**CDAS API Documentation**



**Reference Document for Third Parties**

Version 1.3

May 2018

This is a non-binding Permanent Reference Document (PRD) prepared by DataNet.

| Security Classification Category\*: | |
| --- | --- |
| Restricted – Third Parties | **X** |
| Restricted – Government | **X** |

Restricted Information

Access to and distribution of this document is restricted to the persons listed under the heading Security Classification Category\*. This document is confidential to DataNet and is subject to copyright protection. This document is to be used only for the purposes for which it has been supplied and information contained in it must not be disclosed or in any other way made available, in whole or in part, to persons other than those listed under Security Classification Category\* without the prior written approval of DataNet. DataNet makes no representation, warranty or undertaking (express or implied) with respect to and does not accept any responsibility for, and hereby disclaims liability for the accuracy or completeness or timeliness of the information contained in this document. The information contained in this document may be subject to change without prior notice.

Copyright Disclaimer

© DataNet 2018

This information contained in this document and the logo are registered and the property of DataNet.

Document History

| Version | Date | Brief Description |
| --- | --- | --- |
| 1.0 | December 2017 | Initial Document |
| 1.1 | December 2017 | Modified to include document transfer facility |
| 1.2 | March 2018 | Modified to include new features |
| 1.3 | May 2018 | Added descriptions of failure messages and restrictions |

Changes since last version

1. Change in Section “Authentication / Login” – Replaced the word “Token” with “Authorization” in Response Body.
2. Added more error messages and details in all sections.
3. Added a new Table (Document Type Definition) in “References and Codes” section.
4. Added a new named “Restriction”.

Table of Contents

[Common Mechanism 4](#_Toc514152380)

[Authentication / Login 5](#_Toc514152381)

[Identification (Getting Employee Information) 6](#_Toc514152382)

[Affordability Check (See how much is available for deduction) 7](#_Toc514152383)

[View Deduction (All Third Party Deductions) 8](#_Toc514152384)

[View Deduction (Own Deductions) 9](#_Toc514152385)

[Add/Update/Review/Approve/Cancel/Settle/Delete a Deduction 11](#_Toc514152386)

[Get Statements/Transactions 14](#_Toc514152387)

[Restrictions 15](#_Toc514152388)

[References and Codes 16](#_Toc514152389)

## Common Mechanism

We will use HTTP request to send and receive information. We will provide the URL to send HTTP requests and we will reply accordingly. For different functionalities, we will use different URLs.

The requests from the Third parties will consist of a header and body. The header part will consist of the Token that will be generated to ensure secured access. The body part will consist of the request details and parameters.



POST/Auth

Username=ThirdParty&Password=12345

200 {‘access\_token’:’token’}

In the following sections, we provide details of the input parameters and the expected results.

In the last section, we will provide the status codes and other numerical and string values that will be used throughout the requests and responses.

## Authentication / Login

**Input Parameters and Responses**

|  |  |
| --- | --- |
| **Input URL** | https://cdas.co.ls/api/security/login |
| **Input Parameters** | {  "Username": "string",  "Password": "string"  } |
| **Response Code** | 200 |
| **Response Code Description** | Success |
| **Body** | {  "Authorization":"Berear eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJVc2VySWQiOiIyIiwiVXNlck5hbWUiOiJBZG1pbiIsIk5hbWUiOiJCb2xpYmEgTXVsdGkgUHVycG9zZSBDb29wIiwiRW1haWwiOiIiLCJFeHBpcmVzRGF0ZSI6IjQvNS8yMDE4IDQ6MzU6MjkgUE0iLCJqdGkiOiIyM2Y3MGQwMC00ODBkLTQ5NDYtYTRlYi0yYmNlOTFlYTU0MGQiLCJleHAiOjE1MjI5MjQ1MjksImlzcyI6Imh0dHA6Ly9sb2NhbGhvc3Q6NjM5MzkvIiwiYXVkIjoiaHR0cDovL2xvY2FsaG9zdDo2MzkzOS8ifQ.N00eu6LQog\_GQf4Bca-gaGmAxs7CkR4RtP3I4FYFrOQ"  } |
|  |  |
| **Response Code** | 400 |
| **Response Code Description** | Failure (Bad Request) |
| **Body** | {  “Username or Password is incorrect”  } |
|  |  |
| **Response Code** | 500 |
| **Response Code Description** | Failure (System Error) |
| **Body** | {  “Unknown System Error”  } |
|  |  |
| **Response Code** | 401 |
| **Response Code Description** | Failure |
| **Body** | {  “Authorization Token expired after 8 hours”  } |
|  |  |
| **Response Code** | 402 |
| **Response Code Description** | Failure |
| **Body** | {  “Authorization Token expired for 10 mins of inactivity”  } |

**Notes:**

* The security token for login will remain valid for 8 hours. After 8 hours, the existing token will expire. We will send a 401 Message with string “Token Expired after 8 hours”. After this, a new login request needs to come and we will generate a new Token.
* Each Token will expire if no request comes within 10 mins. We will send a 402 Message with string “Token Expired for 10 mins of inactivity.” After this a new login request needs to come and we will generate a new Token.

