

README (CC Import Tool)

Release Notes

Version 1.3.2

- Fixed a bug that caused cc-import to fail when a component within an imported Protex project BOM had no license.

Version 1.3.1

- Moved fetching of BOM refresh date to the multi-threaded code for faster performance.
- Use new SDK calls (vs. SQL) to access last validation date, project/app associations.

Version 1.3.0

- **This version requires Protex 7.0.2 or later and Code Center 7.0 or later.**
- Migrated to Protex 7.0.2 SDK and Code Center 7.0 SDKs.

Version 1.2.5

- Better error reporting when no valid projects are provided in protex.project.list
- A single instance of the AppAdjuster object (if used) is now shared by all threads, to allow synchronization of methods/code for thread-safety.

Version 1.2.4

- Fixed bug: cc.submit.request was controlling whether or not components are added, rather than validate.requests.add
- Now allows spaces after commas separating projects in project list in config file.

Version 1.2.3

- Fixed bug where certain operating systems were unable to parse XML configuration file for multi-server capability.

Version 1.2.2

- Option to produce a list of newly-created apps

Version 1.2.1

- Improved exception handling for single server multi-threaded mode.

Version 1.2.0

- Single server mode: Ability to split up the project list into subsets, and process the subsets in parallel, by setting num.threads to a value greater than 1.

Version 1.1.1

- Ability to use a config file (first argument) for the config, and specify the project list on the command line (–project <comma-separated project;version list>)

Version 1.1.0

- Consolidates incremental releases 1.0.1-1.0.9 into a minor release
- Enhancements to the NumericPrefixedAppAdjuster (the relevance of this is limited to those using that optional plugin): Now supports generation of a file containing a list of created applications.

Version 1.0.9

- Ability to specify, via new optional property protex.project.name.filter, a project name regex filter. Projects whose name does not match are skipped.
- Ability to specify, via boolean property revalidate.after.changing.bom, that validation should be re-run after the CC app BOM is changed.

- Ability to specify, via boolean property `app.adjuster.only.if.bomedits`, that the custom app adjuster (if configured), should only be run on an app if changes are made to its BOM.

Version 1.0.8

- Enhancements to the `NumericPrefixedAppAdjuster` (the relevance of this is limited to those using that optional plugin): Now supports application descriptions that include the separator character.

Version 1.0.7

- Option to attempt to fix an invalid association in Code Center (such as with a Protex server that has gone offline).

Version 1.0.6

- Enhancements to the `NumericPrefixedAppAdjuster` (the relevance of this is limited to those using that optional plugin).

Version 1.0.5

- Added the ability to (optionally) configure a class responsible for modifying applications after they are sync'd.

Version 1.0.4.1

- Smart validate now works for either some or all projects

Version 1.0.4

- Added "sync report" mode, which compared Protex projects and Code Center applications, and reports on any differences it finds.
- Ignore existing association mode added
- Fix for required `cc.protex.name` in multi-server mode

Version 1.0.2

- Option to delete Code Center requests
- Summary report at the end of each run that includes:
 - Total metrics for validations, imports
 - Total number of requests/added deleted
 - Total number of failed imports and validations with names.

Version 1.0.1

- SolEng Common Framework now drives configuration
- Multi-Protex support added
- Simplified usage
- Minor bug fixes
- Please see new usage for details
- Option to turn off and on the validation process.

Summary

Provides the ability to import all or a specific list of projects from Protex to Code Center.

There are two modes: Single (Protex) Server, and Multi (Protex) Server.

You can configure in an optional `AppAdjuster`, which modifies the app after the import/sync is done. Currently there is one `AppAdjuster` available, `NumericPrefixedAppAdjuster`, developed for a specific customer.

