires OAuth

N

Parameters*Table 175: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date
startDate	Y	—	String	query	Start Date
endDate	N	—	String	query	End Date

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/dwell/averagebylevel/?siteId=<Site ID>&date=<date in yyyy-mm-dd>

Sample Output

```
{
  "FIVE_TO_THIRTY_MINUTES":0.0,
  "THIRTY_TO_SIXTY_MINUTES":0.0,
  "ONE_TO_FIVE_HOURS":0.0,
  "FIVE_TO_EIGHT_HOURS":0.0,
  "EIGHT_PLUS_HOURS":0.0
}
```

GET: Average Visitor Dwell Time by Dwell Level for Today

Description

This API returns the average visitor dwell time in minutes categorized by dwell level for today until now.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/averagebylevel/today

Requires OAuth

N

Parameters

Table 176: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Visitor Dwell Time by Dwell Level for Yesterday

Description

This API returns the average visitor dwell time in minutes categorized by dwell level for yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/averagebylevel/yesterday

Requires OAuth

N

Parameters

Table 177: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Average Visitor Dwell Time by Dwell Level for Last 3 days

Description

This API returns the average visitor dwell time in minutes categorized by dwell level for last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/dwell/averagebylevel/3days

Requires OAuth

N

Parameters

Table 178: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Visitors API

GET: Peak Hour of Visitors Today

Description

This API returns the hour that had peak visitors today.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/today/peakhour

Requires OAuth

N

Parameters

Table 179: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Count of Visitors Today

Description

This API returns the count of visitors seen today until now.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/count/today

Requires OAuth

N

Parameters*Table 180: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Count of Visitors Yesterday

Description

This API returns the count of visitors seen yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/count/yesterday

Requires OAuth

N

Parameters*Table 181: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Count of Unique Visitors for Last 3 Days

Description

This API returns the count of unique visitors seen in the last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/count/3days

Requires OAuth

N

Parameters*Table 182: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Count of Unique Visitors for Last Week

Description

This API returns the count of unique visitors seen in the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/count/lastweek

Requires OAuth

N

Parameters*Table 183: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Count of Unique Visitors for Last Month

Description

This API returns the count of unique visitors seen in the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/count/lastmonth

Requires OAuth

N

Parameters

Table 184: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Count of Unique Visitors for a Date/Date Range

Description

This API returns the count of unique visitors seen on a day or range of dates.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/count

Requires OAuth

N

Parameters*Table 185: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date
date	N	—	String	query	Date

Content Type

application/json

Usage Guidelines

`https://<tenant-id>.cmxcisco.com/api/presence/v1/visitor/count/?siteId=<Site ID>&date=<date in yyyy-mm-dd>`

Sample Output

107

GET: Sum of Visitor Counts for a Date Range

Description

This API returns the sum of visitor counts for each day in the specified date range.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/total

Requires OAuth

N

Parameters*Table 186: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start date

Name	Required	Default	Type	Location	Description
endDate	Y	—	String	query	End date

Content Type

application/json

GET: Sum of Visitor Counts for the Last 3 Days

Description

This API returns the sum of visitor counts for each day in the last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/total/3days

Requires OAuth

N

Parameters*Table 187: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Sum of Visitor Counts for the Last Week

Description

This API returns the sum of visitor counts for each day in the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/total/lastweek

Requires OAuth

N

Parameters*Table 188: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Sum of Visitor Counts for the Last Month

Description

This API returns the sum of visitor counts for each day in the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/total/lastmonth

Requires OAuth

N

Parameters*Table 189: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Hourly Count of Visitors Today

Description

This API returns the hourly count of visitors today until now.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/hourly/today

Requires OAuth

N

Parameters

Table 190: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Hourly Count of Visitors Yesterday

Description

This API returns the hourly count of visitors yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/hourly/yesterday

Requires OAuth

N

Parameters*Table 191: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site Id

Content Type

application/json

GET: Hourly Count of Visitors for Last 3 Days

Description

This API returns the hourly count of visitors for the last 3 days including today.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/hourly/3days

Requires OAuth

N

Parameters*Table 192: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site Id

Content Type

application/json

GET: Hourly Count of Visitors for a Day

Description

This API returns the hourly count of visitors for the specified date.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/hourly

Requires OAuth

N

Parameters*Table 193: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site Id
date	Y	—	String	query	Date

Content Type

application/json

GET: Daily Count of Visitors for a Date Range

Description

This API returns the daily count of unique visitors for the specified date range.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/daily

Requires OAuth

N

Parameters*Table 194: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site Id
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/connected/hourly/?siteId=<Site ID>&date=<date in yyyy-mm-dd>

Sample Output

```
{
  "0": 0,
  "1": 0,
  "2": 0,
  "3": 0,
  "4": 0,
  "5": 0,
  "6": 0,
  "7": 0,
  "8": 0,
  "9": 0
}
```

GET: Daily Count of Visitors for Last Week

Description

This API returns the daily count of visitors for the last 7 days including today.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/daily/lastweek

Requires OAuth

N

Parameters*Table 195: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Daily Count of Visitors for Last Month

Description

This API returns the daily count of visitors for the last 30 days including today.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/daily/lastmonth

Requires OAuth

N

Parameters

Table 196: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Daily Count of Visitors by Hour Category for a Date Range

Description

This API returns the daily count of visitors seen during morning, business, evening hours for the specified date range.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/daily/hourcategory

Requires OAuth

N

Parameters

Table 197: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/visitor/daily/hourcategory/?siteId=<Site ID>&date=<date in yyyy-mm-dd>>

Sample Output

```
{
  "2017-03-01": {
    "business_hours": 0,
    "evening_hours": 0,
    "morning_hours": 0
  },
  "2017-03-02": {
    "business_hours": null,
    "evening_hours": null,
    "morning_hours": null
  },
  "2017-03-03": {
    "business_hours": null,
    "evening_hours": null,
    "morning_hours": null
  },
  "2017-03-04": {
    "business_hours": null,
    "evening_hours": null,
    "morning_hours": null
  },
  "2017-03-05": {
    "business_hours": null,
    "evening_hours": null,
    "morning_hours": null
  },
  "2017-03-06": {
    "business_hours": null,
    "evening_hours": null,
    "morning_hours": null
  },
  "2017-03-07": {
    "business_hours": null,
    "evening_hours": null,
    "morning_hours": null
  },
  "2017-03-08": {
    "business_hours": null,
    "evening_hours": null,
    "morning_hours": null
  }
}
```

```

    "morning_hours":null
  },
  "2017-03-09":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-03-10":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  }
}

```

GET: Visitor Summary for a Day

Description

This API returns a summary of visitor traffic for the specified date.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/daysummary

Requires OAuth

N

Parameters

Table 198: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date

Content Type

application/json

GET: Visitor Summary for Week

Description

This API returns a summary of visitor traffic for the week of the specified date.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/weeksummary

Requires OAuth

N

Parameters*Table 199: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date

Content Type

application/json

GET: Visitor Summary for Month

Description

This API returns a summary of visitor traffic for the month of the specified date.

