

FORTRA

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5.2

Enterprise REST API Guide

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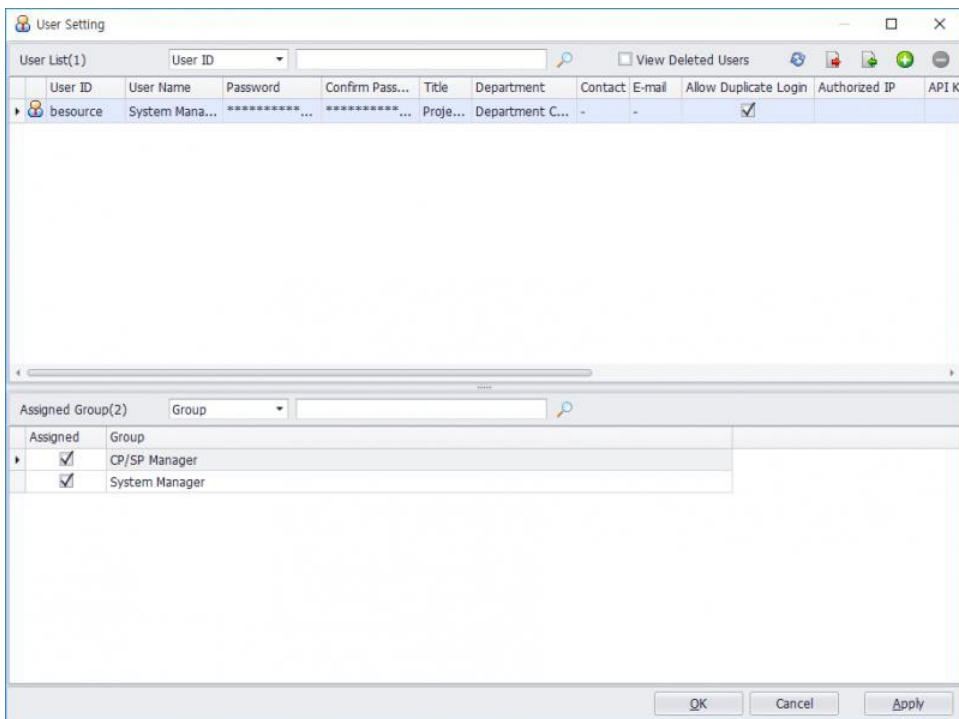
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Getting Started

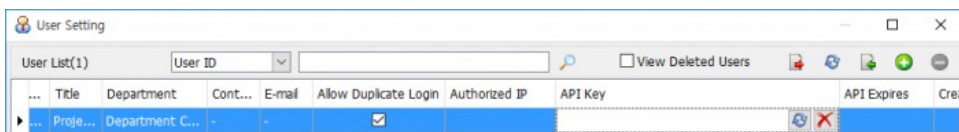
Generating and updating an API key

To issue the REST API key, do the following:

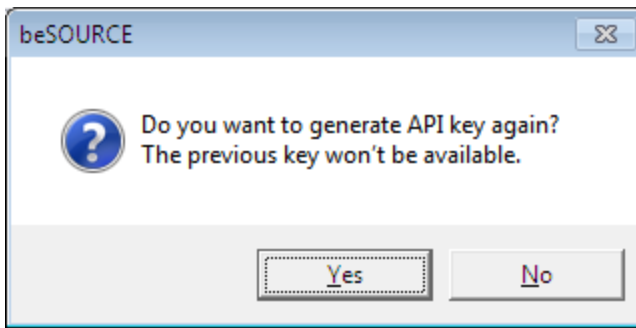
1. Open the **Admin Console**.
2. Open the **User Setting** window.



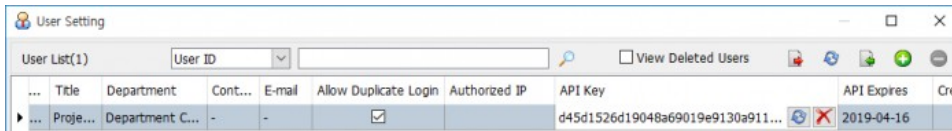
3. Select the **API Key** column, and then select the **Refresh**  button.



