Boardwalk REST API Guide

*BAE Version 4.4 Release BAE-SQ-M-20180716*

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# Introduction

This document is a reference guide for Boardwalk Restful API. The software product provided by Boardwalktech Inc. and is covered under the product support based on Master License Agreement. Please send questions, suggestions or issues to [support@boardwalktech.com](mailto:support@boardwalktech.com).

# Intended Audience

This REST API Implementation Manual is for the reference of developers who want to interact with a Boardwalk Application programmatically.

# Glossary

|  |  |
| --- | --- |
| Term | Definition |
| BAE | BAE (Boardwalk Application Engine) is a software platform that allows enterprise to build and deploy business applications with patented Grid data model. |
| Grid | Grid is a 2-dimensional data structure where each cell can be identified uniquely using row and column address. |
| Cell | A cell is an element in Grid with a unique address. A cell can also be identified by combination of Row and Column Number. |
| Row | A Row is collection of unique cells with same Row numbers. |
| Column | A Column is collection of unique cells with same Column numbers. |
| Grid Buffer | Grid Buffer is information about a grid exchanged between Boardwalk server and Boardwalk client. |
| Cell Buffer | Cell Buffer is collection of cells exchanged between Boardwalk server and Boardwalk client. |
| Neighborhood | A Neighborhood is used on the BAE Server to organize users in a hierarchical fashion. Neighborhoods can represent any hierarchical collection of users—by department, by project team, etc. |
| Collaboration | The Collaboration is a process container attached to the Neighborhood node used for storing related girds. |
| Whiteboard | A Whiteboard is a folder under which the shared grids can be created. It is a way to arrange grids into related categories. |

# Restful API Definition

Boardwalk API definition is done using YAML.



# API Access

This document contains the CURL Commands to run APIs and the expected result returned by APIs. An API can be called using https://<Server>/<Webapp>/rest/

Example: On BW Test environment the APIs are called using following URL:  
[https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/](https://bwrestapiqa.boardwalktech.com:8443/BAE_4_3_REST_API_TEST/rest/)

In the rest of document above URL is used to describe Sample Curl Calls using curl.

# Security

Boardwalk suggests to use SSL for transport security. All calls to the REST API must be done over HTTPS, ensuring end-to-end encryption of the message and authentication of Boardwalk as the recipient of your requests. Each Rest API call expects sender to provide a Base-64 encoded **username: password: nhPath** in the Request Header to the Server. Every REST API request require “Authorization” to be added into HTTP Header.

Example: The Authorization for ‘admin’ who is member of neighborhood-path ‘ROOT’ having password ‘0’ is Base-64 encoded string of **admin:0:ROOT** which is “**YWRtaW46MDpST09U”** , So HTTP Header section of API Request has following line:

Authorization: YWRtaW46MDpST09U

The Server verifies if the username exists in Boardwalk database and authenticates the user using the password sent in HTTP header. The API also verifies the neighborhood or the group, user belongs to before giving access to resource requested by client.

# REST API List

Following is the list all Rest API supported by Boardwalk:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No** | **Resource** | **HTTP Method** | **URI** | **Purpose** |
| 1 | User | GET | /user/{userId} | Provide details on a Boardwalk user. |
| 2 |  | GET | /user?active=true | Provide list of all active user. |
| 3 |  | POST | /user | Create new user in a Boardwalk database. |
| 4 |  | PUT | /user | Update user details for a given user in Boardwalk database. |
| 5 |  | DELETE | /user/{userId} | Deactivate a user in Boardwalk database. |
| 6 | Neighborhood | POST | /neighborhood | Create a new neighborhood in the Boardwalk system |
| 7 |  | GET | /neighborhood/{nhId} | Provide complete hierarchy of a Neighborhood. |
| 8 |  | DELETE | /neighborhood/{nhId} | Delete a neighborhood along with hierarchy. |
| 9 | Member | GET | /neighborhood/{nhId}/member | Provide list of all members in a given Neighborhood. |
| 10 |  | POST | /neighborhood/{nhId}/member | Associate an existing user to a NH. |
| 11 |  | DELETE | /neighborhood/{nhId}/member/{memberId} | Detach a user from a NH. |
| 12 | Relation | GET | /neighborhood/{nhId}/relation | Get all relationship for a given NH. |
| 13 |  | POST | /neighborhood/{nhId}/relation | Create a new relationship for given NH. |
| 14 | Collaboration | GET | /neighborhood/{nhId}/collaboration | Get list of all collaborations under a NH. |
| 15 |  | POST | /neighborhood/{nhId}/member/{memberId}/collaboration | Create a new collaboration under a NH. |
|  |  | DELETE | /neighborhood/{nhId}/member/{memberId}/collaboration | Delete a collaboration under a NH |
| 16 | Whiteboard | GET | /collaboration/{collabId}/whiteboard | Get list of all Whiteboard under a NH. |
| 17 |  | POST | /collaboration/{collabId}/whiteboard | Create a whiteboard under given collaboration. |
|  |  | DELETE | /collaboration/{collabId}/whiteboard | Delete a whiteboard from the Collaboration. |
| 18 | Grid | POST | /grid | Create a new grid. |
| 19 |  | PUT | /grid | Export Data into a grid. |
| 20 |  | GET | /grid/{gridId}?importTid={importTId}&view={view}&mode={mode}&baselineId={baselineId} | Fetch data from a grid. |

# User Management APIs

This section provides support REST API for user management. This section also provides the sample CURL Commands for accessing User Management REST API along with sample success and error response.