HTTP Method

GET

Resource URI

/api/presence/v1/visitor/monthsummary

Requires OAuth

N

Parameters*Table 200: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date

Content Type

application/json

Summary API

GET: Site KPI Summary for Specified Date or Date Range

Description

This API returns the KPI summary for the given site and specified date or date range.

HTTP Method

GET

Resource URI

/api/presence/v1/kpisummary

Requires OAuth

N

Parameters

Table 201: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	N	—	String	query	Date
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/kpisummary?siteId=<Site ID>&startDate=<date in yyyy-mm-dd>&endDate=<date in yyyy-mm-dd>>

Sample Output

```
{
  "visitorCount":107,
  "totalPasserbyCount":0,
  "totalVisitorCount":100,
  "totalConnectedCount":0,
  "connectedPercentage":0,
  "conversionRate":100,
  "averageDwell":0.0,
  "averageDwellByLevels":{
```

```

    "FIVE_TO_THIRTY_MINUTES":{
      "average":0.0,
      "count":0
    },
    "THIRTY_TO_SIXTY_MINUTES":{
      "average":0.0,
      "count":0
    },
    "ONE_TO_FIVE_HOURS":{
      "average":0.0,
      "count":0
    },
    "FIVE_TO_EIGHT_HOURS":{
      "average":0.0,
      "count":0
    },
    "EIGHT_PLUS_HOURS":{
      "average":0.0,
      "count":0
    }
  },
  "topManufacturers":null,
  "peakSummary":null,
  "peakWeekSummary":{
    "peakHour":15,
    "peakDate":"2017-02-28",
    "peakWeek":0,
    "interval":"WEEK",
    "peakHourCount":49,
    "averageHourlyCount":25.01388888888889,
    "hourlyCounts":{
      "0":13,
      "1":13,
      "2":12,
      "3":11,
      "4":12,
      "5":13,
      "6":13,
      "7":15,
      "8":14,
      "9":15,
      "10":21,
      "11":26,
      "12":29,
      "13":31,
      "14":38,
      "15":44,
      "16":46,
      "17":41,
      "18":44,
      "19":38,
      "20":32,
      "21":28,
      "22":25,
      "23":25
    },
    "maxHour":15,
    "maxDay":1,
    "peakDayCount":112,
    "peakHourDay":"2017-02-27"
  },
  "peakMonthSummary":{
    "peakHour":16,
    "peakDate":"2017-03-01",

```



```
"peakWeek":9,
"interval":"MONTH",
"peakHourCount":45,
"averageHourlyCount":25.5,
"hourlyCounts":{
  "0":20,
  "1":18,
  "2":14,
  "3":13,
  "4":14,
  "5":17,
  "6":18,
  "7":18,
  "8":19,
  "9":15,
  "10":23,
  "11":22,
  "12":31,
  "13":28,
  "14":37,
  "15":41,
  "16":45,
  "17":43,
  "18":42,
  "19":33,
  "20":29,
  "21":28,
  "22":26,
  "23":18
},
"maxHour":16,
"maxDay":3,
"peakDayCount":100,
"peakHourDay":"2017-03-01"
}
```

GET: Site KPI Summary for Today

Description

This API returns the KPI summary for the given site today until now.

HTTP Method

GET

Resource URI

/api/presence/v1/kpisummary/today

Requires OAuth

N

Parameters*Table 202: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Site KPI Summary for Yesterday

Description

This API returns the KPI summary for the given site yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/kpisummary/yesterday

Requires OAuth

N

Parameters*Table 203: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Site KPI Summary for Last 3 Days

Description

This API returns the KPI summary for the given site for the last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/kpisummary/3days

Requires OAuth

N

Parameters*Table 204: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Site KPI Summary for last 7 days

Description

This API returns the KPI summary for the given site for the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/kpisummary/lastweek

Requires OAuth

N

Parameters*Table 205: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Site KPI Summary for Last 30 Days

Description

This API returns the KPI summary for the given site for the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/kpisummary/lastmonth

Requires OAuth

N

Parameters

Table 206: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

GET: Site Insights for Specified Date or Date Range

Description

This API returns the insights for the given site and specified date or date range.

HTTP Method

GET

Resource URI

/api/presence/v1/insights

Requires OAuth

N

Parameters

Table 207: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	N	—	String	query	Date
startDate	Y	—	String	query	Start Date
endDate	Y	—	String	query	End Date

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/insights/?siteId=<Site ID>&startDate=<date in yyyy-mm-dd>&endDate=<date in yyyy-mm-dd>>