4. The information message window appears. If you already generated the API key, it will be replaced.



5. You can check the issued API key.

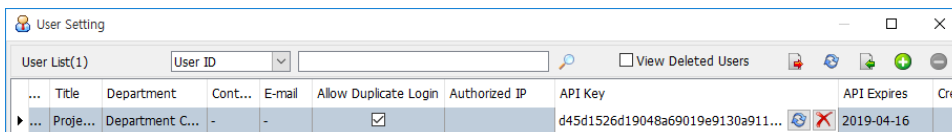



NOTE: Your API key is only valid for one year. You must issue a new key after your current key expires.

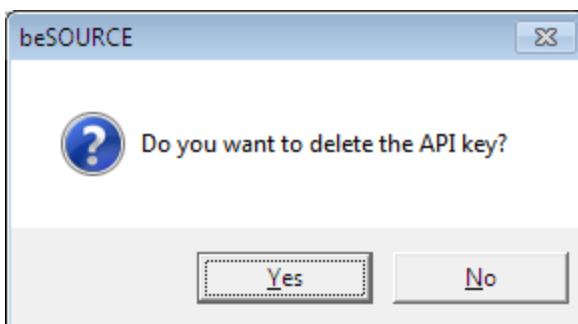
Deleting your API key

To delete your API key, do the following:

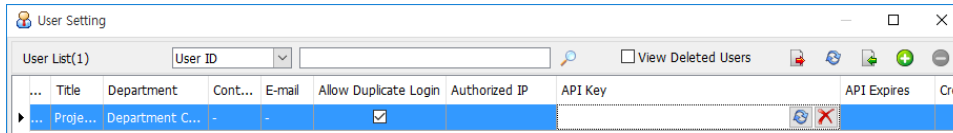
1. Open the **Admin Console**.
2. Open the **User Setting** window.



3. Select an API key, and then select the **Delete**  button.
4. Confirm you want to delete the API key.



5. Confirm the key has been deleted.



| ... | Title | Department | Cont... | E-mail | Allow Duplicate Login | Authorized IP | API Key | API Expires | Cre |
|-----|----------|-----------------|---------|--------|-------------------------------------|---------------|---------|-------------|-----|
| ▶ | Proje... | Department C... | - | - | <input checked="" type="checkbox"/> | | | | |

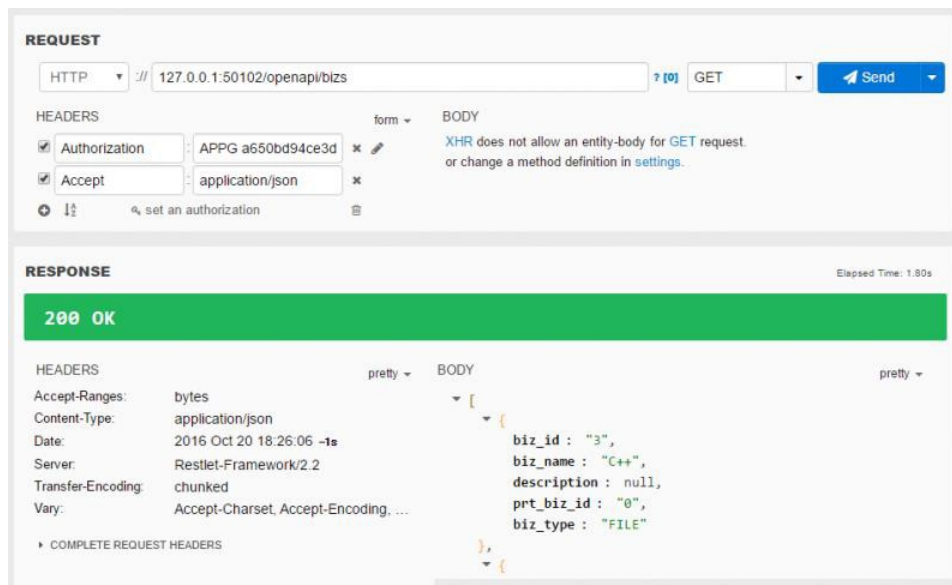
Using the REST service

- The base path is /openapi/.
 - `http://[ip address]:[port]/openapi/`
- Use the HTTP method that the service supports.
- Enter the mandatory items required by the service.

NOTE:

- For Authorization item, you have to input “APPG [API Key]” format.
- For Accept item, you have to input the result data type format.

Example of the REST API tool.