|  |  |
| --- | --- |
| **Resource** | User |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/user/<userId> |
| **Requires**  **Authentication** | Yes |
| **Response Format** | JSON |
| **Method** | Get |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X GET **"**https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/user/1101010**"** -H **"**accept: application/json” |
| **Success Response**  **Example** | HTTP Status: 200  **{"**email**"**:**"**BOARDWALK\_APPLICATION**"**,**"**firstName**"**:**"**Boardwalk**"**,**"**id**"**:1,**"**lastName**"**:**"**Admin**"**, **"**password**"**:**"**\*\*\*\*\*\*\*\*\***"}** |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **HTTP Status: 200**  **[{**  **"**error**"**: **"**404 - User not found**"**,  **"**path**"**: **"**UserManagement.userUserIdGet::getUser**"**,  **"**proposedSolution**"**: **"**The requested user does not exist. Enter correct UserId.**"**  **}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | User |
| **URL** | https://<Boardwalk\_App\_URL>/rest/user?<Query Parameter> |
| **Requires**  **Authentication** | Yes |
| **Response Format** | JSON |
| **Method** | Get |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/user?active=true" -H "accept: application/json" -H "Authorization: YWRtaW46MDpST09U" |
| **Success Response**  **Example** | **[{**  **"**email**"**: **"**Sam@acme.com**"**,  **"**externalId**"**: **"**Sam**"**,  **"**firstName**"**: **"**Sam**"**,  **"**id**"**: 1012,  "lastName": "Page",  **"**password**"**: **"**\*\*\*\*\***"**  **}**, **{**  **"**email**"**: **"**MS.Dhoni@acme.com**"**,  **"**externalId**"**: **"**MS.Dhoni**"**,  **"**firstName**"**: **"**MahendraSingh**"**,  **"**id**"**: 1034,  **"**lastName**"**: **"**Dhoni**"**,  **"**password**"**: **"**\*\*\*\*\***"**  **}**, **{**  **"**email**"**: **"**Sachin.Tendulkar@acme.com**"**,  **"**externalId**"**: **"**Sachin.Tendulkar\_1**"**,  **"**firstName**"**: **"**Sachin**"**,  **"**id**"**: 1038,  **"**lastName**"**: **"**Tendulkar**"**,  **"**password**"**: **"**\*\*\*\*\***"**  **}]** |
| **Error Response**  **Example** | **[{**  **"**error**"**: **"**Missing Authorization in Header**"**,  **"**path**"**: **"**Header:Authorization**"**,  **"**proposedSolution**"**: **"**Authorization Header should contain user:pwd:nhPath as Base64 string**"**  **}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | User |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/user/<User Id> |
| **Requires**  **Authentication** | Yes |
| **Response Format** | JSON |
| **Method** | Post |
| **URL Params** | ***Please refer to Appendix I for User Object definition.*** |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X POST **"**localhost:9090/BAE\_4\_3\_API/rest/user**"** -H **"**accept: application/json**"** -H **"**Authorization: YWRtaW46MDpST09U**"** -H **"**Content-Type: application/json**"** -d **"{** **\"**firstName**\"**: **\"**Jughead**\"**, **\"**lastName**\"**: **\"**Jones**\"**, **\"**password**\"**: **\"**dummy1**\"**, **\"**email**\"**: **\"**jj@acme.com**\"**, **\"**externalid**\"**: **\"**JJ**\"**, **\"**id**\"**: 0**}"** |
| **Success Response**  **Example** | **[{"**email**"**:**"**jj@acme.com**"**,**"**firstName**"**:**"**Jughead**"**,**"**id**"**:1047,**"**lastName**"**:**"**Jones**"}]** |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{**  **"**error**"**: **"**Failed to created user with **=** dummy@dummy.com**"**,  **"**path**"**: **"**UserManagement.userPost::BoardwalkUserManager.createUser**"**,  **"**proposedSolution**"**: **"**Status: 422. Check User Details Posted.**"**  **}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | User |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/user/<User Id> |
| **Requires**  **Authentication** | Yes |
| **Response Format** | JSON |
| **Method** | Put |
| **URL Params** | ***Please refer to Appendix I for User Object definition.*** |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X PUT **"**localhost:9090/BAE\_4\_3\_API/rest/user**"** -H **"**accept: application/json**"** -H **"**Authorization: YWRtaW46MDpST09U**"** -H **"**Content-Type: application/json**"** -d **"{** **\"**firstName**\"**: **\"**Jughead**\"**, **\"**lastName**\"**: **\"**Jones**\"**, **\"**password**\"**: **\"**j0nes@1234**\"**, **\"**email**\"**: **\"**jj@acme.com**\"**, **\"**externalid**\"**: **\"**JJ**\"**, **\"**id**\"**: 1047**}"** |
| **Success Response**  **Example** | Successfully updated profile of = 1047 |
| **Error Response**  **Example** | Example:  User profile does not exist for UserId:1044343 |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | User |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/user/<User Id> |
| **Requires**  **Authentication** | Yes |
| **Response Format** | JSON |
| **Method** | Delete |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X DELETE **"**localhost:9090/BAE\_4\_3\_API/rest/user/1044**"** -H **"**accept: application/json**"** -H **"**Authorization: YWRtaW46MDpST09U**"** |
| **Success Response**  **Example** | User de-activated successfully. UserId:1047 |
| **Error Response**  **Example** | User profile does not exist for UserId:1044343 |
| **Notes** |  |

# Neighborhood Management APIs

This section provides the detail of to access Neighborhood Management API. These APIs also allow to manage membership of a neighborhood as well.