Sample Output

```
{
  "weekStatus":null,
  "monthStatus":null,
  "yesterdayStatus":null,
  "weekStats":{
    "peakDay":"2017-02-28",
    "busiestHour":0,
    "peakCount":112,
    "busiestDay":0,
    "hourlyAverage":25.0138888888889,
    "peakHour":15,
    "peakHourCount":49,
    "peakHourDay":"2017-02-27",
    "busiestWeekDate":"2017-03-01",
    "busiestMonthDate":null
  },
  "monthStats":{
    "peakDay":"2017-03-01",
    "busiestHour":16,
    "peakCount":100,
    "busiestDay":3,
    "hourlyAverage":25.5,
    "peakHour":16,
    "peakHourCount":45,
    "peakHourDay":"2017-03-01",
    "busiestWeekDate":null,
    "busiestMonthDate":"2017-03-01"
  },
  "weekRepeatVisitorStats":{
    "DAILY":{
      "peakDay":"2017-03-01",
      "busiestHour":0,
      "peakCount":60,
      "busiestDay":-1,
      "hourlyAverage":14.6111111111111,
      "peakHour":18,
      "peakHourCount":34,
    }
  }
}
```

```

        "peakHourDay":null,
        "busiestWeekDate":null,
        "busiestMonthDate":null
    },
    "WEEKLY":{
        "peakDay":"2017-02-27",
        "busiestHour":16,
        "peakCount":27,
        "busiestDay":-1,
        "hourlyAverage":5.375,
        "peakHour":16,
        "peakHourCount":19,
        "peakHourDay":null,
        "busiestWeekDate":null,
        "busiestMonthDate":null
    },
    "OCCASIONAL":{
        "peakDay":"2017-02-28",
        "busiestHour":0,
        "peakCount":20,
        "busiestDay":-1,
        "hourlyAverage":2.444444444444444,
        "peakHour":19,
        "peakHourCount":6,
        "peakHourDay":null,
        "busiestWeekDate":null,
        "busiestMonthDate":null
    },
    "FIRST_TIME":{
        "peakDay":"2017-02-27",
        "busiestHour":0,
        "peakCount":24,
        "busiestDay":-1,
        "hourlyAverage":1.888888888888889,
        "peakHour":15,
        "peakHourCount":6,
        "peakHourDay":null,
        "busiestWeekDate":null,
        "busiestMonthDate":null
    },
    "YESTERDAY":{
        "peakDay":null,
        "busiestHour":0,
        "peakCount":0,
        "busiestDay":0,
        "hourlyAverage":0.0,
        "peakHour":0,
        "peakHourCount":0,
        "peakHourDay":null,
        "busiestWeekDate":null,
        "busiestMonthDate":null
    }
},
"monthRepeatVisitorStats":{
    "DAILY":{
        "peakDay":"2017-03-01",
        "busiestHour":18,
        "peakCount":60,
        "busiestDay":-1,
        "hourlyAverage":18.41666666666667,
        "peakHour":18,
        "peakHourCount":34,
        "peakHourDay":null,
        "busiestWeekDate":null,
    }
}

```

```
    "busiestMonthDate":null
  },
  "WEEKLY":{
    "peakDay":"2017-03-01",
    "busiestHour":22,
    "peakCount":18,
    "busiestDay":-1,
    "hourlyAverage":3.75,
    "peakHour":22,
    "peakHourCount":6,
    "peakHourDay":null,
    "busiestWeekDate":null,
    "busiestMonthDate":null
  },
  "OCCASIONAL":{
    "peakDay":"2017-03-01",
    "busiestHour":7,
    "peakCount":8,
    "busiestDay":-1,
    "hourlyAverage":1.8333333333333333,
    "peakHour":7,
    "peakHourCount":4,
    "peakHourDay":null,
    "busiestWeekDate":null,
    "busiestMonthDate":null
  },
  "FIRST_TIME":{
    "peakDay":"2017-03-01",
    "busiestHour":16,
    "peakCount":14,
    "busiestDay":-1,
    "hourlyAverage":1.5,
    "peakHour":16,
    "peakHourCount":5,
    "peakHourDay":null,
    "busiestWeekDate":null,
    "busiestMonthDate":null
  },
  "YESTERDAY":{
    "peakDay":null,
    "busiestHour":0,
    "peakCount":0,
    "busiestDay":0,
    "hourlyAverage":0.0,
    "peakHour":0,
    "peakHourCount":0,
    "peakHourDay":null,
    "busiestWeekDate":null,
    "busiestMonthDate":null
  }
}
}
```

Clients API

GET: Excluded Client Counts

Description

This API returns the client counts excluded by filters.

HTTP Method

GET

Resource URI

/api/presence/v1/excluded

Requires OAuth

N

Parameters

Table 208: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	N	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/excluded?siteId=<Site ID>>

Sample Output

```
{
  "repeat":0,
  "dwell":0,
  "ssid":0
}
```

GET: Active Clients

Description

This API returns the active clients seen in the last 20 minutes.

HTTP Method

GET

Resource URI

/api/presence/v1/clients

Requires OAuth

N

Parameters

None.

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/excluded?siteId=<Site ID>

Sample Output

```
[
  {
    "siteEntries":{
      "1487056035936":{
        "macAddress":"ac:c3:3a:87:5c:79",
        "status":"PASSERBY",
        "siteId":1487056035936,
        "siteName":"PSL NOC",
        "firstRssiTime":1488360873407,
        "lastRssiTime":1488360873407,
        "lastMarkedPasserBy":1488360873407,
        "firstMarkedVisitor":0,
        "lastMarkedVisitor":0,
        "firstMarkedAssociated":0,
        "lastMarkedAssociated":0,
        "lastInfoTime":0,
        "rssi":-83,
        "currentApMacAddress":"00:2a:10:f8:87:50",
        "currentApName":null,
        "lastApMacAddress":null,
        "lastApName":null,
        "controller":"10.222.175.13",
        "firstRssiTimeStamp":"2017-03-01 09:34:407",
        "lastRssiTimeStamp":"2017-03-01 09:34:407",
        "lastMarkedPasserByTimeStamp":"2017-03-01 09:34:407",
        "firstMarkedVisitorTimeStamp":"null",
        "lastMarkedVisitorTimeStamp":"null",
        "lastMarkedAssociatedTimeStamp":"null",
        "firstMarkedAssociatedTimeStamp":"null",
        "lastInfoTimeStamp":"null",
        "lastHeard":1488360873407
      }
    },
    "macAddress":"ac:c3:3a:87:5c:79",
    "changedOn":1488360873407,
    "status":"PASSERBY",
  }
]
```

```

    "ipv4Address":null,
    "ipv6Address":null,
    "ssid":null,
    "bytesReceived":0,
    "bytesSent":0,
    "lastSiteId":0,
    "currentSiteId":1487056035936,
    "rssi":-83,
    "currentSiteName":"PSL NOC",
    "changedOnTimeStamp":"2017-03-01 09:34:407",
    "lastApMacAddress":"","",
    "currentApMacAddress":"00:2a:10:f8:87:50",
    "currentApName":null,
    "lastApName":"","",
    "lastSiteName":""
  },
  {
    "siteEntries":{
      "1487056035936":{
        "macAddress":"cc:61:e5:88:f0:d8",
        "status":"PASSERBY",
        "siteId":1487056035936,
        "siteName":"PSL NOC",
        "firstRssiTime":1488360977448,
        "lastRssiTime":1488361771824,
        "lastMarkedPasserBy":1488361771824,
        "firstMarkedVisitor":0,
        "lastMarkedVisitor":0,
        "firstMarkedAssociated":0,
        "lastMarkedAssociated":0,
        "lastInfoTime":0,
        "rssi":-84,
        "currentApMacAddress":"84:3d:c6:14:73:50",
        "currentApName":null,
        "lastApMacAddress":"00:2a:10:f8:87:50",
        "lastApName":null,
        "controller":"10.222.175.13",
        "firstRssiTimeStamp":"2017-03-01 09:36:448",
        "lastRssiTimeStamp":"2017-03-01 09:49:824",
        "lastMarkedPasserByTimeStamp":"2017-03-01 09:49:824",
        "firstMarkedVisitorTimeStamp":"null",
        "lastMarkedVisitorTimeStamp":"null",
        "lastMarkedAssociatedTimeStamp":"null",
        "firstMarkedAssociatedTimeStamp":"null",
        "lastInfoTimeStamp":"null",
        "lastHeard":1488361771824
      },
      "1487260407843":{
        "macAddress":"cc:61:e5:88:f0:d8",
        "status":"PASSERBY",
        "siteId":1487260407843,
        "siteName":"NOC",
        "firstRssiTime":1488361225740,
        "lastRssiTime":1488361589829,
        "lastMarkedPasserBy":1488361589829,
        "firstMarkedVisitor":0,
        "lastMarkedVisitor":0,
        "firstMarkedAssociated":0,
        "lastMarkedAssociated":0,
        "lastInfoTime":0,
        "rssi":-82,
        "currentApMacAddress":"84:3d:c6:0a:bb:80",
        "currentApName":null,
        "lastApMacAddress":null,