## Identification (Getting Employee Information)

**Input Parameters and Responses**

|  |  |
| --- | --- |
| **Input URL** | https://cdas.co.ls/api/employee/getDetails |
| **Input Header** | {  “Authorization”:“Authorization token from login response”  } |
| **Input Parameters** | {  "EmployeeNo": "string"  } |
|  |  |
| **Response - Code** | 200 |
| **Response - Code Description** | Success |
| **Response - Body** | {  "EmployeeNo": "string",  "Name":"string",  "Surname": "string",  "DOB": "string",  "Department": "string",  "JoiningDate": "string",  "TerminationDate": "string"  } |
|  |  |
| **Response – Code** | 429 |
| **Response - Code Description** | Failure (Too many requests) |
| **Response - Body** | {  “Maximum request threshold reached”  } |
|  |  |
| **Response - Code** | 404 |
| **Response - Code Description** | Failure (Employee Number not found in Govt. System) |
| **Response - Body** | {  "Employee not found. Please check Employee Number."  } |
|  |  |
| **Response – Code** | 500 |
| **Response - Code Description** | Failure (Unknown System Error) |
| **Response - Body** | {  “Unknown System Error”  } |
|  |  |
| **Response – Code** | 400 |
| **Response - Code Description** | Failure (Bad request e.g. without Employee Number) |
| **Response – Body (Array)** | [  "String"  ] |
| **Response – Code** | 406 |
| **Response - Code Description** | Failure (Invalid Token Format) |
| **Response - Body** | {  “Incorrect authorization token format”  } |
|  |  |
| **Response – Code** | 417 |
| **Response - Code Description** | Failure (Missing Authorization Token) |
| **Response - Body** | {  “Authorization token is missing”  } |
|  |  |
| **Response – Code** | 419 |
| **Response - Code Description** | Failure (Session Inactive) |
| **Response - Body** | {  “Your token is expired by logout or administrator force to inactive the token”  } |

**Notes:** We will accept maximum 400 requests per day per user. The total request we will accept will depend on the number of active users for the third party. For example, if a Third party have 10 users, we will accept 4,000 (400 multiplied by 10) requests per day.

## Affordability Check (See how much is available for deduction)

**Input Parameters and Responses**

|  |  |
| --- | --- |
| **Input URL** | https://cdas.co.ls/api/employee/check-affordability |
| **Input Header** | {  “Token”: “token from login response”  } |
| **Input Parameters** | {  "EmployeeNo": "string"  } |
| **Response - Code** | 200 |
| **Response - Code Description** | Success |
| **Response - Body** | {  number($double)  } |
|  |  |
| **Response – Code** | 429 |
| **Response - Code Description** | Failure (Too many requests) |
| **Response - Body** | {  “Maximum request threshold reached”  } |
|  |  |
| **Response - Code** | 404 |
| **Response - Code Description** | Failure (Employee Number not found in Govt. System) |
| **Response - Body** | {  "Employee not found. Please check Employee Number."  } |
|  |  |
| **Response – Code** | 500 |
| **Response - Code Description** | Failure (Unknow System Error) |
| **Response - Body** | {  “Unknow System Error”  } |
|  |  |
| **Response – Code** | 400 |
| **Response - Code Description** | Failure (Bad request e.g. without Employee Number) |
| **Response – Body (Array)** | [  "String"  ] |
|  |  |
| **Response – Code** | 406 |
| **Response - Code Description** | Failure (Invalid Token Format) |
| **Response - Body** | {  “Incorrect authorization token format”  } |
|  |  |
| **Response – Code** | 417 |
| **Response - Code Description** | Failure (Missing Authorization Token) |
| **Response - Body** | {  “Authorization token is missing”  } |
|  |  |
| **Response – Code** | 419 |
| **Response - Code Description** | Failure (Session Inactive) |
| **Response - Body** | {  “Your token is expired by logout or administrator force to inactive the token”  } |

**Notes:** We will accept maximum 400 requests per day per user. The total request we will accept will depend on the number of active users for the third party. For example, if a Third party have 10 users, we will accept 4,000 (400 multiplied by 10) requests per day.

## View Deduction (All Third Party Deductions)

**Input Parameters and Responses**

|  |  |
| --- | --- |
| **Input URL** | https://cdas.co.ls/api/policy/view-all-deduction |
| **Input Header** | {  “Token”: “token from login response”  } |
| **Input Parameters** | {  "EmployeeNo": "string"  } |
| **Response - Code** | 200 |
| **Response - Code Description** | Success |
| **Response – Body**  **(Array)** | [  {  "EmployeeNo": "string",  "DeductionType": 0,  "DeductionAmount": 0.0,  "DeductionStatus": 1  }  ] |
|  |  |
| **Response – Code** | 429 |
| **Response - Code Description** | Failure (Too many requests) |
| **Response - Body** | {  “Maximum request threshold reached”  } |
|  |  |
| **Response - Code** | 404 |
| **Response - Code Description** | Failure (Employee Number not found in Govt. System) |
| **Response - Body** | {  "Employee not found. Please check Employee Number."  } |
|  |  |
| **Response – Code** | 500 |
| **Response - Code Description** | Failure (Unknow System Error) |
| **Response - Body** | {  “Unknow System Error”  } |
|  |  |
| **Response – Code** | 400 |
| **Response - Code Description** | Failure (Bad request e.g. without Employee Number) |
| **Response – Body (Array)** | [  "String"  ] |
|  |  |
| **Response – Code** | 406 |
| **Response - Code Description** | Failure (Invalid Token Format) |
| **Response - Body** | {  “Incorrect authorization token format”  } |
|  |  |
| **Response – Code** | 417 |
| **Response - Code Description** | Failure (Missing Authorization Token) |
| **Response - Body** | {  “Authorization token is missing”  } |
|  |  |
| **Response – Code** | 419 |
| **Response - Code Description** | Failure (Session Inactive) |
| **Response - Body** | {  “Your token is expired by logout or administrator force to inactive the token”  } |

**Notes:** We will accept maximum 400 requests per day per user. The total request we will accept will depend on the number of active users for the third party. For example, if a Third party have 10 users, we will accept 4,000 (400 multiplied by 10) requests per day.