|  |  |
| --- | --- |
| **Resource** | Neighborhood |
| **URL** | https://<Boardwalk\_App\_URL>rest/<v#>/neighborhood/<NH Id> |
| **Requires**  **Authentication** | Yes |
| **Response Format** | JSON |
| **Method** | Get |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X GET **"**https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/neighborhood/1**"** -H **"**accept: application/json**"** -H **"**Authorization: YWRtaW46MDpST09U**"** |
| **Success Response**  **Example** | **[{**  **"**id**"**: 1,  **"**level**"**: 0,  **"**name**"**: **"**ROOT**"**,  **"**parentId**"**: -1,  **"**secure**"**: false  **}**, **{**  **"**id**"**: 2,  **"**level**"**: 1,  **"**name**"**: **"**Boardwalk**"**,  **"**parentId**"**: 1,  **"**secure**"**: false  **}**, **{**  **"**id**"**: 3,  **"**level**"**: 2,  **"**name**"**: **"**BlockChain**"**,  **"**parentId**"**: 2,  **"**secure**"**: false  **}**, **{**  **"**id**"**: 7,  **"**level**"**: 3,  **"**name**"**: **"**Cupertino Team**"**,  **"**parentId**"**: 3,  **"**secure**"**: false  **}**, **{**  **"**id**"**: 4,  **"**level**"**: 2,  **"**name**"**: **"**Collaboration**"**,  **"**parentId**"**: 2,  **"**secure**"**: false  **}**, **{**  **"**id**"**: 5,  **"**level**"**: 3,  **"**name**"**: **"**Yoddha Team**"**,  **"**parentId**"**: 4,  **"**secure**"**: false  **}**, **{**  **"**id**"**: 6,  **"**level**"**: 3,  **"**name**"**: **"**Mumbai Team**"**,  **"**parentId**"**: 4,  **"**secure**"**: false  **}**, **{**  **"**id**"**: 8,  **"**level**"**: 2,  **"**name**"**: **"**PS**"**,  **"**parentId**"**: 2,  **"**secure**"**: false  **}]** |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{"**error**"**:**"**Missing Authorization in Header**"**,**"**path**"**:**"**Header:Authorization**"**,**"**proposedSolution**"**:**"**Authorization Header should contain user:pwd:nhPath as Base64 string**"}]**  **[{**  **"**error**"**: **"**Missing Authorization in Header**"**,  **"**path**"**: **"**Header:Authorization**"**,  **"**proposedSolution**"**: **"**Authorization Header should contain user:pwd:nhPath as Base64 string**"**  **}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | Neighborhood |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/neighborhood/ |
| **Requires**  **Authentication** | Yes |
| **Response Format** | JSON |
| **Method** | Post |
| **URL Params** | ***Please refer to Appendix G for Neighborhood Object definition.*** |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X POST **"**https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/neighborhood**"** -H **"**accept: application/json**"** -H **"**Authorization: YWRtaW46MDpST09U**"** -H **"**Content-Type: application/json**"** -d **"{\"**level**\"**: -1, **\"**name**\"**: **\"**NH\_0\_With\_Auth**\"**, **\"**id**\"**: 0, **\"**parentId**\"**:-1, **\"**secure**\"**: true**}"** |
| **Success Response**  **Example** | **[{**  **"**id**"**: 35,  **"**level**"**: 0,  **"**name**"**: **"**level\_0**"**,  **"**parentId**"**: -1,  **"**secure**"**: true  **}]** |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{"**error**"**:**"**createNeighborhood Failed**"**,**"**path**"**:**"**NeighborhoodManagement.neighborhoodPost::NeighborhoodManagement.  createNeighborhood**"**,**"**proposedSolution**"**:**"**BoardwalkException. ErrorCode:10016, Error Msg:A Neighborhood with this name already exists within it's Parent Neighborhood, Solution:The Neighborhood Name has to be unique within it's Parent Neighborhood, Please choose a different name**"}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | Neighborhood |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/neighborhood/< Neighborhood ID> |
| **Method** | Delete |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X DELETE https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/neighborhood/39 -H **"**Authorization: YWRtaW46MDpST09U**"** |
| **Success Response**  **Example** | Neighborhood Deleted Successfully. All it's dependent objects are purged successfully. |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{**  **"**error**"**: **"**NeighborhoodId NOT FOUND **"**,  **"**path**"**: **"**NeighborhoodManagement.neighborhoodNhIdDelete::BoardwalkNeighborhoodManager.  deleteNeighborhood**"**,  **"**proposedSolution**"**: **"**The NeighborhoodId NOT FOUND. You must provide an existing Neighborhood Id.**"**  **}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | Neighborhood{nhId}/member |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/neighborhood/<NH Id>/member |
| **Method** | Get |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X GET https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/neighborhood/6/member  -H **"**Authorization: YWRtaW46MDpST09U**"** |
| **Success Response**  **Example** | **[{**  **"**id**"**: 1009,  **"**nhid**"**: 6,  **"**userId**"**: 1027  **}**, **{**  **"**id**"**: 1006,  **"**nhid**"**: 6,  **"**userId**"**: 1004  **}**, **{**  **"**id**"**: 1007,  **"**nhid**"**: 6,  **"**userId**"**: 1006  **}**, **{**  **"**id**"**: 1010,  **"**nhid**"**: 6,  **"**userId**"**: 1018  **}]** |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{**  **"**error**"**: **"**NeighborhoodId NOT FOUND **"**,  **"**path**"**: **"**NeighborhoodManagement.neighborhoodNhIdMemberGet::BoardwalkNeighborhoodManager.  getNeighborhoodTree**"**,  **"**proposedSolution**"**: **"**The Neighborhood NOT FOUND. You must provide an existing Neighborhood Id.**"**  **}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | Neighborhood{nhId}/member |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/neighborhood/<NH\_ID>/member |
| **Method** | Post |
| **URL Params** | ***Please refer to Appendix J for Member Object Definition.*** |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X POST **"**localhost:9090/BAE\_4\_3\_API/rest/neighborhood/11/member**"** -H **"**accept: application/json**"** -H **"**Authorization: YWRtaW46MDpST09U**"** -H **"**Content-Type: application/json**"** -d **"{** **\"**userId**\"**: 1003**}"** |
| **Success Response**  **Example** | **[{**  **"**active**"**: true,  **"**id**"**: 1024,  **"**nhid**"**: 11,  **"**userId**"**: 1003  **}]** |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{"**error**"**:**"**Creating new membership to Neighborhood Failed**"**,**"**path**"**:**"**NeighborhoodManagement.neighborhoodNhIdMemberPost:  :BoardwalkNeighborhoodManager.getNeighborhoodTree**"**,**"**proposedSolution**"**:**"**Boardwalk Exception. ErrorCode:10017, Error Msg:This User is already a member of the Neighborhood, Solution:User membership already exists for the Neighborhood**"}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | Neighborhood{nhId}/member |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/neighborhood/<NH\_ID>/member/<MemberId> |
| **Method** | Delete |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X DELETE https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/neighborhood/11/  member/1024 -H **"**Authorization: YWRtaW46MDpST09U**"** |
| **Success Response**  **Example** | Neighborhood Membership: 1024 of Neighborhood: 11 is Successfully Deleted. |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{"**error**"**:**"**The Membership NOT FOUND**"**,**"**path**"**:**"**NeighborhoodManagement.neighborhoodNhIdMemberMemberIdDelete:  :BoardwalkNeighborhoodManager.getMemberList**"**,**"**proposedSolution**"**:**"**You must provide an existing MemberId.**"}]** |
| **Notes** |  |

neighborhood/{nhId}/relation

|  |  |
| --- | --- |
| **Resource** | Neighborhood{nhId}/relation |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/neighborhood/<NH\_ID>/ |
| **Method** | Get |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X GET **"**https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/neighborhood/2  /relation**"** -H **"**accept: application/json**"**  -H **"**Authorization: YWRtaW46MDpST09U**"** |
| **Success Response**  **Example** | **[{**  **"**name**"**: **"**CHILDREN**"**,  **"**relatedNeighborhoodId**"**: **[{**  **"**id**"**: 3,  **"**level**"**: 2,  **"**name**"**: **"**BlockChain**"**,  **"**parentId**"**: 2,  **"**secure**"**: true  **}**, **{**  **"**id**"**: 4,  **"**level**"**: 2,  **"**name**"**: **"**Collaboration**"**,  **"**parentId**"**: 2,  **"**secure**"**: true  **}**, **{**  **"**id**"**: 8,  **"**level**"**: 2,  **"**name**"**: **"**PS**"**,  **"**parentId**"**: 2,  **"**secure**"**: true  **}]**  **}**, **{**  **"**name**"**: **"**PARENT**"**,  **"**relatedNeighborhoodId**"**: **[{**  **"**id**"**: 1,  **"**level**"**: 0,  **"**name**"**: **"**ROOT**"**,  **"**parentId**"**: -1,  **"**secure**"**: true  **}]**  **}**, **{**  **"**name**"**: **"**DOMAIN**"**,  **"**relatedNeighborhoodId**"**: **[{**  **"**id**"**: 1,  **"**level**"**: 0,  **"**name**"**: **"**ROOT**"**,  **"**parentId**"**: -1,  **"**secure**"**: true  **}]**  **}**, **{**  **"**name**"**: **"**PRIVATE**"**,  **"**relatedNeighborhoodId**"**: **[{**  **"**id**"**: 2,  **"**level**"**: 1,  **"**name**"**: **"**Boardwalk**"**,  **"**parentId**"**: 1,  **"**secure**"**: true  **}]**  **}]** |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{"**error**"**:**"**IsNegative**"**,**"**path**"**:**"**nhId**"**,**"**proposedSolution**"**:**"**The Neighborhood you are setting Relation must exists. It should be a Positive Number.**"}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | Neighborhood{nhId}/relation |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/neighborhood/<NH\_ID>/ |
| **Method** | Post |
| **URL Params** | ***Please refer to Appendix K for Relationship Object definition*** |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X POST **"**https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/neighborhood/  5/relation**"** -H **"**accept: application/json**"** -H **"**Authorization: YWRtaW46MDpST09U**"** -H **"**Content-Type: application/json**"** -d **"{** **\"**name**\"**: **\"**ROOT - MUMBAI**\"**, **\"**relatedNeighborhoodId**\"**: **[** **{\"**id**\"**: 1**}**, **{\"**id**\"**: 6**}** **]}"** |
| **Success Response**  **Example** | **[{"**error**"**:**"**All Neighborhood Relations Created Successfully**"**,**"**path**"**:**"**relationship.nhList**[]**.Id**"**,**"**proposedSolution**"**:**"**Relations created successfully for all Neighborhood Ids.**"}]** |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{"**error**"**:**"**NeighborhoodId NOT FOUND **"**,**"**path**"**:**"**NeighborhoodManagement.neighborhoodNhIdRelationPost:  :BoardwalkNeighborhoodManager.getNeighborhoodTree**"**,**"**proposedSolution**"**:**"**The NeighborhoodId NOT FOUND. You must provide an existing Neighborhood Id.**"}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | Neighborhood{nhId}/relation |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/neighborhood/<NH\_ID>/ |
| **Method** | Delete |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X DELETE **"**https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/v1/neighborhood/ 8/relation?relation**=**ROOT%20-%20MUMBAI5" -H "accept: application/json" -H **"**Authorization: YWRtaW46MDpST09U**"** |
| **Success Response**  **Example** | **[**ROOT - MUMBAI5**]** Deleted Successfully |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{**  **"**error**"**: **"**Missing Authorization in Header**"**,  **"**path**"**: **"**Header:Authorization**"**,  **"**proposedSolution**"**: **"**Authorization Header should contain user:pwd:nhPath as Base64string**"**  **}]** |
| **Notes** |  |