```

```

        "lastApName":null,
        "controller":"10.222.175.13",
        "firstRssiTimeStamp":"2017-03-01 09:40:740",
        "lastRssiTimeStamp":"2017-03-01 09:46:829",
        "lastMarkedPasserByTimeStamp":"2017-03-01 09:46:829",
        "firstMarkedVisitorTimeStamp":"null",
        "lastMarkedVisitorTimeStamp":"null",
        "lastMarkedAssociatedTimeStamp":"null",
        "firstMarkedAssociatedTimeStamp":"null",
        "lastInfoTimeStamp":"null",
        "lastHeard":1488361589829
    }
},
"macAddress":"cc:61:e5:88:f0:d8",
"changedOn":1488361771824,
"status":"PASSERBY",
"ipv4Address":null,
"ipv6Address":null,
"ssid":null,
"bytesReceived":0,
"bytesSent":0,
"lastSiteId":1487056035936,
"currentSiteId":1487056035936,
"rssi":-84,
"currentSiteName":"PSL NOC",
"changedOnTimeStamp":"2017-03-01 09:49:824",
"lastApMacAddress":"84:3d:c6:14:73:50",
"currentApMacAddress":"84:3d:c6:14:73:50",
"currentApName":null,
"lastApName":null,
"lastSiteName":"PSL NOC"
},
{
"siteEntries":{
"1487056035936":{
"macAddress":"dc:1a:c5:4c:c7:d3",
"status":"PASSERBY",
"siteId":1487056035936,
"siteName":"PSL NOC",
"firstRssiTime":1488361425736,
"lastRssiTime":1488361425736,
"lastMarkedPasserBy":1488361425736,
"firstMarkedVisitor":0,
"lastMarkedVisitor":0,
"firstMarkedAssociated":0,
"lastMarkedAssociated":0,
"lastInfoTime":0,
"rssi":-87,
"currentApMacAddress":"00:2a:10:ee:40:40",
"currentApName":null,
"lastApMacAddress":null,
"lastApName":null,
"controller":"10.222.175.13",
"firstRssiTimeStamp":"2017-03-01 09:43:736",
"lastRssiTimeStamp":"2017-03-01 09:43:736",
"lastMarkedPasserByTimeStamp":"2017-03-01 09:43:736",
"firstMarkedVisitorTimeStamp":"null",
"lastMarkedVisitorTimeStamp":"null",
"lastMarkedAssociatedTimeStamp":"null",
"firstMarkedAssociatedTimeStamp":"null",
"lastInfoTimeStamp":"null",
"lastHeard":1488361425736
}
}
},

```

```

    "macAddress": "dc:1a:c5:4c:c7:d3",
    "changedOn": 1488361427739,
    "status": "PASSERBY",
    "ipv4Address": null,
    "ipv6Address": null,
    "ssid": null,
    "bytesReceived": 0,
    "bytesSent": 0,
    "lastSiteId": 1487056035936,
    "currentSiteId": 1487056035936,
    "rssi": -87,
    "currentSiteName": "PSL NOC",
    "changedOnTimeStamp": "2017-03-01 09:43:739",
    "lastApMacAddress": "00:2a:10:ee:40:40",
    "currentApMacAddress": "00:2a:10:ee:40:40",
    "currentApName": null,
    "lastApName": null,
    "lastSiteName": "PSL NOC"
  },
  {
    "siteEntries": {
      "1487056035936": {
        "macAddress": "00:08:22:be:76:bb",
        "status": "PASSERBY",
        "siteId": 1487056035936,
        "siteName": "PSL NOC",
        "firstRssiTime": 1488359961555,
        "lastRssiTime": 1488360953775,
        "lastMarkedPasserBy": 1488360953775,
        "firstMarkedVisitor": 0,
        "lastMarkedVisitor": 0,
        "firstMarkedAssociated": 0,
        "lastMarkedAssociated": 0,
        "lastInfoTime": 0,
        "rssi": -81,
        "currentApMacAddress": "00:2a:10:ee:40:40",
        "currentApName": null,
        "lastApMacAddress": "84:3d:c6:14:73:50",
        "lastApName": null,
        "controller": "10.222.175.13",
        "firstRssiTimeStamp": "2017-03-01 09:19:555",
        "lastRssiTimeStamp": "2017-03-01 09:35:775",
        "lastMarkedPasserByTimeStamp": "2017-03-01 09:35:775",
        "firstMarkedVisitorTimeStamp": "null",
        "lastMarkedVisitorTimeStamp": "null",
        "lastMarkedAssociatedTimeStamp": "null",
        "firstMarkedAssociatedTimeStamp": "null",
        "lastInfoTimeStamp": "null",
        "lastHeard": 1488360953775
      },
      "1487260407843":
    ...<etc>
  }
}

```

GET: Client Detail

Description

This API returns the client detail for the specified MAC address for a specified site.