## View Deduction (Own Deductions)

**Input Parameters and Responses**

|  |  |
| --- | --- |
| **Input URL** | https://cdas.co.ls/api/policy/view-deduction |
| **Input Header** | {  “Token”: “token from login response”  } |
| **Input Parameters** | {  "EmployeeNo": "string"  "DeductionStatus": "number (integer)",  } |
| **Response - Code** | 200 |
| **Response - Code Description** | Success |
| **Response – Body**  **(Array)** | [  {  "ItemCode": "string",  "EmployeeNo": "string",  "Name":"string",  "Surname": "string",  "PrincipalAmount": 0,  "DeductionAmount": 0,  "ReducingBalance": 0,  “RemainingDay”: 0,  "TotalInstallment": 0,  "InstallmentCount": 0,  "EffectiveMonth": "2017-12",  "ReferenceNo": "string",  "DeductionType": 0,  "DeductionStatus": "number (integer)",  "AuthorizationNo": "string",  "RegistryDate": "2018-04-13T10:32:39.308Z",  "EffectiveDate": "2018-04-13T10:32:39.308Z",  "ReviewDate": "2018-04-13T10:32:39.308Z",  "ApproveDate": "2018-04-13T10:32:39.308Z",  "CancelDate": "2018-04-13T10:32:39.308Z",  "SettlementDate": "2018-04-13T10:32:39.308Z",  "RegistryBy": "string",  "ReviewBy": "string",  "ApproveBy": "string",  "CancelBy": "string",  "SettleBy": "string",  "CancelReason": "string",  "Notes": "string",  "SettleReason": "string",  "UpdatedBy": "string",  "UpdateDate": "2018-04-13T10:32:39.308Z"  }  ] |
|  |  |
| **Response – Code** | 429 |
| **Response - Code Description** | Failure (Too many requests) |
| **Response - Body** | {  “Maximum request threshold reached”  } |
|  |  |
| **Response - Code** | 404 |
| **Response - Code Description** | Failure (Employee Number not found in Govt. System) |
| **Response - Body** | {  "Employee not found. Please check Employee Number."  } |
|  |  |
| **Response – Code** | 500 |
| **Response - Code Description** | Failure (Unknow System Error) |
| **Response - Body** | {  “Unknow System Error”  } |
|  |  |
| **Response – Code** | 400 |
| **Response - Code Description** | Failure (Bad request e.g. without Employee Number) |
| **Response – Body (Array)** | [  "String"  ] |
|  |  |
| **Response – Code** | 406 |
| **Response - Code Description** | Failure (Invalid Token Format) |
| **Response - Body** | {  “Incorrect authorization token format”  } |
|  |  |
| **Response – Code** | 417 |
| **Response - Code Description** | Failure (Missing Authorization Token) |
| **Response - Body** | {  “Authorization token is missing”  } |
|  |  |
| **Response – Code** | 419 |
| **Response - Code Description** | Failure (Session Inactive) |
| **Response - Body** | {  “Your token is expired by logout or administrator force to inactive the token”  } |

**Notes:** We will accept maximum 400 requests per day per user. The total request we will accept will depend on the number of active users for the third party. For example, if a Third party have 10 users, we will accept 4,000 (400 multiplied by 10) requests per day.