REQUEST

HTTP // 127.0.0.1:50102/openapi/bizs GET Send

HEADERS: Authorization: APPG a650bd94ce3d, Accept: application/json

BODY: XHR does not allow an entity-body for GET request or change a method definition in settings.

RESPONSE Elapsed Time: 1.80s

200 OK

HEADERS: Accept-Ranges: bytes, Content-Type: application/json, Date: 2016 Oct 20 18:26:06 -1e, Server: Restlet-Framework/2.2, Transfer-Encoding: chunked, Vary: Accept-Charset, Accept-Encoding, ...

BODY: { biz_id: "3", biz_name: "C++", description: null, prt_biz_id: "0", biz_type: "FILE" }

Administration

This section describes REST APIs for server administration such as source file importing and analysis.

The user who has the API key must be in the "System Manager" group.

Collection Units List

Retrieves the list of Collection Units. The record without collection type is system information.

Request

- HTTP Method: GET
- URL Path: /openapi/admin/collect-units
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)
- Parameters
 - (optional) fetch_size: the number of records to fetch per page
 - (optional) page_num: page number

Success Response

- HTTP Status: 200 OK
- Body
 - collect_id: Collection Unit ID
 - collect_name: Collection Unit name
 - description: description
 - collect_type_code: collector's type code
 - collect_type_name : collector type

Collection Unit Option

Retrieves the options of Collection Unit.

Request

- HTTP Method: GET
- URL Path: /openapi/admin/collect-units/{collect_id}/option
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - name: option name
 - value: option value
 - pname: parent option name
 - required: specify whether it is a mandatory option or not
 - is_path: specify whether it has path or not

Executing Collection Job

Initiates collection job (source file importing job).

Request

- HTTP Method: GET
- URL Path: /openapi/admin/collect-units/{collect_id}?action=run
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - status: the result of job request (000 : Success, 010 : Failure)
 - message: result message

Collection Job Log

Retrieve the log of collection job.

Request

- HTTP Method: GET
- URL Path: /openapi/admin/collect-units/{collect_id}?action=check
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - job_id: collection job ID
 - start_date: starting date
 - start_time: starting time
 - end_date: end date
 - end_time: end time
 - job_status_code: job status code
 - job_status_name: job status

Analysis Unit List

Retrieve the list of Analysis Units.

Request

- HTTP Method: GET
- URL Path: /openapi/admin/analyze-units
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)
- Parameters

- (optional) `fetch_size`: the number of records to fetch per page
- (optional) `page_num`: page number

Success Response

- HTTP Status: 200 OK
- Body
 - `analyze_type_id`: Analysis Unit ID
 - `analyze_type_name`: Analysis Unit name
 - `description`: description
 - `compiler_code`: analyzer (parser) code
 - `compiler_name`: analyzer (parser) name

Execution Option of Analysis Job

Default option applied to the analysis job. If there is no additional option setting, the analysis job will use the default option.

Request

- HTTP Method: GET
- URL Path: `/openapi/admin/analyze-units/{analyze_type_id}?action=option`
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - `analyze_type_id`: Analysis Unit ID
 - `is_include_failed`: specify whether it includes the failed analysis targets or not
 - `is_include_aqprism`: specify whether it includes AQPrism (quality scoring; deprecated) analysis or not
 - `only_cpssp`: specify whether it just performs code inspection or not
 - `analyze_all`: specify whether it is re-analysis or not
 - `analyzeStepList`: analysis type selection

- step_code: analysis type code
 - step_name: analysis type name
 - step_chk: whether selected or not
- analyzeTargetSourceList: select analysis target
 - src_id: source file ID
 - src_chk: whether selected or not

Executing Analysis Job

Initiate the analysis job.

Request

- HTTP Method: GET
- URL Path: /openapi/admin/analyze-units/{analyze_type_id}?action=run
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - status: the result of job request (000 : Success, 010 : Failure)
 - message: result message

Executing Analysis Job with Options

Initiate analysis job with option values.