HTTP Method

GET

Resource URI

/api/presence/v1/clients/macaddress

Requires OAuth

N

Parameters*Table 209: Parameter Details*

Name	Required	Default	Type	Location	Description
macaddress	Y	—	String	pathReplace	MAC address
site-id	Y	—	String	pathReplace	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/clients?siteId=<Site ID>&macaddress=<MAC address>

Sample Output

```
[
  {
    "siteEntries":{
      "1487056035936":{
        "macAddress":"50:c8:e5:c5:ba:f0",
        "status":"PASSERBY",
        "siteId":1487056035936,
        "siteName":"PSL NOC",
        "firstRssiTime":1488362139553,
        "lastRssiTime":1488362515548,
        "lastMarkedPasserBy":1488362515548,
        "firstMarkedVisitor":0,
        "lastMarkedVisitor":0,
        "firstMarkedAssociated":0,
        "lastMarkedAssociated":0,
        "lastInfoTime":0,
        "rssi":-88,
        "currentApMacAddress":"00:2a:10:f8:87:50",
        "currentApName":null,
        "lastApMacAddress":null,
        "lastApName":null,
        "controller":"10.222.175.13",
        "firstRssiTimeStamp":"2017-03-01 09:55:553",
        "lastRssiTimeStamp":"2017-03-01 10:01:548",
        "lastMarkedPasserByTimeStamp":"2017-03-01 10:01:548",
        "firstMarkedVisitorTimeStamp":"null",
        "lastMarkedVisitorTimeStamp":"null",
        "lastMarkedAssociatedTimeStamp":"null",
        "firstMarkedAssociatedTimeStamp":"null",
      }
    }
  }
]
```

```

        "lastInfoTimeStamp":"null",
        "lastHeard":1488362515548
    },
    "1487260407843":{
        "macAddress":"50:c8:e5:c5:ba:f0",
        "status":"PASSERBY",
        "siteId":1487260407843,
        "siteName":"NOC",
        "firstRssiTime":1488362141536,
        "lastRssiTime":1488362513641,
        "lastMarkedPasserBy":1488362513641,
        "firstMarkedVisitor":0,
        "lastMarkedVisitor":0,
        "firstMarkedAssociated":0,
        "lastMarkedAssociated":0,
        "lastInfoTime":0,
        "rssi":-92,
        "currentApMacAddress":"84:3d:c6:0a:bb:80",
        "currentApName":null,
        "lastApMacAddress":null,
        "lastApName":null,
        "controller":"10.222.175.13",
        "firstRssiTimeStamp":"2017-03-01 09:55:536",
        "lastRssiTimeStamp":"2017-03-01 10:01:641",
        "lastMarkedPasserByTimeStamp":"2017-03-01 10:01:641",
        "firstMarkedVisitorTimeStamp":"null",
        "lastMarkedVisitorTimeStamp":"null",
        "lastMarkedAssociatedTimeStamp":"null",
        "firstMarkedAssociatedTimeStamp":"null",
        "lastInfoTimeStamp":"null",
        "lastHeard":1488362513641
    }
},
"macAddress":"50:c8:e5:c5:ba:f0",
"changedOn":1488362527563,
"status":"PASSERBY",
"ipv4Address":null,
"ipv6Address":null,
"ssid":null,
"bytesReceived":0,
"bytesSent":0,
"lastSiteId":1487056035936,
"currentSiteId":1487056035936,
"rssi":-92,
"currentSiteName":"PSL NOC",
"changedOnTimeStamp":"2017-03-01 10:02:563",
"lastApMacAddress":"00:2a:10:f8:87:50",
"currentApMacAddress":"00:2a:10:f8:87:50",
"currentApName":null,
"lastApName":null,
"lastSiteName":"PSL NOC"
},
{
    "siteEntries":{
        "1487056035936":{
            "macAddress":"cc:61:e5:88:f0:d8",
            "status":"PASSERBY",
            "siteId":1487056035936,
            "siteName":"PSL NOC",
            "firstRssiTime":1488360977448,
            "lastRssiTime":1488361771824,
            "lastMarkedPasserBy":1488361771824,
            "firstMarkedVisitor":0,
            "lastMarkedVisitor":0,
        }
    }
}

```

```

    "firstMarkedAssociated":0,
    "lastMarkedAssociated":0,
    "lastInfoTime":0,
    "rssi":-84,
    "currentApMacAddress":"84:3d:c6:14:73:50",
    "currentApName":null,
    "lastApMacAddress":"00:2a:10:f8:87:50",
    "lastApName":null,
    "controller":"10.222.175.13",
    "firstRssiTimeStamp":"2017-03-01 09:36:448",
    "lastRssiTimeStamp":"2017-03-01 09:49:824",
    "lastMarkedPasserByTimeStamp":"2017-03-01 09:49:824",
    "firstMarkedVisitorTimeStamp":"null",
    "lastMarkedVisitorTimeStamp":"null",
    "lastMarkedAssociatedTimeStamp":"null",
    "firstMarkedAssociatedTimeStamp":"null",
    "lastInfoTimeStamp":"null",
    "lastHeard":1488361771824
  },
  "1487260407843":{
    "macAddress":"cc:61:e5:88:f0:d8",
    "status":"PASSERBY",
    "siteId":1487260407843,
    "siteName":"NOC",
    "firstRssiTime":1488361225740,
    "lastRssiTime":1488361589829,
    "lastMarkedPasserBy":1488361589829,
    "firstMarkedVisitor":0,
    "lastMarkedVisitor":0,
    "firstMarkedAssociated":0,
    "lastMarkedAssociated":0,
    "lastInfoTime":0,
    "rssi":-82,
    "currentApMacAddress":"84:3d:c6:0a:bb:80",
    "currentApName":null,
    "lastApMacAddress":null,
    "lastApName":null,
    "controller":"10.222.175.13",
    "firstRssiTimeStamp":"2017-03-01 09:40:740",
    "lastRssiTimeStamp":"2017-03-01 09:46:829",
    "lastMarkedPasserByTimeStamp":"2017-03-01 09:46:829",
    "firstMarkedVisitorTimeStamp":"null",
    "lastMarkedVisitorTimeStamp":"null",
    "lastMarkedAssociatedTimeStamp":"null",
    "firstMarkedAssociatedTimeStamp":"null",
    "lastInfoTimeStamp":"null",
    "lastHeard":1488361589829
  }
},
"macAddress":"cc:61:e5:88:f0:d8",
"changedOn":1488361771824,
"status":"PASSERBY",
"ipv4Address":null,
"ipv6Address":null,
"ssid":null,
"bytesReceived":0,
"bytesSent":0,
"lastSiteId":1487056035936,
"currentSiteId":1487056035936,
"rssi":-84,
"currentSiteName":"PSL NOC",
"changedOnTimeStamp":"2017-03-01 09:49:824",
"lastApMacAddress":"84:3d:c6:14:73:50",
"currentApMacAddress":"84:3d:c6:14:73:50",