## Add a Deduction

**Input Parameters and Responses**

|  |  |
| --- | --- |
| **Input URL** | https://cdas.co.ls/api/policy/add-update-deduction |
| **Input Header** | {  “Token”: “token from login response”  } |
| **Input Parameters** | {  "RequestType": 1,  "DeductionID": 0,  "EmployeeNo": "0015905",  "LoanPolicy": 1,  "ItemCode": "9999",  "DeductionAmount":5,  "PrincipalAmount":15,  "TotalInstallment":3,  "EffectiveMonth": "2019-11",  "ReferenceNo": "Ref-1",  "Notes": "test",  "Email": "string",  "CellPhone": "123456",  "AccountNo": "string",  "BankName": "string",  "BranchCode": "string",  "RegistryBy": "admin",  "ReviewBy": "string",  "ApproveBy": "string",  "CancelBy": "string",  "SettleBy": "string",  "CancelReason": 0,  "UpdatedBy": "string",  "SettleReason": 0,  "RegistryDate": "2019-10-14T10:11:20.957Z",  "ReviewDate": "2019-10-14T10:11:20.957Z",  "ApproveDate": "2019-10-14T10:11:20.957Z",  "CancelDate": "2019-10-14T10:11:20.957Z",  "SettleDate": "2019-10-14T10:11:20.957Z",  "UpdateDate": "2019-10-14T10:11:20.957Z",  "SuspensionDate": "2019-10-14T10:11:20.957Z",  "SettlementDate": "2019-10-14T10:11:20.957Z"  } |
| **Response - Code** | 200 |
| **Response - Code Description** | Success |
| **Response – Body** | {  "RequestType": 1,  "DeductionID": 556836,  "EmployeeNo": "0015905",  "LoanPolicy": 1,  "ItemCode": "9999",  "DeductionAmount": 10,  "PrincipalAmount": 100,  "TotalInstallment": 10,  "EffectiveMonth": "2019-11",  "ReferenceNo": "Ref-1",  "Notes": "string",  "Email": "string",  "CellPhone": "string",  "AccountNo": "string",  "BankName": "string",  "BranchCode": "string",  "RegistryBy": "api.panadmin",  "ReviewBy": "string",  "ApproveBy": "string",  "CancelBy": "string",  "SettleBy": "string",  "CancelReason": "0",  "UpdatedBy": "string",  "SettleReason": 0,  "RegistryDate": "2019-10-14 04:01:33",  "ReviewDate": "1900-01-01 12:00:00",  "ApproveDate": "1900-01-01 12:00:00",  "CancelDate": "1900-01-01 12:00:00",  "SettleDate": "1900-01-01 12:00:00",  "UpdateDate": "2019-10-14 11:06:32",  "SuspensionDate": "1900-01-01 12:00:00",  "SettlementDate": "1900-01-01 12:00:00"  } |
|  |  |
| **Response – Code** | 429 |
| **Response - Code Description** | Failure (Too many requests) |
| **Response - Body** | {  “Maximum request threshold reached”  } |
|  |  |
| **Response - Code** | 404 |
| **Response - Code Description** | Failure (Employee Number not found in Govt. System) |
| **Response - Body** | {  "Employee not found. Please check Employee Number."  } |
|  |  |
| **Response – Code** | 500 |
| **Response - Code Description** | Failure (Unknow System Error) |
| **Response - Body** | {  “Unknow System Error”  } |
|  |  |
| **Response – Code** | 400 |
| **Response - Code Description** | Failure (Bad request e.g. without Employee Number) |
| **Response – Body (Array)** | [  "String"  ] |
|  |  |
| **Response – Code** | 499 |
| **Response - Code Description** | Failure (Deduction request more than affordable amount) |
| **Response - Body** | {  “Deduction amount exceeds maximum available fund.”  } |
|  |  |
| **Response – Code** | 498 |
| **Response - Code Description** | Failure (Item Code does not belong to the company) |
| **Response - Body** | {  “Deduction amount exceeds maximum available fund.”  } |
|  |  |
| **Response – Code** | 497 |
| **Response - Code Description** | Failure (Wrong Effective Month) |
| **Response – Body** | {  “Deduction can’t start on the date mentioned.”  } |
|  |  |
| **Response – Code** | 496 |
| **Response - Code Description** | Failure (Loan with zero or blank installment count) |
| **Response – Body** | {  “Loan’s can’t have zero or blank installment count.”  } |
|  |  |
| **Response – Code** | 406 |
| **Response - Code Description** | Failure (Invalid Token Format) |
| **Response - Body** | {  “Incorrect authorization token format”  } |
|  |  |
| **Response – Code** | 417 |
| **Response - Code Description** | Failure (Missing Authorization Token) |
| **Response - Body** | {  “Authorization token is missing”  } |
|  |  |
| **Response – Code** | 419 |
| **Response - Code Description** | Failure (Session Inactive) |
| **Response - Body** | {  “Your token is expired by logout or administrator force to inactive the token”  } |
|  |  |
| **Response – Code** | 495 |
| **Response - Code Description** | Failure (Disallow to modify deduction) |
| **Response - Body** | {  “Not allow to modify active or approve deduction”  } |

**Notes:** We will accept maximum 400 requests per day per user. The total request we will accept will depend on the number of active users for the third party. For example, if a Third party have 10 users, we will accept 4,000 (400 multiplied by 10) requests per day.

## Review a Deduction

**Input Parameters and Responses**

|  |  |
| --- | --- |
| **Input URL** | https://cdas.co.ls/api/policy/add-update-deduction |
| **Input Header** | {  “Token”: “token from login response”  } |
| **Input Parameters** | {  "RequestType": 3,  "DeductionID": 556836,  "EmployeeNo": "0015905",  "LoanPolicy": 1,  "ItemCode": "9999",  "DeductionAmount":5,  "PrincipalAmount":15,  "TotalInstallment":3,  "EffectiveMonth": "2019-11",  "ReferenceNo": "Ref-1",  "Notes": "string",  "Email": "string",  "CellPhone": "string",  "AccountNo": "string",  "BankName": "string",  "BranchCode": "string",  "RegistryBy": "string",  "ReviewBy": "string",  "ApproveBy": "string",  "CancelBy": "string",  "SettleBy": "string",  "CancelReason": 0,  "UpdatedBy": "string",  "SettleReason": 0,  "RegistryDate": "2019-10-14T10:11:20.957Z",  "ReviewDate": "2019-10-14T10:11:20.957Z",  "ApproveDate": "2019-10-14T10:11:20.957Z",  "CancelDate": "2019-10-14T10:11:20.957Z",  "SettleDate": "2019-10-14T10:11:20.957Z",  "UpdateDate": "2019-10-14T10:11:20.957Z",  "SuspensionDate": "2019-10-14T10:11:20.957Z",  "SettlementDate": "2019-10-14T10:11:20.957Z"  } |
| **Response - Code** | 200 |
| **Response - Code Description** | Success |
| **Response – Body** | {  "RequestType": 3,  "DeductionID": 556836,  "EmployeeNo": "0015905",  "LoanPolicy": 1,  "ItemCode": "9999",  "DeductionAmount": 5,  "PrincipalAmount": 15,  "TotalInstallment": 3,  "EffectiveMonth": "2019-11",  "ReferenceNo": "Ref-1",  "Notes": "string",  "Email": "string",  "CellPhone": "string",  "AccountNo": "string",  "BankName": "string",  "BranchCode": "string",  "RegistryBy": "string",  "ReviewBy": "api.panadmin",  "ApproveBy": "string",  "CancelBy": "string",  "SettleBy": "string",  "CancelReason": "0",  "UpdatedBy": "api.panadmin",  "SettleReason": 0,  "RegistryDate": "2019-10-14 10:11:20",  "ReviewDate": "2019-10-14 04:21:40",  "ApproveDate": "2019-10-14 10:11:20",  "CancelDate": "2019-10-14 10:11:20",  "SettleDate": "2019-10-14 10:11:20",  "UpdateDate": "2019-10-14 04:21:40",  "SuspensionDate": "2019-10-14 10:11:20",  "SettlementDate": "2019-10-14 10:11:20"  } |
|  |  |
| **Response – Code** | 429 |
| **Response - Code Description** | Failure (Too many requests) |
| **Response - Body** | {  “Maximum request threshold reached”  } |
|  |  |
| **Response - Code** | 404 |
| **Response - Code Description** | Failure (Employee Number not found in Govt. System) |
| **Response - Body** | {  "Employee not found. Please check Employee Number."  } |
|  |  |
| **Response – Code** | 500 |
| **Response - Code Description** | Failure (Unknow System Error) |
| **Response - Body** | {  “Unknow System Error”  } |
|  |  |
| **Response – Code** | 400 |
| **Response - Code Description** | Failure (Bad request e.g. without Employee Number) |
| **Response – Body (Array)** | [  "String"  ] |
|  |  |
| **Response – Code** | 499 |
| **Response - Code Description** | Failure (Deduction request more than affordable amount) |
| **Response - Body** | {  “Deduction amount exceeds maximum available fund.”  } |
|  |  |
| **Response – Code** | 498 |
| **Response - Code Description** | Failure (Item Code does not belong to the company) |
| **Response - Body** | {  “Deduction amount exceeds maximum available fund.”  } |
|  |  |
| **Response – Code** | 497 |
| **Response - Code Description** | Failure (Wrong Effective Month) |
| **Response – Body** | {  “Deduction can’t start on the date mentioned.”  } |
|  |  |
| **Response – Code** | 496 |
| **Response - Code Description** | Failure (Loan with zero or blank installment count) |
| **Response – Body** | {  “Loan’s can’t have zero or blank installment count.”  } |
|  |  |
| **Response – Code** | 406 |
| **Response - Code Description** | Failure (Invalid Token Format) |
| **Response - Body** | {  “Incorrect authorization token format”  } |
|  |  |
| **Response – Code** | 417 |
| **Response - Code Description** | Failure (Missing Authorization Token) |
| **Response - Body** | {  “Authorization token is missing”  } |
|  |  |
| **Response – Code** | 419 |
| **Response - Code Description** | Failure (Session Inactive) |
| **Response - Body** | {  “Your token is expired by logout or administrator force to inactive the token”  } |
|  |  |
| **Response – Code** | 495 |
| **Response - Code Description** | Failure (Disallow to modify deduction) |
| **Response - Body** | {  “Not allow to modify active or approve deduction”  } |