## Collaboration

|  |  |
| --- | --- |
| **Resource** | Collaboration |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/neighborhood/<NH\_ID>/collaboration |
| **Requires**  **Authentication** | Yes |
| **Response**  **Format** | Jason |
| **Method** | Get |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X GET **"**https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/neighborhood/**1**/ collaboration**"** -H **"**accept: application/json**"** -H **"**Authorization: YWRtaW46MDpST09U |
| **Success Response**  **Example** | **HTTP Status: 200**  **[{**  **"**id**"**: 1003,  **"**name**"**: **"**MYcOLLABV**"**,  **"**wbList**"**: **[{**  **"**gridList**"**: **[]**,  **"**id**"**: 1004,  **"**name**"**: **"**Main**"**  **}]**  **}**, **{**  **"**id**"**: 1006,  **"**name**"**: **"**REST-LABS**"**,  **"**wbList**"**: **[{**  **"**gridList**"**: **[]**,  **"**id**"**: 1007,  **"**name**"**: **"**Main**"**  **}]**  **}**, **{**  **"**id**"**: 1,  **"**name**"**: **"**SYSTEM**"**,  **"**wbList**"**: **[{**  **"**gridList**"**: **[{**  **"**id**"**: 1000002,  **"**name**"**: **"**BRectDefinition**"**  **}]**,  **"**id**"**: 2,  **"**name**"**: **"**BRect**"**  **}**, **{**  **"**gridList**"**: **[{**  **"**id**"**: 1000009,  **"**name**"**: **"**SystemConfiguration**"**  **}]**,  **"**id**"**: 6,  **"**name**"**: **"**Configuration**"**  **}**, **{**  **"**gridList**"**: **[{**  **"**id**"**: 1000003,  **"**name**"**: **"**KeyStore**"**  **}]**,  **"**id**"**: 3,  **"**name**"**: **"**KeyStore**"**  **}**, **{**  **"**gridList**"**: **[{**  **"**id**"**: 1000010,  **"**name**"**: **"**TemplateManifest\_ProcessManagement**"**  **}**, **{**  **"**id**"**: 1000001,  **"**name**"**: **"**TemplateManifest\_SuperMerge**"**  **}]**,  **"**id**"**: 1,  **"**name**"**: **"**Manifest**"**  **}**, **{**  **"**gridList**"**: **[{**  **"**id**"**: 1000008,  **"**name**"**: **"**PerformanceCapture**"**  **}]**,  **"**id**"**: 5,  **"**name**"**: **"**PerformanceCapture**"**  **}**, **{**  **"**gridList**"**: **[{**  **"**id**"**: 1000006,  **"**name**"**: **"**C2C\_SuperMerge\_Rules**"**  **}**, **{**  **"**id**"**: 1000005,  **"**name**"**: **"**C2S\_SuperMerge\_Rules**"**  **}**, **{**  **"**id**"**: 1000007,  **"**name**"**: **"**Multi\_C2C\_SuperMerge\_Rules**"**  **}**, **{**  **"**id**"**: 1000004,  **"**name**"**: **"**S2C\_SuperMerge\_Rules**"**  **}]**,  **"**id**"**: 4,  **"**name**"**: **"**SuperMerge**"**  **}]**  **}]** |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{"**error**"**:**"**Missing Authorization in Header**"**,**"**path**"**:**"**Header:Authorization**"**,**"**proposedSolution**"**:**"**Authorization Header  should contain user:pwd:nhPath as Base64 string**"}**,**{"**error**"**:**"**IsMissing**"**,**"**path**"**:**"**Collaboration.Purpose**"**,**"**proposedSolution**"**: **"**Collaboration Purpose is Missing in the Request. Provide Collaboration Purpose**"}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | Neighborhood{nhId}/collaboration |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/neighborhood/<NH\_ID>/collaboration |
| **Requires**  **Authentication** | Yes |
| **Response**  **Format** | JSON |
| **Method** | Post |
| **URL Params** | ***Please refer to Appendix K for Collaboration object definition.*** |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X POST **"**https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/neighborhood/26/member/ 1028/collaboration**"** -H **"**accept: application/json**"** -H **"**Authorization: YWRtaW46MDpXQVNfQkxBTks**="** -H **"**Content-Type: application/json**"** -d **"{** **\"**name**\"**: **\"**REST-LABS**\"** **}"** |
| **Success Response**  **Example** | **HTTP Status: 200**  1009 |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:    **[{"**error**”**:Authorization Is not allowed to create Collaboration in this Neighborhood. **[**NhID mismatch**]"**, **"**path**"**:**"**NeighborhoodManagement.neighborhoodNhIdMemberMemberIdCollaborationPost:: bwAuthorization.AuthenticateUser**"**,**"**proposedSolution**"**:**"**Authorization Neighborhood Membership does not match. Provide correct Authorization and Try Again.**"}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | Neighborhood{nhId}/collaboration |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/neighborhood/<NH\_ID>/collaboration |
| **Requires**  **Authentication** | Yes |
| **Response**  **Format** | JSON |
| **Method** | Delete |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X DELETE https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/v1/collaboration/1022 -H **"**Authorization: YWRtaW46MDpST09U |
| **Success Response**  **Example** | Collaboration Deleted Successfully |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{**  **"**error**"**: **"**Missing Authorization in Header**"**,  **"**path**"**: **"**Header:Authorization**"**,  **"**proposedSolution**"**: **"**Authorization Header should contain user:pwd:nhPath as Base64 string**"**  **}]** |
| **Notes** | Delete Collaboration returns status code 200 for success while 400 is returned for invalid requests and 422 is returned for server side error. |