```

```

    "currentApName":null,
    "lastApName":null,
    "lastSiteName":"PSL NOC"
  },
  {
    "siteEntries":{
      "1487056035936":{
        "macAddress":"b4:ce:f6:6e:9d:ea",
        "status":"PASSERBY",
        "siteId":1487056035936,
        "siteName":"PSL NOC",
        "firstRssiTime":1488357877311,
        "lastRssiTime":1488362333581,
        "lastMarkedPasserBy":1488362333581,
        "firstMarkedVisitor":0,
        "lastMarkedVisitor":0,
        "firstMarkedAssociated":0,
        "lastMarkedAssociated":0,
        "lastInfoTime":0,
        "rssi":-90,
        "currentApMacAddress":"00:2a:10:f8:87:50",
        "currentApName":null,
        "lastApMacAddress":"84:3d:c6:14:73:50",
        "lastApName":null,
        "controller":"10.222.175.13",
        "firstRssiTimeStamp":"2017-03-01 08:44:311",
        "lastRssiTimeStamp":"2017-03-01 09:58:581",
        "lastMarkedPasserByTimeStamp":"2017-03-01 09:58:581",
        "firstMarkedVisitorTimeStamp":"null",
        "lastMarkedVisitorTimeStamp":"null",
        "lastMarkedAssociatedTimeStamp":"null",
        "firstMarkedAssociatedTimeStamp":"null",
        "lastInfoTimeStamp":"null",
        "lastHeard":1488362333581
      },
      "1487260407843":{
        "macAddress":"b4:ce:f6:6e:9d:ea",
        "status":"PASSERBY",
        "siteId":1487260407843,
        "siteName":"NOC",
        "firstRssiTime":1488357852934,
        "lastRssiTime":1488362696100,
        "lastMarkedPasserBy":1488362696100,
        "firstMarkedVisitor":0,
        "lastMarkedVisitor":0,
        "firstMarkedAssociated":0,
        "lastMarkedAssociated":0,
        "lastInfoTime":0,
        "rssi":-95,
        "currentApMacAddress":"84:3d:c6:0a:bb:80",
        "currentApName":null,
        "lastApMacAddress":null,
        "lastApName":null,
        "controller":"10.222.175.13",
        "firstRssiTimeStamp":"2017-03-01 08:44:934",
        "lastRssiTimeStamp":"2017-03-01 10:04:100",
        "lastMarkedPasserByTimeStamp":"2017-03-01 10:04:100",
        "firstMarkedVisitorTimeStamp":"null",
        "lastMarkedVisitorTimeStamp":"null",
        "lastMarkedAssociatedTimeStamp":"null",
        "firstMarkedAssociatedTimeStamp":"null",
        "lastInfoTimeStamp":"null",
        "lastHeard":1488362696100
      }
    }
  }
}

```



```
    },
    "macAddress": "b4:ce:f6:6e:9d:ea",
    "changedOn": 1488362696100,
    "status": "PASSERBY",
    "ipv4Address": null,
    "ipv6Address": null,
    "ssid": null,
    "bytesReceived": 0,
    "bytesSent": 0,
    "lastSiteId": 1487260407843,
    "currentSiteId": 1487260407843,
    "rssi": -95,
    "currentSiteName": "NOC",
    "changedOnTimeStamp": "2017-03-01 10:04:100",
    "lastApMacAddress": "84:3d:c6:0a:bb:80",
    "currentApMacAddress": "84:3d:c6:0a:bb:80",
    "currentApName": null,
    "lastApName": null,
    "lastSiteName": "NOC"
  },
  {
    "siteEntries": {
      "1487260407843":
```

GET: Active Client Counts

Description

This API returns the count of active clients that are currently being tracked.

HTTP Method

GET

Resource URI

/api/presence/v1/clients/count

Requires Basic Auth

N

Parameters

None.

Content Type

application/json

API History

Table 210: API History

Release	Modification
Cisco CMX Release 10.4	This API is introduced.

Passersby API

GET: Count of Passersby Today

Description

This API returns the count of passersby seen today until now.

HTTP Method

GET

Resource URI

/api/presence/v1/passersby/count/today

Requires OAuth

N

Parameters

Table 211: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/count/today?siteId=<Site ID>

Sample Output

Number

GET: Count of Passersby Yesterday

Description

This API returns the count of passersby seen yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/passersby/count/yesterday

Requires OAuth

N

Parameters

Table 212: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/count/yesterday?siteId=<Site ID>

Sample Output

Number

GET: Average Count of Passersby in Last 3 Days

Description

This API returns the average count of passersby seen in the last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/passersby/count/3days

Parameters

Table 213: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines <https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/count/3days?siteId=<Site ID>>

Sample Output

Number

GET: Average Count of Passersby in the Last 7 days

Description

This API returns the average count of passersby seen in the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/passersby/count/lastweek

Requires OAuth

N

Parameters

Table 214: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines <https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/count/lastweek?siteId=<Site ID>>

Sample Output

Number

GET: Average Count of Passersby in the Last 30 Days

Description

This API returns the average count of passersby seen in the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/passerby/count/lastmonth

Parameters*Table 215: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/passerby/count/lastmonth?siteId=<Site ID>

Sample Output

Number

GET: Sum of Passerby Counts in the Specified Date Range

Description

This API returns the sum of passerby counts for each day in the specified date range.