**Notes:** We will accept maximum 400 requests per day per user. The total request we will accept will depend on the number of active users for the third party. For example, if a Third party have 10 users, we will accept 4,000 (400 multiplied by 10) requests per day.

## Approve a Deduction

**Input Parameters and Responses**

|  |  |
| --- | --- |
| **Input URL** | https://cdas.co.ls/api/policy/add-update-deduction |
| **Input Header** | {  “Token”: “token from login response”  } |
| **Input Parameters** | {  "RequestType": 4,  "DeductionID": 556836,  "EmployeeNo": "0015905",  "LoanPolicy": 1,  "ItemCode": "9999",  "DeductionAmount":5,  "PrincipalAmount":15,  "TotalInstallment":3,  "EffectiveMonth": "2019-11",  "ReferenceNo": "Ref-1",  "Notes": "string",  "Email": "string",  "CellPhone": "string",  "AccountNo": "string",  "BankName": "string",  "BranchCode": "string",  "RegistryBy": "string",  "ReviewBy": "string",  "ApproveBy": "string",  "CancelBy": "string",  "SettleBy": "string",  "CancelReason": 0,  "UpdatedBy": "string",  "SettleReason": 0,  "RegistryDate": "2019-10-14T10:11:20.957Z",  "ReviewDate": "2019-10-14T10:11:20.957Z",  "ApproveDate": "2019-10-14T10:11:20.957Z",  "CancelDate": "2019-10-14T10:11:20.957Z",  "SettleDate": "2019-10-14T10:11:20.957Z",  "UpdateDate": "2019-10-14T10:11:20.957Z",  "SuspensionDate": "2019-10-14T10:11:20.957Z",  "SettlementDate": "2019-10-14T10:11:20.957Z"  } |
| **Response - Code** | 200 |
| **Response - Code Description** | Success |
| **Response – Body** | {  "RequestType": 4,  "DeductionID": 556836,  "EmployeeNo": "0015905",  "LoanPolicy": 1,  "ItemCode": "9999",  "DeductionAmount": 5,  "PrincipalAmount": 15,  "TotalInstallment": 3,  "EffectiveMonth": "2019-11",  "ReferenceNo": "Ref-1",  "Notes": "string",  "Email": "string",  "CellPhone": "string",  "AccountNo": "string",  "BankName": "string",  "BranchCode": "string",  "RegistryBy": "string",  "ReviewBy": "string",  "ApproveBy": "api.panadmin",  "CancelBy": "string",  "SettleBy": "string",  "CancelReason": "0",  "UpdatedBy": "api.panadmin",  "SettleReason": 0,  "RegistryDate": "2019-10-14 10:11:20",  "ReviewDate": "2019-10-14 10:11:20",  "ApproveDate": "2019-10-14 04:26:24",  "CancelDate": "2019-10-14 10:11:20",  "SettleDate": "2019-10-14 10:11:20",  "UpdateDate": "2019-10-14 04:26:24",  "SuspensionDate": "2019-10-14 10:11:20",  "SettlementDate": "2019-10-14 10:11:20"  } |
|  |  |
| **Response – Code** | 429 |
| **Response - Code Description** | Failure (Too many requests) |
| **Response - Body** | {  “Maximum request threshold reached”  } |
|  |  |
| **Response - Code** | 404 |
| **Response - Code Description** | Failure (Employee Number not found in Govt. System) |
| **Response - Body** | {  "Employee not found. Please check Employee Number."  } |
|  |  |
| **Response – Code** | 500 |
| **Response - Code Description** | Failure (Unknow System Error) |
| **Response - Body** | {  “Unknow System Error”  } |
|  |  |
| **Response – Code** | 400 |
| **Response - Code Description** | Failure (Bad request e.g. without Employee Number) |
| **Response – Body (Array)** | [  "String"  ] |
|  |  |
| **Response – Code** | 499 |
| **Response - Code Description** | Failure (Deduction request more than affordable amount) |
| **Response - Body** | {  “Deduction amount exceeds maximum available fund.”  } |
|  |  |
| **Response – Code** | 498 |
| **Response - Code Description** | Failure (Item Code does not belong to the company) |
| **Response - Body** | {  “Deduction amount exceeds maximum available fund.”  } |
|  |  |
| **Response – Code** | 497 |
| **Response - Code Description** | Failure (Wrong Effective Month) |
| **Response – Body** | {  “Deduction can’t start on the date mentioned.”  } |
|  |  |
| **Response – Code** | 496 |
| **Response - Code Description** | Failure (Loan with zero or blank installment count) |
| **Response – Body** | {  “Loan’s can’t have zero or blank installment count.”  } |
|  |  |
| **Response – Code** | 406 |
| **Response - Code Description** | Failure (Invalid Token Format) |
| **Response - Body** | {  “Incorrect authorization token format”  } |
|  |  |
| **Response – Code** | 417 |
| **Response - Code Description** | Failure (Missing Authorization Token) |
| **Response - Body** | {  “Authorization token is missing”  } |
|  |  |
| **Response – Code** | 419 |
| **Response - Code Description** | Failure (Session Inactive) |
| **Response - Body** | {  “Your token is expired by logout or administrator force to inactive the token”  } |
|  |  |
| **Response – Code** | 495 |
| **Response - Code Description** | Failure (Disallow to modify deduction) |
| **Response - Body** | {  “Not allow to modify active or approve deduction”  } |