There are many configuration options for controlling the details of what happens, but the sequence of operations for a typical run is: For each Protex project:

1. Import: Create the Code Center application, if it does not already exist.
2. If it looks like the project may have been changed since the last validation (see `"validate.application.smart"`):
 - a. Validate, to get a list of differences (if any) in the Protex project BOM relative to the Code Center application BOM.
3. If there are BOM differences:
 - a. Perform component add/deletes to synchronize the BOMs
 - b. Optionally perform a second validation (to ensure the validation status of the application ends up = PASSED)
4. If configured: Run the configured `AppAdjuster` to make adjustments to the application

USAGE for version 1.X.X and above:

1. Unpack zip and execute the batch or shell script inside the /bin/ directory
2. Provide full path of configuration files or use command line arguments (see below for valid arguments)
 - a. Except for the case below, you must use either a configuration file (first/only argument) or command line arguments, but not both.
 - b. The exception to the rule above is that the following usage is supported starting in version 1.1.1. In this use case, the project list specified in the config file (if any) is overridden by the project list specified on the command line after the --project argument.

<cc-import command> <config filename> --project <comma-separated project;version list>

1. For multi-protex support, your configuration file must contain the following property:
 - a. server.list.location - This is the name of the server XML file relative to the configuration file.
 - b. server XML file - This is the file that defines your servers, the format of which is defined below.
 - c. Command line driven option does not offer multi-protex support.
2. An example configuration file can be found within the /properties/ directory

Password Encryption

Configuration file contain Protex and Code Center passwords, configured via properties of the form:

<prefix>.password=<value>

Possible values for <prefix>: protex, cc.

Passwords are entered in plain text, and then (usually) automatically encrypted in-place by the utility the next time it reads the configuration file. When creating a configuration file, set the value of each password to the password in plain text. The first time the utility reads the file, if the property <prefix>.password.isencrypted is not present, it will encrypt the password and insert the property <prefix>.password.isencrypted=true. To change the password, remove the <prefix>.password.isencrypted property, and set <prefix>.password to the password in plain text. To tell the utility to leave the password as plain text, insert <prefix>.password.isencrypted=false.

Configuration Options / Command Line

Note: Command line format: argument <space> value

Property Name	Command Line Argument	Description	Required	Default
protex.server.name	--p-server	URL of your Protex server	Yes, for single server mode	N/A
protex.user.name	--p-username	Protex login name	Yes, for single server mode	N/A
protex.password	--p-password	Password for that account	Yes, for single server mode	N/A
cc.server.name	--cc-server	URL of your Code Center server	Yes, for single server mode	N/A
cc.user.name	--cc-username	Code Center login name	Yes, for single server mode	N/A
cc.password	--cc-password	Password for that account	Yes, for single server mode	N/A
cc.protex.name	--protex-name	Name of the Protex configuration inside Code Center	Yes, for single server mode	N/A
cc.default.app.version	--default-app-version	The version that will be used for newly created application	Yes	N/A
cc.workflow	--workflow	Name of the Code Center workflow that will belong to the application	Yes	N/A
cc.owner	--owner	The Code Center account that will be assigned to this application	Yes	N/A

cc.submit.request	--submit	True/False as to whether the components for your application should be submitted	No	false
validate.application	--validate	Whether to proceed with validation of newly created application	Yes	false
validate.application.smart	N/A	True/False. If true, activates a date checking algorithm that performs a validation only if the Protex BOM Refresh date is newer than the last validation date. This can significantly increase performance as this only performs costly validations against those applications which really need it.	No	false
protex.project.list	--project	Custom list of projects. Optional version can be added to list: Comma separated pair of name and version. Format <projectName>;<version>,<projectName2>;<version2>,etc	Leave blank for ALL projects	blank
validate.requests.add	N/A	As part of the validation process, enable true if you want components found only in Protex to be added	No	true
validate.requests.delete	N/A	As part of the validation process, enable true if you want requests found only in Code Center to be deleted	No	false
server.list.location	N/A	Location of server.xml file	Yes, for multi server mode	blank
generate.report	N/A	If set to true, instead of synchronizing Protex and Code Center, the utility generates a report that shows any application/project differences between Code Center and Protex. The report is written to sync_report.xlsx in the working directory from which the utility was run.	No	false