HTTP Method

GET

Resource URI

/api/presence/v1/passerby/total

Parameters*Table 216: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date in format of yyyy-mm-dd
endDate	Y	—	String	query	End Date in format of yyyy-mm-dd

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/passergyby/total?siteId=<Site ID>&startDate=yyyy-mm-dd&endDate=yyyy-mm-dd

Sample Output

Number

GET: Sum of Passerby Counts in the Last 3 Days

Description

This API returns the sum of passerby counts for each day in the last 3 days.

HTTP Method

GET

Resource URI

/api/presence/v1/passergyby/total/3days

Requires OAuth

N

Parameters*Table 217: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/passergyby/total/3days?siteId=<Site ID>

Sample Output

Number

GET: Sum of Passerby Counts in the Last 7 Days

Description

This API returns the sum of passerby counts for each day in the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/passerby/total/lastweek

Requires OAuth

N

Parameters

Table 218: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/passerby/total/lastweek?siteId=<Site ID>

Sample Output

Number

GET: Count of Passersby on a Given Date

Description

This API returns the count of passersby seen on a given day.

HTTP Method

GET

Resource URI

/api/presence/v1/passerby/count

Requires OAuth

N

Parameters*Table 219: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date in format of yyyy-mm-dd

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/passerby/count?siteId=<Site ID>&date=<date in yyyy-mm-dd>>

Sample Output

Number

GET: Sum of Passerby Counts in the Last 30 days

Description

This API returns the sum of passerby counts for each day in the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/passerby/total/lastmonth

Requires OAuth

N

Parameters*Table 220: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines<https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/total/lastmonth?siteId=<Site ID>>**Sample Output**

Number

GET: Hourly Count of Passersby Today

Description

This API returns the hourly count of passersby today until now.

HTTP Method

GET

Resource URI</api/presence/v1/passersby/hourly/today>**Requires OAuth**

N

Parameters*Table 221: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines<https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/hourly/today?siteId=<Site ID>>**Sample Output**

```
{
  "0": 85,
  "1": 45,
  "2": 42,
  "3": 45,
  "4": 46,
  "5": 48,
  "6": 89,
  "7": 180,
  "8": 316,
```

```

    "9":618,
    "10":886,
    "11":587,
    "12":263
  }

```

GET: Hourly Count of Passersby Yesterday

Description

This API returns the hourly count of passersby yesterday.

HTTP Method

GET

Resource URI

/api/presence/v1/passersby/hourly/yesterday

Requires OAuth

N

Parameters

Table 222: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/hourly/yesterday?siteId=<Site ID>>

Sample Output

```

{
  "0":85,
  "1":45,
  "2":42,
  "3":45,
  "4":46,
  "5":48,
  "6":89,
  "7":180,
  "8":316,
  "9":618,
  "10":886,
  "11":587,
  "12":263
}

```

GET: Hourly Count of Passersby for Last 3 days

Description

This API returns the hourly count of passersby for the last 3 days including today.

HTTP Method

GET

Resource URI

/api/presence/v1/passersby/hourly/3days

Requires OAuth

N

Parameters

Table 223: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/hourly/3days?siteId=<Site ID>

Sample Output

```
{
  "2017-02-27": {
    "0": 0,
    "1": 61,
    "2": 71,
    "3": 71,
    "4": 19,
    "5": 43,
    "6": 119,
    "7": 182,
    "8": 352,
    "9": 732,
    "10": 887,
    "11": 681,
    "12": 643,
    "13": 834,
    "14": 690,
    "15": 605,
    "16": 701,
    "17": 916,
    "18": 990,
    "19": 1124,
  }
}
```

```
        "20":902,  
        "21":604,  
        "22":314,  
        "23":150  
    },  
    "2017-02-28":{  
        "0":143,  
        "1":47,  
        "2":34,  
        "3":39,  
        "4":62,  
        "5":35,  
        "6":71,  
        "7":159,  
        "8":298,  
        "9":739,  
        "10":820,  
        "11":648,  
        "12":577,  
        "13":664,  
        "14":702,  
        "15":542,  
        "16":604,  
        "17":725,  
        "18":1112,  
        "19":1097,  
        "20":919,  
        "21":706,  
        "22":477,  
        "23":188  
    },  
    "2017-03-01":{  
        "0":85,  
        "1":45,  
        "2":42,  
        "3":45,  
        "4":46,  
        "5":48,  
        "6":89,  
        "7":180,  
        "8":316,  
        "9":618,  
        "10":886,  
        "11":587,  
        "12":288  
    }  
}
```

GET: Hourly Count of Passersby for a Day

Description

This API returns the hourly count of passersby for the specified date.

HTTP Method

GET

Resource URI

/api/presence/v1/passersby/hourly

Requires OAuth

N

Parameters*Table 224: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
date	Y	—	String	query	Date in format of yyyy-mm-dd

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/hourly?siteId=<Site ID>&date=<date in yyyy-mm-dd>

Sample Output

```
{
  "0": 85,
  "1": 45,
  "2": 42,
  "3": 45,
  "4": 46,
  "5": 48,
  "6": 89,
  "7": 180,
  "8": 316,
  "9": 618,
  "10": 886,
  "11": 586,
  "12": 321
}
```

GET: Daily Count of Passersby for a Specified Date Range

Description

This API returns the daily count of passersby for the specified date range.

HTTP Method

GET

Resource URI

/api/presence/v1/passersby/daily

Requires OAuth

N

Parameters*Table 225: Parameter Details*

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date in yyyy-mm-dd format
endDate	Y	—	String	query	End Date in yyyy-mm-dd format

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/daily?siteId=<Site ID>&startDate=<date in yyyy-mm-dd>&endDate=<date in yyyy-mm-dd>

Sample Output

```
{
  "2017-02-01":0,
  "2017-02-02":0,
  "2017-02-03":0,
  "2017-02-04":0,
  "2017-02-05":0,
  "2017-02-06":0,
  "2017-02-07":0,
  "2017-02-08":0,
  "2017-02-09":0,
  "2017-02-10":0,
  "2017-02-11":0,
  "2017-02-12":0,
  "2017-02-13":0,
  "2017-02-14":7221,
  "2017-02-15":8461,
  "2017-02-16":12151,
  "2017-02-17":11309,
  "2017-02-18":11968,
  "2017-02-19":8076,
  "2017-02-20":11406,
  "2017-02-21":8776,
  "2017-02-22":10403,
  "2017-02-23":10149,
  "2017-02-24":9566,
```

```

    "2017-02-25": 9215,
    "2017-02-26": 7042,
    "2017-02-27": 10073,
    "2017-02-28": 9599,
    "2017-03-01": 4438
  }

```

GET: Daily Count of Passersby for the Last 7 days

Description

This API returns the daily count of passersby for the last 7 days.