**Notes: 1.** We will accept maximum 400 requests per day per user. The total request we will accept will depend on the number of active users for the third party. For example, if a Third party have 10 users, we will accept 4,000 (400 multiplied by 10) requests per day.

## Reject/Cancel a Deduction

**Input Parameters and Responses**

|  |  |
| --- | --- |
| **Input URL** | https://cdas.co.ls/api/policy/add-update-deduction |
| **Input Header** | {  “Token”: “token from login response”  } |
| **Input Parameters** | {  "RequestType": 2,  "DeductionID": 556837,  "EmployeeNo": "0013598",  "LoanPolicy": 1,  "ItemCode": "9999",  "DeductionAmount":5,  "PrincipalAmount":15,  "TotalInstallment":3,  "EffectiveMonth": "2019-11",  "ReferenceNo": "Ref-1",  "Notes": "string",  "Email": "string",  "CellPhone": "string",  "AccountNo": "string",  "BankName": "string",  "BranchCode": "string",  "RegistryBy": "string",  "ReviewBy": "string",  "ApproveBy": "string",  "CancelBy": "string",  "SettleBy": "string",  "CancelReason": 0,  "UpdatedBy": "string",  "SettleReason": 0,  "RegistryDate": "2019-10-14T10:11:20.957Z",  "ReviewDate": "2019-10-14T10:11:20.957Z",  "ApproveDate": "2019-10-14T10:11:20.957Z",  "CancelDate": "2019-10-14T10:11:20.957Z",  "SettleDate": "2019-10-14T10:11:20.957Z",  "UpdateDate": "2019-10-14T10:11:20.957Z",  "SuspensionDate": "2019-10-14T10:11:20.957Z",  "SettlementDate": "2019-10-14T10:11:20.957Z"  } |
| **Response - Code** | 200 |
| **Response - Code Description** | Success |
| **Response – Body** | {  "RequestType": 2,  "DeductionID": 556837,  "EmployeeNo": "0013598",  "LoanPolicy": 1,  "ItemCode": "9999",  "DeductionAmount": 5,  "PrincipalAmount": 15,  "TotalInstallment": 3,  "EffectiveMonth": "2019-11",  "ReferenceNo": "Ref-1",  "Notes": "string",  "Email": "string",  "CellPhone": "string",  "AccountNo": "string",  "BankName": "string",  "BranchCode": "string",  "RegistryBy": "string",  "ReviewBy": "string",  "ApproveBy": "string",  "CancelBy": "api.panadmin",  "SettleBy": "string",  "CancelReason": "0",  "UpdatedBy": "api.panadmin",  "SettleReason": 0,  "RegistryDate": "2019-10-14 10:11:20",  "ReviewDate": "2019-10-14 10:11:20",  "ApproveDate": "2019-10-14 10:11:20",  "CancelDate": "2019-10-14 05:38:44",  "SettleDate": "2019-10-14 10:11:20",  "UpdateDate": "2019-10-14 05:38:44",  "SuspensionDate": "2019-10-14 10:11:20",  "SettlementDate": "2019-10-14 10:11:20"  } |
|  |  |
| **Response – Code** | 429 |
| **Response - Code Description** | Failure (Too many requests) |
| **Response - Body** | {  “Maximum request threshold reached”  } |
|  |  |
| **Response - Code** | 404 |
| **Response - Code Description** | Failure (Employee Number not found in Govt. System) |
| **Response - Body** | {  "Employee not found. Please check Employee Number."  } |
|  |  |
| **Response – Code** | 500 |
| **Response - Code Description** | Failure (Unknow System Error) |
| **Response - Body** | {  “Unknow System Error”  } |
|  |  |
| **Response – Code** | 400 |
| **Response - Code Description** | Failure (Bad request e.g. without Employee Number) |
| **Response – Body (Array)** | [  "String"  ] |
|  |  |
| **Response – Code** | 499 |
| **Response - Code Description** | Failure (Deduction request more than affordable amount) |
| **Response - Body** | {  “Deduction amount exceeds maximum available fund.”  } |
|  |  |
| **Response – Code** | 498 |
| **Response - Code Description** | Failure (Item Code does not belong to the company) |
| **Response - Body** | {  “Deduction amount exceeds maximum available fund.”  } |
|  |  |
| **Response – Code** | 497 |
| **Response - Code Description** | Failure (Wrong Effective Month) |
| **Response – Body** | {  “Deduction can’t start on the date mentioned.”  } |
|  |  |
| **Response – Code** | 496 |
| **Response - Code Description** | Failure (Loan with zero or blank installment count) |
| **Response – Body** | {  “Loan’s can’t have zero or blank installment count.”  } |
|  |  |
| **Response – Code** | 406 |
| **Response - Code Description** | Failure (Invalid Token Format) |
| **Response - Body** | {  “Incorrect authorization token format”  } |
|  |  |
| **Response – Code** | 417 |
| **Response - Code Description** | Failure (Missing Authorization Token) |
| **Response - Body** | {  “Authorization token is missing”  } |
|  |  |
| **Response – Code** | 419 |
| **Response - Code Description** | Failure (Session Inactive) |
| **Response - Body** | {  “Your token is expired by logout or administrator force to inactive the token”  } |
|  |  |
| **Response – Code** | 495 |
| **Response - Code Description** | Failure (Disallow to modify deduction) |
| **Response - Body** | {  “Not allow to modify active or approve deduction”  } |