## Whiteboard

|  |  |
| --- | --- |
| **Resource** | Whiteboard |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/collaboration/<ID>/whiteboard |
| **Requires**  **Authentication** | Yes |
| **Response**  **Format** | Jason |
| **Method** | Get |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | **"**https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/collaboration/ **1003**/whiteboard**"** -H **"**accept: application/json**"** -H **"**Authorization: YWRtaW46MDpST09U**"** |
| **Success Response**  **Example** | **HTTP Status: 200**  **[{**  **"**id**"**: 1003,  **"**name**"**: **"**MYcOLLABV**"**,  **"**wbList**"**: **[{**  **"**id**"**: 1004,  **"**name**"**: **"**Main**"**  **}**, **{**  **"**id**"**: 1013,  **"**name**"**: **"**Teertng**"**  **}**, **{**  **"**id**"**: 1011,  **"**name**"**: **"**Teing**"**  **}**, **{**  **"**id**"**: 1012,  **"**name**"**: **"**Teseeting**"**  **}**, **{**  **"**id**"**: 1009,  **"**name**"**: **"**Test**"**  **}**, **{**  **"**id**"**: 1010,  **"**name**"**: **"**Testing**"**  **}]**  **}]** |
| **Error Response**  **Example** | **[{**  **"**error**"**: **"**Collaboration ID NOT FOUND**"**,  **"**path**"**: **"**CollaborationManagement.collaborationCollabIdWhiteboardGet:: BoardwalkCollaborationManager.getCollaborationTree**"**,  **"**proposedSolution**"**: **"**Boardwalk Exception. ErrorCode:10018, Error Msg:Collaboration does not exist for this Collaboration Id, Solution:Use existing Collaboration Id**"**  **}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | Whiteboard |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/collaboration/<ID>/whiteboard |
| **Requires**  **Authentication** | Yes |
| **Response**  **Format** | Jason |
| **Method** | Post |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | **"** curl -X POST **"**https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/collaboration/ 1003/whiteboard**"** -H **"**accept: application/json**"** -H **"**Content-Type: application/json**"** -d **"{** **\"**name**\"**: **\"**NEW TEST**\"}"** -H **"**Authorization: YWRtaW46MDpST09U**"** |
| **Success Response**  **Example** | **HTTP Status: 200**  1021 |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:    **[{"**error**"**:**"**Whiteboard already Exists with this name.**"**,**"**path**"**:**"**CollaborationManagement.collaborationCollabIdWhiteboardPost:: bcn.getWhiteboards**()"**,**"**proposedSolution**"**:**"**Boardwalk Exception. ErrorCode:10011, Error Msg:A Whiteboard with this name already exists within this Collaboration, Solution:The Whiteboard Name has to be unique within a Collaboration, Please choose a different name**"}]** |
| **Notes** |  |

|  |  |
| --- | --- |
| **Resource** | Whiteboard |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/collaboration/<ID>/whiteboard |
| **Requires**  **Authentication** | Yes |
| **Response**  **Format** | Jason |
| **Method** | Delete |
| **URL Params** | ***Please refer to Appendix M for Whiteboard Object definition.*** |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X DELETE **"**  <https://bwrestapiqa.boardwalktech.com:8443/BAE_TEST/rest/v1/collaboration/1003> /whiteboard/1010**"** -H **"**accept: application/json**"** -H **"**Authorization: YWRtaW46MDpST09U**"** |
| **Success Response**  **Example** | Whiteboard: **[**1010**]** under Collaboration:**[**1003**]** is successfully Deleted. |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **[{**  **"**error**"**: **"**Missing Authorization in Header**"**,  **"**path**"**: **"**Header:Authorization**"**,  **"**proposedSolution**"**: **"**Authorization Header should contain user:pwd:nhPath as Base64 string**"**  **}]** |
| **Notes** |  |

# Grid Management API

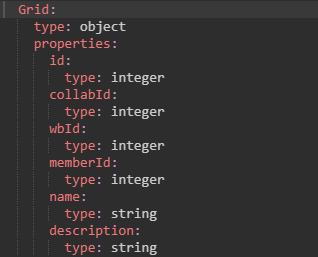
This section provides Grid Management REST API. These APIs allow to create a grid, extract the data from the grid and update the changes made to a grid on server. The section also describes the cell buffer structure for request and response.

|  |  |
| --- | --- |
| **Resource** | Grid |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/grid |
| **Requires**  **Authentication** | Yes |
| **Response Format** | JSON |
| **Method** | Post |
| **URL Params** | ***Please refer to Appendix A for Grid Object definition.*** |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X POST "https://bwrestapiqa.boardwalktech.com:8443/ BAE\_TEST/rest/v1/grid" -H  "accept: application/json"    -H  "Authorization: c3VqaXRoOjA6Uk9PVHxCT0FSRFdBTEt8Q09MTEFCT1JBVElPTnxNVU1CQUkgVEVBTQ =="   -H  "Content-Type: application/json" -d "{  \"name\":\" GOOD\_CUBOID\_2152418\",  \"description\": \"CHECK FOR SUCCESS\",  \"wbId\": 1004,  \"collabId\": 1003  }" |
| **Success Response**  **Example** | HTTP Status: 200[{"userName":null,"password":null,"nhPath":null,"gridId":2003473,"collabId":1003,"wbId":1004,"nhId":null,"memberId":1000,"name":"GOOD\_CUBOID\_2152418","description":"CHECK FOR SUCCESS"}] |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **HTTP Status: 200**  [{"error":"SQLException:2627, Cause: Violation of UNIQUE KEY constraint 'UQ\_NC\_BW\_TBL'. Cannot insert duplicate key in object 'dbo.BW\_TBL'. The duplicate key value is (1009, GOOD\_CUBOID).","path":"GridManagement.gridPost::TableManager.createTable","proposedSolution":"Grid Already Exists in Whiteboard. Try different Grid Name"}] |
| **Notes** |  |