HTTP Method

GET

Resource URI

/api/presence/v1/passersby/daily/lastweek

Requires OAuth

N

Parameters

Table 226: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/daily/lastweek?siteId=<Site ID>>

Sample Output

```

{
  "2017-02-01": 0,
  "2017-02-02": 0,
  "2017-02-03": 0,
  "2017-02-04": 0,
  "2017-02-05": 0,
  "2017-02-06": 0,
  "2017-02-07": 0,
  "2017-02-08": 0,
  "2017-02-09": 0,
  "2017-02-10": 0,
  "2017-02-11": 0,
  "2017-02-12": 0,
  "2017-02-13": 0,
  "2017-02-14": 7221,
}

```



```

    "2017-02-15":8461,
    "2017-02-16":12151,
    "2017-02-17":11309,
    "2017-02-18":11968,
    "2017-02-19":8076,
    "2017-02-20":11406,
    "2017-02-21":8776,
    "2017-02-22":10403,
    "2017-02-23":10149,
    "2017-02-24":9566,
    "2017-02-25":9215,
    "2017-02-26":7042,
    "2017-02-27":10073,
    "2017-02-28":9599,
    "2017-03-01":4438
  }

```

GET: Daily count of passersby for the last 30 days

Description

This API returns the daily count of passersby for the last 30 days.

HTTP Method

GET

Resource URI

/api/presence/v1/passersby/daily/lastmonth

Requires OAuth

N

Parameters

Table 227: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID

Content Type

application/json

Usage Guidelines

https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/daily/lastmonth?siteId=<Site ID>

Sample Output

```

{
  "2017-01-31":0,
  "2017-02-01":0,
  "2017-02-02":0,
  "2017-02-03":0,

```

```

"2017-02-04":0,
"2017-02-05":0,
"2017-02-06":0,
"2017-02-07":0,
"2017-02-08":0,
"2017-02-09":0,
"2017-02-10":0,
"2017-02-11":0,
"2017-02-12":0,
"2017-02-13":0,
"2017-02-14":7221,
"2017-02-15":8461,
"2017-02-16":12151,
"2017-02-17":11309,
"2017-02-18":11968,
"2017-02-19":8076,
"2017-02-20":11406,
"2017-02-21":8776,
"2017-02-22":10403,
"2017-02-23":10149,
"2017-02-24":9566,
"2017-02-25":9215,
"2017-02-26":7042,
"2017-02-27":10073,
"2017-02-28":9599,
"2017-03-01":4483
}

```

GET: Daily Count of Passersby by hour for the Specified Date Range

Description

This API returns the daily count of passersby by hour category for the specified date range

HTTP Method

GET

Resource URI

/api/presence/v1/passersby/daily/hourcategory

Requires OAuth

N

Parameters

Table 228: Parameter Details

Name	Required	Default	Type	Location	Description
siteId	Y	—	Number	query	Site ID
startDate	Y	—	String	query	Start Date in yyyy-mm-dd format

Name	Required	Default	Type	Location	Description
endDate	Y	—	String	query	End Date in yyyy-mm-dd format

Content Type

application/json

Usage Guidelines

<https://<tenant-id>.cmxcisco.com/api/presence/v1/passersby/daily/hourcategory?siteId=<Site ID>&startDate=<date in yyyy-mm-dd>&endDate=<date in yyyy-mm-dd>>

Sample Output

```
{
  "2017-02-01":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-02-02":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-02-03":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-02-04":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-02-05":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-02-06":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-02-07":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-02-08":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  },
  "2017-02-09":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  }
}
```

```
},
"2017-02-10":{
  "business_hours":null,
  "evening_hours":null,
  "morning_hours":null
},
"2017-02-11":{
  "business_hours":null,
  "evening_hours":null,
  "morning_hours":null
},
"2017-02-12":{
  "business_hours":null,
  "evening_hours":null,
  "morning_hours":null
},
"2017-02-13":{
  "business_hours":null,
  "evening_hours":null,
  "morning_hours":null
},
"2017-02-14":{
  "business_hours":0,
  "evening_hours":0,
  "morning_hours":0
},
"2017-02-15":{
  "business_hours":0,
  "evening_hours":0,
  "morning_hours":0
},
"2017-02-16":{
  "business_hours":0,
  "evening_hours":0,
  "morning_hours":0
},
"2017-02-17":{
  "business_hours":0,
  "evening_hours":0,
  "morning_hours":0
},
"2017-02-18":{
  "business_hours":0,
  "evening_hours":0,
  "morning_hours":0
},
"2017-02-19":{
  "business_hours":0,
  "evening_hours":0,
  "morning_hours":0
},
"2017-02-20":{
  "business_hours":0,
  "evening_hours":0,
  "morning_hours":0
},
"2017-02-21":{
  "business_hours":0,
  "evening_hours":0,
  "morning_hours":0
},
"2017-02-22":{
  "business_hours":0,
  "evening_hours":0,
```

```
    "morning_hours":0
  },
  "2017-02-23":{
    "business_hours":0,
    "evening_hours":0,
    "morning_hours":0
  },
  "2017-02-24":{
    "business_hours":0,
    "evening_hours":0,
    "morning_hours":0
  },
  "2017-02-25":{
    "business_hours":0,
    "evening_hours":0,
    "morning_hours":0
  },
  "2017-02-26":{
    "business_hours":0,
    "evening_hours":0,
    "morning_hours":0
  },
  "2017-02-27":{
    "business_hours":0,
    "evening_hours":0,
    "morning_hours":0
  },
  "2017-02-28":{
    "business_hours":0,
    "evening_hours":0,
    "morning_hours":0
  },
  "2017-03-01":{
    "business_hours":null,
    "evening_hours":null,
    "morning_hours":null
  }
}
```