**Notes: 1.** We will accept maximum 400 requests per day per user. The total request we will accept will depend on the number of active users for the third party. For example, if a Third party have 10 users, we will accept 4,000 (400 multiplied by 10) requests per day.

## Settle a Deduction

Settle means Stop deducting.

**Input Parameters and Responses**

|  |  |
| --- | --- |
| **Input URL** | https://cdas.co.ls/api/policy/add-update-deduction |
| **Input Header** | {  “Token”: “token from login response”  } |
| **Input Parameters** | {  "RequestType": 7,  "DeductionID": 556836,  "EmployeeNo": "0015905",  "LoanPolicy": 1,  "ItemCode": "9999",  "DeductionAmount":5,  "PrincipalAmount":15,  "TotalInstallment":3,  "EffectiveMonth": "2019-11",  "ReferenceNo": "Ref-1",  "Notes": "string",  "Email": "string",  "CellPhone": "string",  "AccountNo": "string",  "BankName": "string",  "BranchCode": "string",  "RegistryBy": "string",  "ReviewBy": "string",  "ApproveBy": "string",  "CancelBy": "string",  "SettleBy": "string",  "CancelReason": 0,  "UpdatedBy": "string",  "SettleReason": 0,  "RegistryDate": "2019-10-14T10:11:20.957Z ",  "ReviewDate": "2019-10-14T10:11:20.957Z",  "ApproveDate": "2019-10-14T10:11:20.957Z",  "CancelDate": "2019-10-14T10:11:20.957Z",  "SettleDate": "2019-10-14T10:11:20.957Z",  "UpdateDate": "2019-10-14T10:11:20.957Z",  "SuspensionDate": "2019-10-14T10:11:20.957Z",  "SettlementDate": "2019-10-14T10:11:20.957Z"  } |
| **Response - Code** | 200 |
| **Response - Code Description** | Success |
| **Response – Body** | {  "RequestType": 7,  "DeductionID": 556836,  "EmployeeNo": "0015905",  "LoanPolicy": 1,  "ItemCode": "9999",  "DeductionAmount": 5,  "PrincipalAmount": 15,  "TotalInstallment": 3,  "EffectiveMonth": "2019-11",  "ReferenceNo": "Ref-1",  "Notes": "string",  "Email": "string",  "CellPhone": "string",  "AccountNo": "string",  "BankName": "string",  "BranchCode": "string",  "RegistryBy": "string",  "ReviewBy": "string",  "ApproveBy": "string",  "CancelBy": "string",  "SettleBy": "api.panadmin",  "CancelReason": "0",  "UpdatedBy": "string",  "SettleReason": 0,  "RegistryDate": "2019-10-14 10:11:20",  "ReviewDate": "2019-10-14 10:11:20",  "ApproveDate": "2019-10-14 10:11:20",  "CancelDate": "2019-10-14 10:11:20",  "SettleDate": "2019-10-14 10:11:20",  "UpdateDate": "2019-10-14 10:11:20",  "SuspensionDate": "2019-10-14 10:11:20",  "SettlementDate": "2019-10-14 10:11:20"  } |
|  |  |
| **Response – Code** | 429 |
| **Response - Code Description** | Failure (Too many requests) |
| **Response - Body** | {  “Maximum request threshold reached”  } |
|  |  |
| **Response - Code** | 404 |
| **Response - Code Description** | Failure (Employee Number not found in Govt. System) |
| **Response - Body** | {  "Employee not found. Please check Employee Number."  } |
|  |  |
| **Response – Code** | 500 |
| **Response - Code Description** | Failure (Unknow System Error) |
| **Response - Body** | {  “Unknow System Error”  } |
|  |  |
| **Response – Code** | 400 |
| **Response - Code Description** | Failure (Bad request e.g. without Employee Number) |
| **Response – Body (Array)** | [  "String"  ] |
|  |  |
| **Response – Code** | 499 |
| **Response - Code Description** | Failure (Deduction request more than affordable amount) |
| **Response - Body** | {  “Deduction amount exceeds maximum available fund.”  } |
|  |  |
| **Response – Code** | 498 |
| **Response - Code Description** | Failure (Item Code does not belong to the company) |
| **Response - Body** | {  “Deduction amount exceeds maximum available fund.”  } |
|  |  |
| **Response – Code** | 497 |
| **Response - Code Description** | Failure (Wrong Effective Month) |
| **Response – Body** | {  “Deduction can’t start on the date mentioned.”  } |
|  |  |
| **Response – Code** | 496 |
| **Response - Code Description** | Failure (Loan with zero or blank installment count) |
| **Response – Body** | {  “Loan’s can’t have zero or blank installment count.”  } |
|  |  |
| **Response – Code** | 406 |
| **Response - Code Description** | Failure (Invalid Token Format) |
| **Response - Body** | {  “Incorrect authorization token format”  } |
|  |  |
| **Response – Code** | 417 |
| **Response - Code Description** | Failure (Missing Authorization Token) |
| **Response - Body** | {  “Authorization token is missing”  } |
|  |  |
| **Response – Code** | 419 |
| **Response - Code Description** | Failure (Session Inactive) |
| **Response - Body** | {  “Your token is expired by logout or administrator force to inactive the token”  } |
|  |  |
| **Response – Code** | 495 |
| **Response - Code Description** | Failure (Disallow to modify deduction) |
| **Response - Body** | {  “Not allow to modify active or approve deduction”  } |