Request

- HTTP Method: POST
- URL Path: /openapi/admin/analyze-units/{analyze_type_id}?action=run
- Headers

- (required) Authorization: REST API key value
- (optional) Accept: result data type (application/json or application/xml)
- (optional) Content-Type: sending data type (application/json or application/xml)

Body

- analyze_type_id: Analysis Unit ID
- is_include_failed: specify whether it includes the failed analysis targets or not
- is_include_aqprism: specify whether it includes AQPrism (quality scoring; deprecated) analysis or not
- only_cpsp: specify whether it just performs code inspection or not
- analyze_all: specify whether it is re-analysis or not
- analyzeStepList: analysis type selection
 - step_code: analysis type code
 - step_name: analysis type name
 - step_chk: whether selected or not
- analyzeTargetSourceList: select analysis target
 - src_id: source file ID
 - src_chk: whether selected or not

Success Response

- HTTP Status: 200 OK
- Body
 - status: result of job request (000 : Success, 010 : Failure)
 - message: result message

Analysis Job Log

Retrieve the log of analysis job.

Request

- HTTP Method: GET
- URL Path: /openapi/admin/analyze-units/{analyze_type_id}?action=check
- Headers

- (required) Authorization: REST API key value
- (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - job_id: job ID
 - start_date: start date
 - start_time: start time
 - end_date: end date
 - end_time: end time
 - job_status_code: job status code
 - job_status_name: job status

Analysis Unit Filter

Retrieve Analysis Unit's filter information.

Request

- HTTP Method: GET
- URL Path: /openapi/admin/analyze-units/{analyze_type_id}/filter-info
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - analyze_filter_id: Analysis Filter ID
 - collect_id: Collection Unit ID
 - collect_name: Collection Unit name
 - rule_code: filtering method code
 - rule_name: filtering method

- filter_string: filtering condition
- type_id: object type ID
- type_name: object type

Analysis Unit Option

Retrieve Analysis Unit's option information.

Request

- HTTP Method: GET
- URL Path: /openapi/admin/analyze-units/{analyze_type_id}/option
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - name: option name
 - value: option value
 - pname: parent option name
 - required: specify whether it is a mandatory or not
 - is_path: specify whether it has path or not

Meta Information

This section describes the meta information (code, parser and type information) related to REST APIs.

Code Category List

Retrieve the list of code categories.

Request

- HTTP Method: GET
- URL Path: /openapi/meta-info/codes
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)
- Parameters
 - (optional) fetch_size: the number of records to fetch per page
 - (optional) page_num: page number

Success Response

- HTTP Status: 200 OK
- Body
 - category_id: category ID
 - category_name: category name
 - description: description

Code List

Retrieve the list of codes.

Request

- HTTP Method: GET
- URL Path: /openapi/meta-info/codes/{category_id}

- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)
- Parameters
 - (optional) fetch_size: the number of records to fetch per page
 - (optional) page_num: page number

Success Response

- HTTP Status: 200 OK
- Body
 - category_id: category ID
 - code: code
 - code_value: code value
 - description: description
 - prt_category_id: parent category ID
 - prt_code: parent code
 - order_seq: sorting order

Parser Information

Retrieve the list of parsers (analyzers)

Request

- HTTP Method: GET
- URL Path: /openapi/meta-info/analyzers
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)
- Parameters
 - (optional) fetch_size: the number of records to fetch per page
 - (optional) page_num: page number

Success Response

- HTTP Status: 200 OK
- Body
 - compiler_code: parser code
 - compiler_name: parser

Parser's Object Information

Retrieve gets the list of parser objects.

Request

- HTTP Method: GET
- URL Path: /openapi/meta-info/analyzers/{compiler_code}/object
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)
- Parameters
 - (optional) fetch_size: the number of records to fetch per page
 - (optional) page_num: page number

Success Response

- HTTP Status: 200 OK
- Body
 - type_id: parser code
 - type_name: parser
 - display_name: display name
 - display_yn: specify whether it is displayed or not
 - description: description

Application

This section describes application or project-related REST APIs.

Application List

Retrieve the list of applications or projects.

Request

- HTTP Method: GET
- URL Path: /openapi/bizs
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)
- Parameters
 - (optional) fetch_size: the number of records to fetch per page
 - (optional) page_num: page number

Success Response

- HTTP Status: 200 OK
- Body
 - biz_id: application or project ID
 - biz_name: application or project name
 - description: description
 - prt_biz_id: parent application or project ID
 - biz_type: application or project type

Application Information

Retrieve the information on application or project.