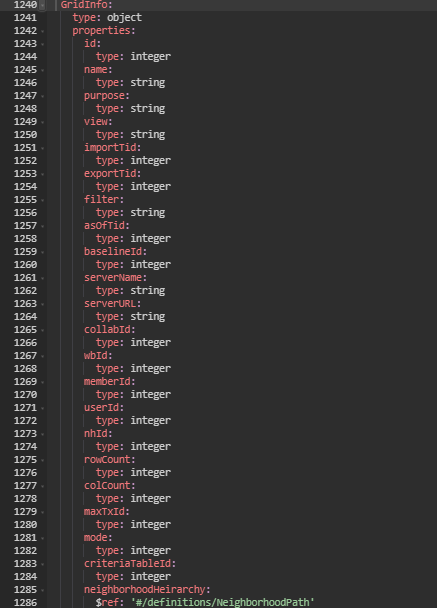
|  |  |
| --- | --- |
| **Resource** | Grid |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/grid?gridId=<gridid> |
| **Requires**  **Authentication** | Yes |
| **Response Format** | JSON |
| **Method** | Put |
| **URL Params** | ***Please refer to Appendix C for Cell Buffer Object definition.*** |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X PUT "https://bwrestapiqa.boardwalktech.com:8443/ BAE\_TEST/rest/v1/grid" -H  "accept: application/json"    -H  "Authorization: c3VqaXRoOjA6Uk9PVHxCT0FSRFdBTEt8Q09MTEFCT1JBVElPTnxNVU1CQUkgVEVBTQ =="   -H  "Content-Type: application/json" -d “{\"cells\":[],\"columnArray\":[-1,-1],\"columnCellArrays\":[{\"cellValues\":[\"Maharashtra\",\"Maharashtra\",\"Gujrat\",\"Gujrat\"],\"cellFormulas\":[\"Maharashtra\",\"Maharashtra\",\"Gujrat\",\"Gujrat\"],\"cellAccess\":[2,2,2,2],\"columnId\":-1,\"colSequence\":1},{\"cellValues\":[\"Pune\",\"Mumbai\",\"Surat\",\"Ahmedabad\"],\"cellFormulas\":[\"Pune\",\"Mumbai\",\"Surat\",\"Ahmedabad\"],\"cellAccess\":[2,2,2,2],\"columnId\":-1,\"colSequence\":2}],\"columns\":[{\"active\":true,\"id\":-1,\"name\":\"state\",\"previousColumnSequence\":0,\"previousColumnid\":-1,\"seqNo\":1,\"tid\":-1},{\"active\":true,\"id\":-1,\"name\":\"city\",\"previousColumnSequence\":1,\"previousColumnid\":-1,\"seqNo\":2,\"tid\":-1}],\"GridChangeBuffer\":{\"critical\":0,\"criticalLevel\":-1,\"newRowArray\":[{\"active\":true,\"id\":-1,\"previousRowSequence\":-1,\"previousRowid\":-1,\"seqNo\":1,\"tid\":-1,\"rowName\":\" \",\"ownerId\":-1,\"ownerName\":\" \",\"creationTid\":-1,\"createrId\":-1,\"ownershipAssignedTid\":-1},{\"active\":true,\"id\":-1,\"previousRowSequence\":-1,\"previousRowid\":-1,\"seqNo\":2,\"tid\":-1,\"rowName\":\" \",\"ownerId\":-1,\"ownerName\":\" \",\"creationTid\":-1,\"createrId\":-1,\"ownershipAssignedTid\":-1},{\"active\":true,\"id\":-1,\"previousRowSequence\":-1,\"previousRowid\":-1,\"seqNo\":3,\"tid\":-1,\"rowName\":\" \",\"ownerId\":-1,\"ownerName\":\" \",\"creationTid\":-1,\"createrId\":-1,\"ownershipAssignedTid\":-1},{\"active\":true,\"id\":-1,\"previousRowSequence\":-1,\"previousRowid\":-1,\"seqNo\":4,\"tid\":-1,\"rowName\":\" \",\"ownerId\":-1,\"ownerName\":\" \",\"creationTid\":-1,\"createrId\":-1,\"ownershipAssignedTid\":-1}],\"deletedRowArray\":[],\"newColumnArray\":[{\"active\":true,\"id\":-1,\"name\":\"state\",\"previousColumnSequence\":0,\"previousColumnid\":-1,\"seqNo\":1,\"tid\":-1},{\"active\":true,\"id\":-1,\"name\":\"city\",\"previousColumnSequence\":1,\"previousColumnid\":-1,\"seqNo\":2,\"tid\":-1}],\"deletedColumnArray\":[]},\"rowArray\":[-1,-1,-1,-1],\"rows\":[{\"active\":true,\"id\":-1,\"previousRowSequence\":-1,\"previousRowid\":-1,\"seqNo\":1,\"tid\":-1,\"rowName\":\" \",\"ownerId\":-1,\"ownerName\":\" \",\"creationTid\":-1,\"createrId\":-1,\"ownershipAssignedTid\":-1},{\"active\":true,\"id\":-1,\"previousRowSequence\":-1,\"previousRowid\":-1,\"seqNo\":2,\"tid\":-1,\"rowName\":\" \",\"ownerId\":-1,\"ownerName\":\" \",\"creationTid\":-1,\"createrId\":-1,\"ownershipAssignedTid\":-1},{\"active\":true,\"id\":-1,\"previousRowSequence\":-1,\"previousRowid\":-1,\"seqNo\":3,\"tid\":-1,\"rowName\":\" \",\"ownerId\":-1,\"ownerName\":\" \",\"creationTid\":-1,\"createrId\":-1,\"ownershipAssignedTid\":-1},{\"active\":true,\"id\":-1,\"previousRowSequence\":-1,\"previousRowid\":-1,\"seqNo\":4,\"tid\":-1,\"rowName\":\" \",\"ownerId\":-1,\"ownerName\":\" \",\"creationTid\":-1,\"createrId\":-1,\"ownershipAssignedTid\":-1}],\"info\":{\"exportTid\":-1,\"importTid\":-1}}” |
| **Success Response**  **Example** | HTTP Status: 200  {"info":{"id":2003762,"name":" GOOD\_CUBOID\_2152418","purpose":"CHECK FOR SUCCESS","view":"LATEST","importTid":34782,"exportTid":34782,"filter":"","asOfTid":34782,"baselineId":-1,"serverName":"","serverURL":"","collabId":1000,"wbId":1009,"memberId":1000,"userId":1000,"nhId":2,"rowCount":4,"colCount":2,"maxTxId":34782,"mode":1,"criteriaTableId":-1,"neighborhoodHeirarchy":{"levels":0,"nh\_Level\_0":2,"nh\_Level\_1":-1,"nh\_level\_2":-1,"nh\_level\_3":-1}},"rowArray":[8348,8349,8350,8351],"columnArray":[6654,6655],"columnCellArrays":[{"columnId":6654,"colSequence":1,"cellValues":["Maharashtra","Maharashtra","Gujrat","Gujrat"],"cellFormulas":["Maharashtra","Maharashtra","Gujrat","Gujrat"],"cellAccess":[2,2,2,2]},{"columnId":6655,"colSequence":2,"cellValues":["Pune","Mumbai","Surat","Ahmedabad"],"cellFormulas":["Pune","Mumbai","Surat","Ahmedabad"],"cellAccess":[2,2,2,2]}],"rows":[{"id":8348,"seqNo":1,"previousRowid":-1,"previousRowSequence":-1,"active":true,"rowName":null,"tid":34782,"ownerId":null,"ownerName":null,"creationTid":null,"createrId":null,"ownershipAssignedTid":null},{"id":8349,"seqNo":2,"previousRowid":8348,"previousRowSequence":0,"active":true,"rowName":null,"tid":34782,"ownerId":null,"ownerName":null,"creationTid":null,"createrId":null,"ownershipAssignedTid":null},{"id":8350,"seqNo":3,"previousRowid":8349,"previousRowSequence":1,"active":true,"rowName":null,"tid":34782,"ownerId":null,"ownerName":null,"creationTid":null,"createrId":null,"ownershipAssignedTid":null},{"id":8351,"seqNo":4,"previousRowid":8350,"previousRowSequence":2,"active":true,"rowName":null,"tid":34782,"ownerId":null,"ownerName":null,"creationTid":null,"createrId":null,"ownershipAssignedTid":null}],"columns":[{"id":6654,"name":"state","seqNo":1,"previousColumnid":-1,"previousColumnSequence":-1,"active":true,"tid":34782},{"id":6655,"name":"city","seqNo":2,"previousColumnid":6654,"previousColumnSequence":1,"active":true,"tid":34782}],"cells":[{"id":null,"rowId":8348,"colId":6654,"rowSequence":1,"colSequence":0,"cellValue":"Maharashtra","cellFormula":null,"active":true,"tid":34782,"changeFlag":12,"access":null},{"id":null,"rowId":8349,"colId":6654,"rowSequence":2,"colSequence":0,"cellValue":"Maharashtra","cellFormula":null,"active":true,"tid":34782,"changeFlag":12,"access":null},{"id":null,"rowId":8350,"colId":6654,"rowSequence":3,"colSequence":0,"cellValue":"Gujrat","cellFormula":null,"active":true,"tid":34782,"changeFlag":12,"access":null},{"id":null,"rowId":8351,"colId":6654,"rowSequence":4,"colSequence":0,"cellValue":"Gujrat","cellFormula":null,"active":true,"tid":34782,"changeFlag":12,"access":null},{"id":null,"rowId":8348,"colId":6655,"rowSequence":1,"colSequence":1,"cellValue":"Pune","cellFormula":null,"active":true,"tid":34782,"changeFlag":12,"access":null},{"id":null,"rowId":8349,"colId":6655,"rowSequence":2,"colSequence":1,"cellValue":"Mumbai","cellFormula":null,"active":true,"tid":34782,"changeFlag":12,"access":null},{"id":null,"rowId":8350,"colId":6655,"rowSequence":3,"colSequence":1,"cellValue":"Surat","cellFormula":null,"active":true,"tid":34782,"changeFlag":12,"access":null},{"id":null,"rowId":8351,"colId":6655,"rowSequence":4,"colSequence":1,"cellValue":"Ahmedabad","cellFormula":null,"active":true,"tid":34782,"changeFlag":12,"access":null}],"GridChangeBuffer":{"critical":-1,"criticalLevel":0,"newRowArray":[{"id":8348,"seqNo":1,"previousRowid":-1,"previousRowSequence":-1,"active":true,"rowName":null,"tid":34782,"ownerId":null,"ownerName":null,"creationTid":null,"createrId":null,"ownershipAssignedTid":null},{"id":8349,"seqNo":2,"previousRowid":8348,"previousRowSequence":0,"active":true,"rowName":null,"tid":34782,"ownerId":null,"ownerName":null,"creationTid":null,"createrId":null,"ownershipAssignedTid":null},{"id":8350,"seqNo":3,"previousRowid":8349,"previousRowSequence":1,"active":true,"rowName":null,"tid":34782,"ownerId":null,"ownerName":null,"creationTid":null,"createrId":null,"ownershipAssignedTid":null},{"id":8351,"seqNo":4,"previousRowid":8350,"previousRowSequence":2,"active":true,"rowName":null,"tid":34782,"ownerId":null,"ownerName":null,"creationTid":null,"createrId":null,"ownershipAssignedTid":null}],"deletedRowArray":[],"newColumnArray":[{"id":6654,"name":"state","seqNo":1,"previousColumnid":-1,"previousColumnSequence":-1,"active":true,"tid":34782},{"id":6655,"name":"city","seqNo":2,"previousColumnid":6654,"previousColumnSequence":1,"active":true,"tid":34782}],"deletedColumnArray":[]}} |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **HTTP Status: 200**  [{"error”: “Missing Authorization in Header","path":"Header:Authorization" ,"proposedSolution":"Authorization Header should contain user:pwd:nhPath as Base64 string"}] |
| **Notes** | Same API call can be used to export delta changes to database. |