**Notes:** We will accept maximum 400 requests per day per user. The total request we will accept will depend on the number of active users for the third party. For example, if a Third party have 10 users, we will accept 4,000 (400 multiplied by 10) requests per day.

## Get Statements/Transactions

**Input Parameters and Responses**

|  |  |
| --- | --- |
| **Input URL** | https://cdas.co.ls/api/policy/get\_document |
| **Input Header** | {  “Token”: “token from login response”  } |
| **Input Parameters** | {  "Year":0  "Month":0  "DocumentType": "number (integer)",  } |
| **Response - Code** | 200 |
| **Response - Code Description** | Success |
| **Response – Body** | {  "FileName": "string",  "DocumentTye": "string",  "Year": 0  "Month": 0,  "Content" : "byte",  } |
|  |  |
| **Response – Code** | 429 |
| **Response - Code Description** | Failure (Too many requests) |
| **Response - Body** | {  “Maximum request threshold reached”  } |
|  |  |
| **Response – Code** | 500 |
| **Response - Code Description** | Failure (Unknow System Error) |
| **Response - Body** | {  “Unknow System Error”  } |
|  |  |
| **Response – Code** | 400 |
| **Response - Code Description** | Failure (Bad request e.g. without Year/Month) |
| **Response – Body (Array)** | [  "String"  ] |
|  |  |
| **Response – Code** | 406 |
| **Response - Code Description** | Failure (File not ready) |
| **Response - Body** | {  “Reports not ready yet”  } |
|  |  |
| **Response – Code** | 406 |
| **Response - Code Description** | Failure (Invalid Token Format) |
| **Response - Body** | {  “Incorrect authorization token format”  } |
|  |  |
| **Response – Code** | 417 |
| **Response - Code Description** | Failure (Missing Authorization Token) |
| **Response - Body** | {  “Authorization token is missing”  } |
|  |  |
| **Response – Code** | 419 |
| **Response - Code Description** | Failure (Session Inactive) |
| **Response - Body** | {  “Your token is expired by logout or administrator force to inactive the token”  } |

**Document Type Definition**

|  |  |
| --- | --- |
| **Reason** | **Status Code** |
| Output File | 1 |
| Statement | 2 |

**Some demo EmployeeNo given in below:**

0014222

0015905

0013766

0044573

0043001

0030968

0016307

0013598

## Restrictions

* The security token for login will remain valid for 8 hours. After 8 hours, the existing token will expire. We will send a 401 Message with string “Token Expired after 8 hours”. After this, a new login request needs to come and we will generate a new Token.
* Each Token will expire if no request comes within 10 mins. We will send a 402 Message with string “Token Expired for 10 mins of inactivity.” After this a new login request needs to come and we will generate a new Token.
* We will accept maximum 400 requests per day per user. The total request we will accept will depend on the number of active users for the third party. For example, if a Third party have 10 users, we will accept 4,000 (400 multiplied by 10) requests per day.

## References and Codes

**Request Types**

|  |  |
| --- | --- |
| **Request Type** | **Request Code** |
| Registration | 1 |
| Reject | 2 |
| Review | 3 |
| Approve | 4 |
| Settle | 7 |
| Delete | 9 |
| Change/Update | 10 |

**Deduction Status**

|  |  |
| --- | --- |
| **Deduction Status** | **Status Code** |
| Registered | 1 |
| Rejected | 2 |
| Reviewed | 3 |
| Approved | 4 |
| Settled | 7 |
| Deleted | 9 |
| Canceled | 6 |
| AutoSettled | 8 |

**Settlement Reason**

|  |  |
| --- | --- |
| **Reason** | **Status Code** |
| Policy Expired | 1 |
| Paid By Employee | 2 |
| Consolidation | 3 |
| Deceased Employee | 4 |

**Deduction Type Definition**

|  |  |
| --- | --- |
| **Reason** | **Status Code** |
| Loan | 1 |
| Policy | 2 |

**Document Type Definition**

|  |  |
| --- | --- |
| **Reason** | **Status Code** |
| Output File | 1 |
| Statement | 2 |