cc.ignore.associations*	N/A	<p>If true: the CCImporтер will ignore associations by application name, and do a direct lookup in the database to get the internal association id. This setting should be true if there are previously imported applications in Code Center that have been renamed or modified.</p> <p>If false: the CCImporтер will attempt to make the association through the SDK which matches by project/application name. This will fail when Code Center applications aren't named the same as Protex projects and already have an existing association.</p>	No	false
app.adjuster.classname	N/A	If set, this property specifies a class (that implements the AppAdjuster interface) that will be invoked on each application after it is sync'd, giving that code an opportunity to modify the application. This feature is probably of limited use unless/until more AppAdjuster classes are developed.	No	N/A
app.adjuster.only.if.bome dits	N/A	If true, and if app.adjuster.classname points to a valid AppAdjuster: Only runs the AppAdjuster if it changes the CC app BOM	No	false
attempt.to.fix.invalid.asso ciation	N/A	If true, if validate throws a NoRemoteProjectFoundException (this can happen if the originally-associated Protex server has gone offline), disassociate it, and retry (up to twice).	No	false
protex.project.name.filter	N/A	To process only projects whose name matches a given regular expression, set this property equal to that regular expression.	No	N/A

revalidate.after.changing.bom	N/A	<p>If true, the utility will attempt to leave each CC application with a validation status = "PASSED". It does this by doing the following:</p> <ul style="list-style-type: none"> • If, when the import phase completes, the application validation status is not "PASSED", skip smart validation (if enabled) to ensure that validation will be run. • If, after validation, changes are made to the CC app BOM, re-run validation. 	No	false
num.threads		<p>Single-server mode: If set, divide the work across this number of client-side threads. It splits the list of projects into subsets, and processes the subsets in parallel in different threads.</p> <p>Multi-server mode: Has no effect.</p>	No	1

**DB access must be granted to the Code Center Server*

Server List XML Configuration

The XML file should follow the following format

Sample Server Configuration

```
<servers>
  <server>
    <alias>Protex7Test</alias>
    <server.name>http://myProtexServer</server.name>
    <user.name>user@blackducksoftware.com</user.name>
    <password>blackduck</password>
    <application>PROTEX</application>
  </server>
  <server>
    <alias>Seneca7</alias>
    <server.name>http://some.other.server/</server.name>
    <user.name>user@blackducksoftware.com</user.name>
    <password>blackduck</password>
    <application>PROTEX</application>
  </server>
  <server>
    <server.name>http://myCodeCenterserver/</server.name>
    <user.name>ccUser</user.name>
    <password>blackduck</password>
    <application>CODECENTER</application>
  </server>
</servers>
```

USAGE for version .7 and below:

```
java -jar cclmporter.jar [-getProjectList | -importProjectList | -importAllProjects]
```

-getProjectList : Displays a list of projects in Protex assigned to the user
-importProjectList : Imports the projects specified in the context.xml file into Code Center.
-importAllProjects : Imports all user assigned Protex projects into Code Center.

PRE-REQUISITES:

A. Both Protex SDK and Code Center SDK need to be enabled.

B. Protex server needs to be configured in Code Center.

C. Update context.xml file:

1. Update protexSDKClient bean with Protex server URL, username, and password
2. Update codecenterSDK620Client with Code Center URL, username, and password
3. Update importerInputs:

- protexServerName: Name of Protex server association shown in Code Center > Administration > Settings > Protex
- defaultVersion: Version to use if version is not specified in project list
- workflowName: Name of workflow to associate with project
- onwer: Username of Code Center application owner
- submitRequest: true/false if component requests should be submitted.

If there are custom required fields or steps in the request process, a true value will cause the import to error.

- protexProjectList: List of Protex projects names to import into Code Center.

The list needs to be delimited by carriage returns (newlines).

An optional version may be specified with each project after a comma (i.e. Project 1, v1.0)

If the version isn't specified, the default version will be used (specified above)

KNOWN ISSUES:

- If a Protex project's Bill of Materials contains a component that is a license, the import for that project will fail.
- If the request process in Code Center contains custom required fields, or if the approvers are set at request time, set the submitRequest to false.
- If your requested Protex project is already associated to a different Code Center application, the import will fail. **(Fixed as of 1.0.4)**