



Version: 120-2960

Last Updated: 22.05.2014

API Documentation

Synergy SKY Health API

Synergy Sky © 2014

Not released to public

Contents

- 1 Introduction
- 2 General API Usage
 - 2.1 Authentication
 - 2.2 How to use the API
 - 2.3 Alternative responses and errors
- 3 GET SKY Health
 - 3.1 Request
 - 3.2 Response
 - 3.3 GET Example

1 Introduction

This document describes the Synergy SKY Health API interface, which can be used by external Network Monitoring System to poll current health on the Synergy SKY platform. The API will only report back on aliveness of the application/service, and not anything related to the various running subsystems (OS/Hardware/Network) other than what will have impact on application/service availability.

To get most accurate monitoring of the complete platform, standard OS and hardware monitoring is recommended in addition to the Synergy SKY Health API.

2 General API Usage

2.1 Authentication

Synergy Sky 3.0 implements only Basic Access Authentication [[1] (http://en.wikipedia.org/wiki/Basic_access_authentication)] as form of authentication. The authentication and session state is happening server side with a expiretime on 30 minutes, which allows the integrator to be reusing connection for infinite amount of time, as long as its kept refreshed.



Note

To setup a API user, please consult the Admin guide of Synergy Sky 3.0

To authenticate client from i.e. C# .Net, following class is called:

```
client.Authenticator = new HttpBasicAuthenticator(Username, Password);
```

Similar type of object can be created when using Python

```
requests.get('<api url>', auth=HTTPBasicAuth('user', 'pass'))
```

en.wikipedia.org/wiki/Basic_access_authentication:

When the user agent wants to send the server authentication credentials it may use the Authorization header. The Authorization header is constructed as follows:
 Username and password are combined into a string "username:password"
 The resulting string literal is then encoded using the RFC2045-MIME variant of Base64, except not limited to 76 char/line
 The authorization method and a space i.e. "Basic " is then put before the encoded string.
 For example, if the user agent uses 'Aladdin' as the username and 'open sesame' as the password then the header is formed as follows:
Authorization: Basic QWxhZGRpbjpvYVUyIHNlc2FtZQ==

2.2 How to use the API

The health API retrieve latest reported status on all services reporting in their status, and polls status on whatever service that are available for real time status and feeds this back to the user. This means polling interval **should not go below 30 seconds** - to avoid unnecessary stress on the servers. The API only supports GET on the whole service tree initially.

2.3 Alternative responses and errors

In any case where the parameters have wrong format, or goes out of range the system outputs

- HTTP Code: 400
 - Body: {"Message": "Wrong format on the Service UUID use following '00000000-0000-0000-0000-000000000000'"}
 - Body: {"Message": "Service UUID not found"}
- HTTP Code: 500
 - Body: {"Message": "Unable to get Service status, there might be a problem with the backend."}

In cases where there is a problem with the application host (Microsoft Internet Information Server), a errorcode 503 Service unavailable will be given out.

3 GET SKY Health

Service path: /HarvestAPI/harvest/GetSystemHealth

Do a get on the root object will get a list/array of all running services, and the status of them

HTTP Method accepted: [GET]

3.1 Request

URL Parameter name	Parameter type	Description
ServiceUUID	string	The Service UUID you want to display
ExtendedInfo	boolean	If you want the tree to contain the extended info. or not Default: True

There are no mandatory parameters to get the status response, empty parameter set implies status on all components.



Request example

Get a specific service without extended information


- **GET /HarvestAPI/harvest/GetSystemHealth?ExtendedInfo=False&ServiceUUID=f27e064e-1036-4d48-b28a-b8d1c273b709**

Get all the services also including extended information

- **GET /HarvestAPI/harvest/GetSystemHealth**

3.2 Response

- Response: 200 OK
- Content-Type: application/json



Data Structure excluding ExtendedInformation

```

{
  "Id": "f27e064e-1036-4d48-b28a-b8d1c273b709",
  "ServiceName": "Alert Agent",
  "ReportedHostname": "WIN-3VH95TUITOU",
  "ReportedIPAddress": "fe80::ddf5:a6dc:9f32:1648%12, 192.168.1.50",
  "Version": "3.0 build 51",
  "Health": "OK",
  "LastError": "NA",
  "LastUpdated": "2014-04-30T09:06:59.67Z",
  "ExtendedInformation": [{}]
```

Body:

Key Name	Parameter Type	Description	Example
Id	string	Service UUID	f27e064e-1036-4d48-b28a-b8d1c273b709
ServiceName	string (255)	Reported name on the service	Alert Agent
ReportedHostName	string (255)	Reported hostname the service is running on	WIN-3VH95TUITOU
ReportedIPAddress	string (max)	Reported ip addresses on the machine the service is running on	fe80::ddf5:a6dc:9f32:1648%12, fe80::2c11:ca6c:a323:e0ed%15, 192.168.1.50, 2001:0:5ef5:79fb:2c11:ca6c:a323:e0ed
Version	string (64)	A constant string representation of the service type Id	3.0 build 51
Health	string (16)	Health reported as following enumeration <ul style="list-style-type: none"> OK TIMEOUT - Indicates that the heartbeat have timed out and the service is down. ISSUES - Indicates that some of the sub-services in the extended information have troubles 	OK
LastError	string (1024)	Last error reported by the running service. Limited support in first release, only outputting OK, TIMEOUT or NA	NA
LastUpdated	string	Last status change, all times are given in UTC	2014-04-30T09:06:59.67Z
ExtendedInformation	Array	Dictionary List	-

Key Name	Parameter Type	Description	Example
ExtendedInformation	Array	-	-
Key	string	key name	Device
Value	string	Value	Synergy Acano 1.1

This data can be reflected in following java/c#-type class when serializing from JSON.

```

List<SystemHealthModel> DataFromAPI;

public class SystemHealthModel
{
  public String Id;
  public String ServiceName;
  public String ReportedHostname;
  public String ReportedIPAddress;
  public String Version;
  public String Health;
  public String LastError;
  public DateTime LastUpdated;
```

```
    public ArrayList< ArrayList< KeyValuePair<string,string> > > ExtendedInformation;  
}
```

3.3 GET Example

```
[{
  "Id": "f27e064e-1036-4d48-b28a-b8d1c273b709",
  "ServiceName": "Alert Agent",
  "ReportedHostname": "WIN-3VH95TUITOU",
  "ReportedIPAddress": "fe80::ddf5:a6dc:9f32:1648%12, 192.168.1.50",
  "Version": "3.0 build 51",
  "Health": "OK",
  "LastError": "NA",
  "LastUpdated": "2014-04-30T09:06:59.67Z",
  "ExtendedInformation": [
    [{
      "Key": "LastUpdated",
      "Value": "\"2014-04-30T09:06:59.667Z\""
    }, {
      "Key": "Version",
      "Value": "3.0 build 51"
    }, {
      "Key": "LastError",
      "Value": "NA"
    }, {
      "Key": "ServiceName",
      "Value": "Alert Rule Analysis Agent"
    }
  ],
  [{
    "Key": "LastUpdated",
    "Value": "\"2014-04-30T09:06:53.523Z\""
  }, {
    "Key": "Version",
    "Value": "3.0 build 51"
  }, {
    "Key": "LastError",
    "Value": "NA"
  }, {
    "Key": "ServiceName",
    "Value": "Service Alert Agent"
  }
  ],
  [{
    "Key": "LastUpdated",
    "Value": "\"2014-04-30T09:06:35.977Z\""
  }, {
    "Key": "Version",
    "Value": "3.0 build 51"
  }, {
    "Key": "LastError",
    "Value": "NA"
  }, {
    "Key": "ServiceName",
    "Value": "Message Queue Agent"
  }
  ]
}],{
  "Id": "a92a969f-eeff-4e0b-ae57-b646b6eda3d8",
  "ServiceName": "Data Queue Processing Agent",
  "ReportedHostname": "WIN-UMN7MN8JG48",
  "ReportedIPAddress": "fe80::a14f:d26f:cb28:7f04%12, 192.168.1.52",
  "Version": "3.0 build 94",
  "Health": "OK",
  "LastError": "NA",
  "LastUpdated": "2014-04-30T09:07:01.22Z",
  "ExtendedInformation": [
    [{
      "Key": "LastUpdated",
      "Value": "\"2014-04-30T09:07:01.22Z\""
    }, {
      "Key": "Version",
      "Value": "3.0 build 94"
    }, {
      "Key": "LastError",
      "Value": "NA"
    }, {
      "Key": "ServiceName",
      "Value": "Data Queue Processing Agent"
    }
  ]
}]
}]
```