|  |  |
| --- | --- |
| **Resource** | Grid |
| **URL** | https://<Boardwalk\_App\_URL>/rest/<v#>/grid?gridId/<gridid>?importTid=<Import\_Txn\_Id>& view=LATEST&mode=<mode>&baselineId=<BaselineId> |
| **Requires**  **Authentication** | Yes |
| **Response Format** | JSON |
| **Method** | Get |
| **URL Params** |  |
| **HTTP Header** | Content-Type– application/json  Accept – application/json  Authorization |
| **Sample Curl Call** | curl -X GET “https://bwrestapiqa.boardwalktech.com:8443/BAE\_TEST/rest/v1/grid/2003762?importTid=-1&view=LATEST&mode=1&baselineId=-1” -H "accept: application/json" -H  "Authorization: c3VqaXRoOjA6Uk9PVHxCT0FSRFdBTEt8Q09MTEFCT1JBVElPTnxNVU1CQUkgVEVBTQ =="   -H  "Content-Type: application/json" |
| **Success Response**  **Example** | {"info":{"id":2003762,"name":"GOOD\_CUBOID\_2152418","purpose":"CHECK FOR SUCCESS","view":"LATEST","importTid":34782,"exportTid":34782,"filter":"","asOfTid":34782,"baselineId":-1,"serverName":"","serverURL":"","collabId":1000,"wbId":1009,"memberId":1000,"userId":1000,"nhId":2,"rowCount":4,"colCount":2,"maxTxId":34782,"mode":1,"criteriaTableId":-1,"neighborhoodHeirarchy":{"levels":0,"nh\_Level\_0":2,"nh\_Level\_1":-1,"nh\_level\_2":-1,"nh\_level\_3":-1}},"rowArray":[8348,8349,8350,8351],"columnArray":[6654,6655],"columnCellArrays":[{"columnId":6654,"colSequence":1,"cellValues":["Maharashtra","Maharashtra","Gujrat","Gujrat"],"cellFormulas":["","","",""],"cellAccess":[2,2,2,2]},{"columnId":6655,"colSequence":2,"cellValues":["Pune","Mumbai","Surat","Ahmedabad"],"cellFormulas":["","","",""],"cellAccess":[2,2,2,2]}],"rows":[{"id":8348,"seqNo":1,"previousRowid":-1,"previousRowSequence":-1,"active":true,"rowName":"","tid":34782,"ownerId":1000,"ownerName":"user1","creationTid":34782,"createrId":1000,"ownershipAssignedTid":34782},{"id":8349,"seqNo":2,"previousRowid":8348,"previousRowSequence":1,"active":true,"rowName":"","tid":34782,"ownerId":1000,"ownerName":"user1","creationTid":34782,"createrId":1000,"ownershipAssignedTid":34782},{"id":8350,"seqNo":3,"previousRowid":8349,"previousRowSequence":2,"active":true,"rowName":"","tid":34782,"ownerId":1000,"ownerName":"user1","creationTid":34782,"createrId":1000,"ownershipAssignedTid":34782},{"id":8351,"seqNo":4,"previousRowid":8350,"previousRowSequence":3,"active":true,"rowName":"","tid":34782,"ownerId":1000,"ownerName":"user1","creationTid":34782,"createrId":1000,"ownershipAssignedTid":34782}],"columns":[{"id":6654,"name":"state","seqNo":1,"previousColumnid":-1,"previousColumnSequence":-1,"active":true,"tid":34782},{"id":6655,"name":"city","seqNo":2,"previousColumnid":6654,"previousColumnSequence":1,"active":true,"tid":34782}],"cells":[{"id":null,"rowId":8348,"colId":6654,"rowSequence":1,"colSequence":1,"cellValue":"Maharashtra","cellFormula":"","active":true,"tid":34782,"changeFlag":0,"access":2},{"id":null,"rowId":8349,"colId":6654,"rowSequence":2,"colSequence":1,"cellValue":"Maharashtra","cellFormula":"","active":true,"tid":34782,"changeFlag":0,"access":2},{"id":null,"rowId":8350,"colId":6654,"rowSequence":3,"colSequence":1,"cellValue":"Gujrat","cellFormula":"","active":true,"tid":34782,"changeFlag":0,"access":2},{"id":null,"rowId":8351,"colId":6654,"rowSequence":4,"colSequence":1,"cellValue":"Gujrat","cellFormula":"","active":true,"tid":34782,"changeFlag":0,"access":2},{"id":null,"rowId":8348,"colId":6655,"rowSequence":1,"colSequence":2,"cellValue":"Pune","cellFormula":"","active":true,"tid":34782,"changeFlag":0,"access":2},{"id":null,"rowId":8349,"colId":6655,"rowSequence":2,"colSequence":2,"cellValue":"Mumbai","cellFormula":"","active":true,"tid":34782,"changeFlag":0,"access":2},{"id":null,"rowId":8350,"colId":6655,"rowSequence":3,"colSequence":2,"cellValue":"Surat","cellFormula":"","active":true,"tid":34782,"changeFlag":0,"access":2},{"id":null,"rowId":8351,"colId":6655,"rowSequence":4,"colSequence":2,"cellValue":"Ahmedabad","cellFormula":"","active":true,"tid":34782,"changeFlag":0,"access":2}],"GridChangeBuffer":{"critical":-1,"criticalLevel":-1,"newRowArray":[{"id":8348,"seqNo":1,"previousRowid":-1,"previousRowSequence":-1,"active":true,"rowName":"","tid":34782,"ownerId":1000,"ownerName":"user1","creationTid":34782,"createrId":1000,"ownershipAssignedTid":34782},{"id":8349,"seqNo":2,"previousRowid":8348,"previousRowSequence":1,"active":true,"rowName":"","tid":34782,"ownerId":1000,"ownerName":"user1","creationTid":34782,"createrId":1000,"ownershipAssignedTid":34782},{"id":8350,"seqNo":3,"previousRowid":8349,"previousRowSequence":2,"active":true,"rowName":"","tid":34782,"ownerId":1000,"ownerName":"user1","creationTid":34782,"createrId":1000,"ownershipAssignedTid":34782},{"id":8351,"seqNo":4,"previousRowid":8350,"previousRowSequence":3,"active":true,"rowName":"","tid":34782,"ownerId":1000,"ownerName":"user1","creationTid":34782,"createrId":1000,"ownershipAssignedTid":34782}],"deletedRowArray":[],"newColumnArray":[{"id":6654,"name":"state","seqNo":1,"previousColumnid":-1,"previousColumnSequence":-1,"active":true,"tid":34782},{"id":6655,"name":"city","seqNo":2,"previousColumnid":6654,"previousColumnSequence":1,"active":true,"tid":34782}],"deletedColumnArray":[]}} |
| **Error Response**  **Example** | The error response will include following:  **Error** – Error Code and short description of the error encountered.  **Path** – The location of JSON data and/or server code. This will be helpful for user and also for support from troubleshooting standpoint.  **Proposed Solution** – Suggested corrective action to resolve the error. Example:  **HTTP Status: 200**  [{"error”: “Missing Authorization in Header","path":"Header:Authorization" ,"proposedSolution":"Authorization Header should contain user:pwd:nhPath as Base64 string"}] |
| **Notes** | * Import\_Txn\_Id should be passed as -1 to import entire data of a grid. * To get the delta changes previous Import\_Txn\_Id should be passed. * Possible value for mode 0 or 1. If 1 is passed, server sends value for the grid without formulae. * Baseline ID should be passed to get the data as of given date/time. |