Request

- HTTP Method: GET
- URL Path: /openapi/bizs/{biz_id}
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)
- Parameters
 - (optional) fetch_size: the number of records to fetch per page
 - (optional) page_num: page number

Success Response

- HTTP Status: 200 OK
- Body
 - biz_id: application or project ID
 - biz_name: application or project name
 - description: description
 - prt_biz_id: parent application or project ID
 - biz_type: application or project type

Application Filter

Retrieve the filtering information of application or project.

Request

- HTTP Method: GET
- URL Path: /openapi/bizs/{biz_id}/filter-info
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)
- Parameters
 - (optional) fetch_size: the number of records to fetch per page
 - (optional) page_num: page number

Success Response

- HTTP Status: 200 OK
- Body
 - biz_id: application or project ID
 - collect_id: Collection Unit ID
 - rule_code: filtering method code
 - rule_name: filtering method
 - filter_string: filtering condition

Application Rule Violations

Retrieve the code inspection rule violations of application or project.

Request

- HTTP Method: GET
- URL Path: /openapi/bizs/{biz_id}/rule-violation
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - src_id: source file ID
 - sname: source file name
 - spath: source file path
 - rule_id: rule ID
 - rule_name: rule name
 - line_num: rule violation code line number
 - priority_code: rule priority code
 - priority_name: rule priority

Source File

This section describes source file-related REST APIs.

Source List

Retrieve the list of source files belonging to an application or project.

Request

- HTTP Method: GET
- URL Path: /openapi/bizs/{biz_id}/sources
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - src_id: source file ID
 - sname: source file name
 - spath: source file path
 - root_path: collection or importing path
 - analyze_success: specify whether it is analyzed successfully or not
 - logical_name: logical name
 - type_id: type ID
 - type_name: type

Source File Content

Retrieve the content of source file.

Request

- HTTP Method: GET
- URL Path: /openapi/bizs/{biz_id}/sources/{src_id}
- Headers
 - (required) Authorization: REST API key value.
 - (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - text: source file content

Source File Property

Retrieve the property information of source file.

Request

- HTTP Method: GET
- URL Path: /openapi/bizs/{biz_id}/sources/{src_id}/meta-info
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - biz_name: application or project name
 - sname: source file name
 - spath: source file path
 - logical_name: logical name
 - cm_date: the last collection and analysis date
 - type_name: source file type
 - analyze_success: specify whether it is analyzed successfully or not

- line_count: the number of lines
- is_file: specify whether it is a file or not

Source File History

Retrieve the history information of a source file.

Request

- HTTP Method: GET
- URL Path: /openapi/bizs/{biz_id}/sources/{src_id}/history-info
- Headers
 - (required) Authorization: REST API key value
- (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - src_id: source file ID
 - chg_seq: change sequence
 - chg_date: changed date
 - chg_time: changed time
 - chg_reason_code: change reason code
 - chg_reason_name: change reason

Source File Object

Retrieve the object information of a source file.

Request

- HTTP Method: GET
- URL Path: /openapi/bizs/{biz_id}/sources/{src_id}/object-info
- Headers

- (required) Authorization: REST API key value
- (optional) Accept: result data type (application/json or application/xml)
- Parameters
 - (optional) fetch_size: the number of records to fetch per page
 - (optional) page_num: page number

Success Response

- HTTP Status: 200 OK
- Body
 - obj_id: object ID
 - obj_name: object name
 - logical_name: logical name
 - obj_type_id: object type ID
 - obj_type_name: object type
 - line_number: code line number

Source File Metrics

Retrieve the metrics of a source file.

Request

- HTTP Method: GET
- URL Path: /openapi/bizs/{biz_id}/sources/{src_id}/metric-info
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)
- Parameters
 - (optional) fetch_size: the number of records to fetch per page
 - (optional) page_num: page number

Success Response

- HTTP Status: 200 OK
- Body

- metric_category: category of metrics
- metric_name: metric
- measure_value: metric value

Source File Rule Violations

Retrieve the code inspection rule violations of a source file.

Request

- HTTP Method: GET
- URL Path: /openapi/bizs/{biz_id}/sources/{src_id}/rule-violation
- Headers
 - (required) Authorization: REST API key value
 - (optional) Accept: result data type (application/json or application/xml)

Success Response

- HTTP Status: 200 OK
- Body
 - src_id: source file ID
 - sname: source file name
 - spath: source file path
 - rule_id: rule ID
 - rule_name: rule name
 - line_num: violation code line
 - priority_code: rule priority code
 - priority_name: rule priority