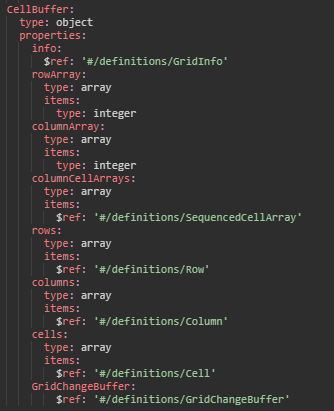
# Appendix A: Grid Object Definition



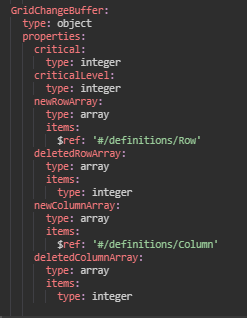
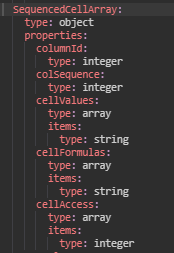
# Appendix B: Grid Info Object Definition



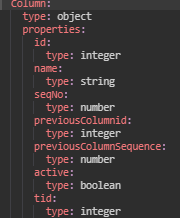
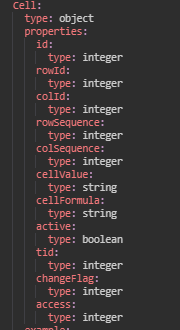
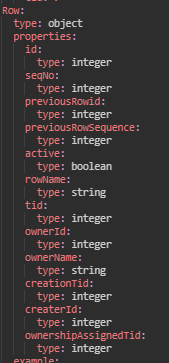
# Appendix C: Cell Buffer Object Definition



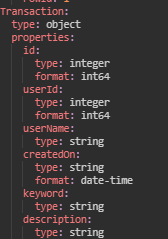
# Appendix D: SequencedCellArray and Grid Changer Buffer Object Definition



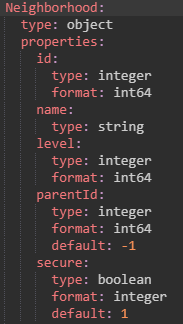
# Appendix E: Row, Column and Cell Object



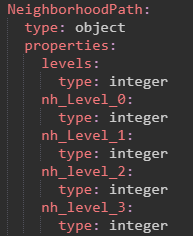
# Appendix F: Transaction Object



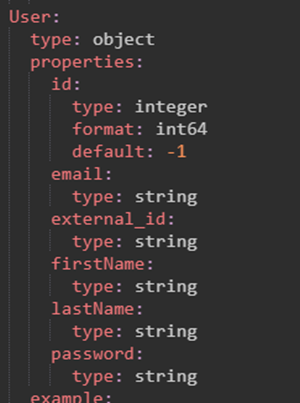
# Appendix G: Neighborhood Object Definition



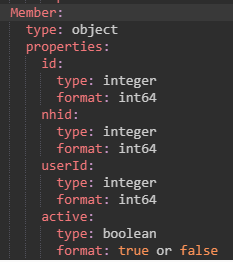
# Appendix H: Neighborhood Path Object Definition



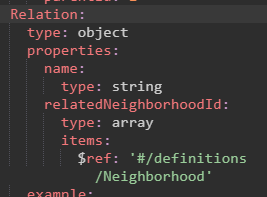
# Appendix I: User Object Definition



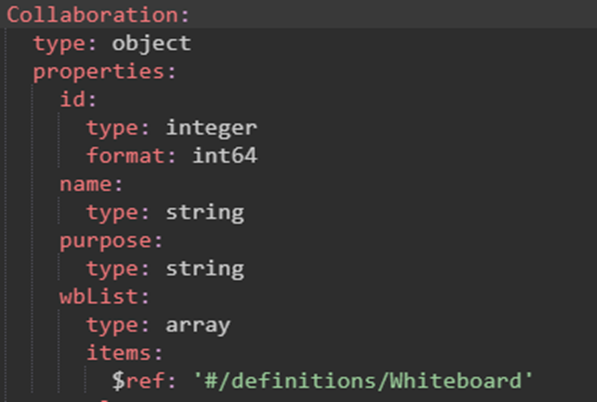
# Appendix J: Member Object Definition



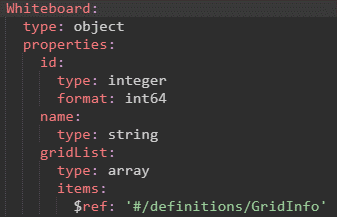
# Appendix K: Relation Object Definition



# Appendix L Collaboration Object Definition



# Appendix M Whiteboard Object Definition



# Appendix N: List of Error Messages: