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| NICE Information |
| R-CLIPS Admin Guide |
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| NICE Information  2020-05-18 |

Revision History

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| --- | --- | --- | --- |
| Version | Created | Updated contents | Author |
| V0.7 | May 3, 2020 | First draft | Kim, SangHyeon |
| V1.0 | May 18, 2020 | Update | Lee, Hoon |
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Index

[1. Summary 3](#_Toc42154980)

[2. Service Configuration 3](#_Toc42154981)

[2.1. R-CLIPS Server Information 3](#_Toc42154982)

[2.2. R-CLIPS Service Configuration[Production Environment] 4](#_Toc42154983)

[2.3. R-CLIPS Service Configuration[Development Environment] 4](#_Toc42154984)

[3. Service Management 5](#_Toc42154985)

[3.1. Start & Shutdown 5](#_Toc42154986)

[3.1.1. Rule Management Service (R-CLIPS Site & R-CLIPS client) 5](#_Toc42154987)

[3.2. Logging 5](#_Toc42154988)

[3.2.1. Rule Management(R-CLIPS Site & R-CLIPS client) 5](#_Toc42154989)

[3.2.2. Score Batch 5](#_Toc42154990)

[3.3. Batch Service 5](#_Toc42154991)

[3.3.1. Directory and Path 5](#_Toc42154992)

[3.3.2. Batch Excute 6](#_Toc42154993)

[3.3.3. Batch Schedule 7](#_Toc42154994)

[4. Rule Repository Export/Import 7](#_Toc42154995)

[4.1. Repository Export(Backup) 7](#_Toc42154996)

[4.2. Repository Import(Restore) 8](#_Toc42154997)

[5. Model Rule Registration 9](#_Toc42154998)

[5.1. Register ML Rule in mapping property 9](#_Toc42154999)

[5.2. ML Model Registration 9](#_Toc42155000)

[5.3. Unit Test 11](#_Toc42155001)

[5.4. Rule Sample Test(Multiple data test) 12](#_Toc42155002)

[6. Rule Build & Apply 14](#_Toc42155003)

[6.1. Rule build & Add snapshot 14](#_Toc42155004)

[6.2. Rule Apply 14](#_Toc42155005)

# Summary

It is the operation guide of R-CLIPS system administrator by describing the contents including operation of R-CLIPS service, change source deploy and application.

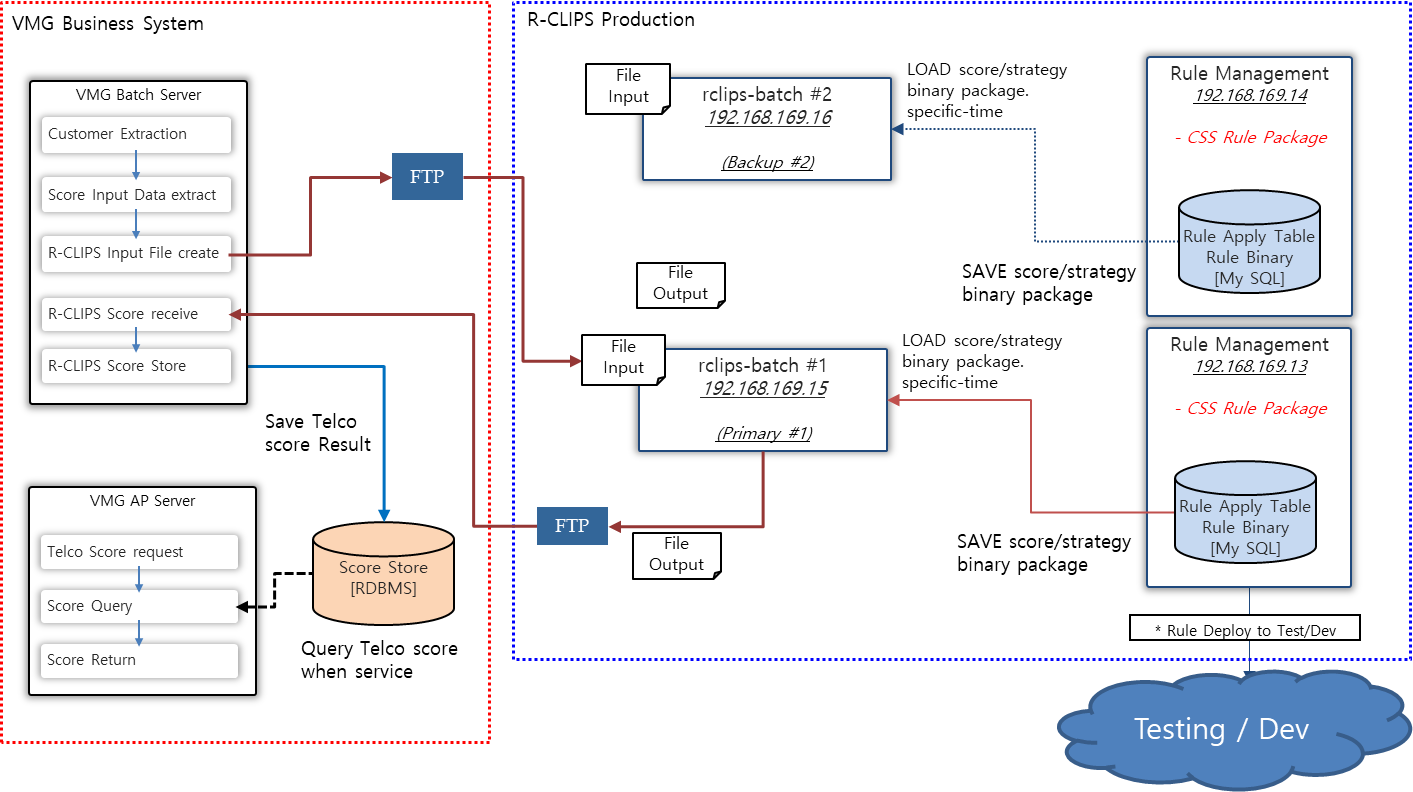
# Service Configuration

## R-CLIPS Server Information

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Environment | Server | IP Information | Connection info | H/W Spec |
| Development | R-CLIPS  Strategy | IP Local : 192.168.169.?  IP Public : 103.68.240.82 | SSH User name: root  MySQL Username: rclips  Database: rclips | 32G RAM  18 Core  (ES-2697) |
| R-CLIPS  Batch Server | IP Local : 192.168.169.?  IP Public : 103.68.240.83 | SSH User name: root | 32G RAM  18 Core  (ES-2697) |
| Production | R-CLIPS  Strategy [Primary] | IP Local : 192.168.169.13  IP Public : 103.68.240.101 | SSH User name: rclips  MySQL Username: rclips  Database: rclips | 32G RAM  12 Core  (ES-6252) |
| R-CLIPS  Strategy [Backup] | IP Local : 192.168.169.14  IP Public : 103.68.240.102 | SSH User name: rclips  MySQL Username: rclips  Database: rclips | 32G RAM  12 Core  (ES-6252) |
| R-CLIPS  Batch Server  [Primary] | IP Local : 192.168.169.15  IP Public : 103.68.240.103 | SSH User name: rclips | 128G RAM  24 Core  (ES-6252) |
| R-CLIPS  Batch Server  [Backup] | IP Local : 192.168.169.16  IP Public : 103.68.240.104 | SSH User name: rclips | 128G RAM  24 Core  (ES-6252) |

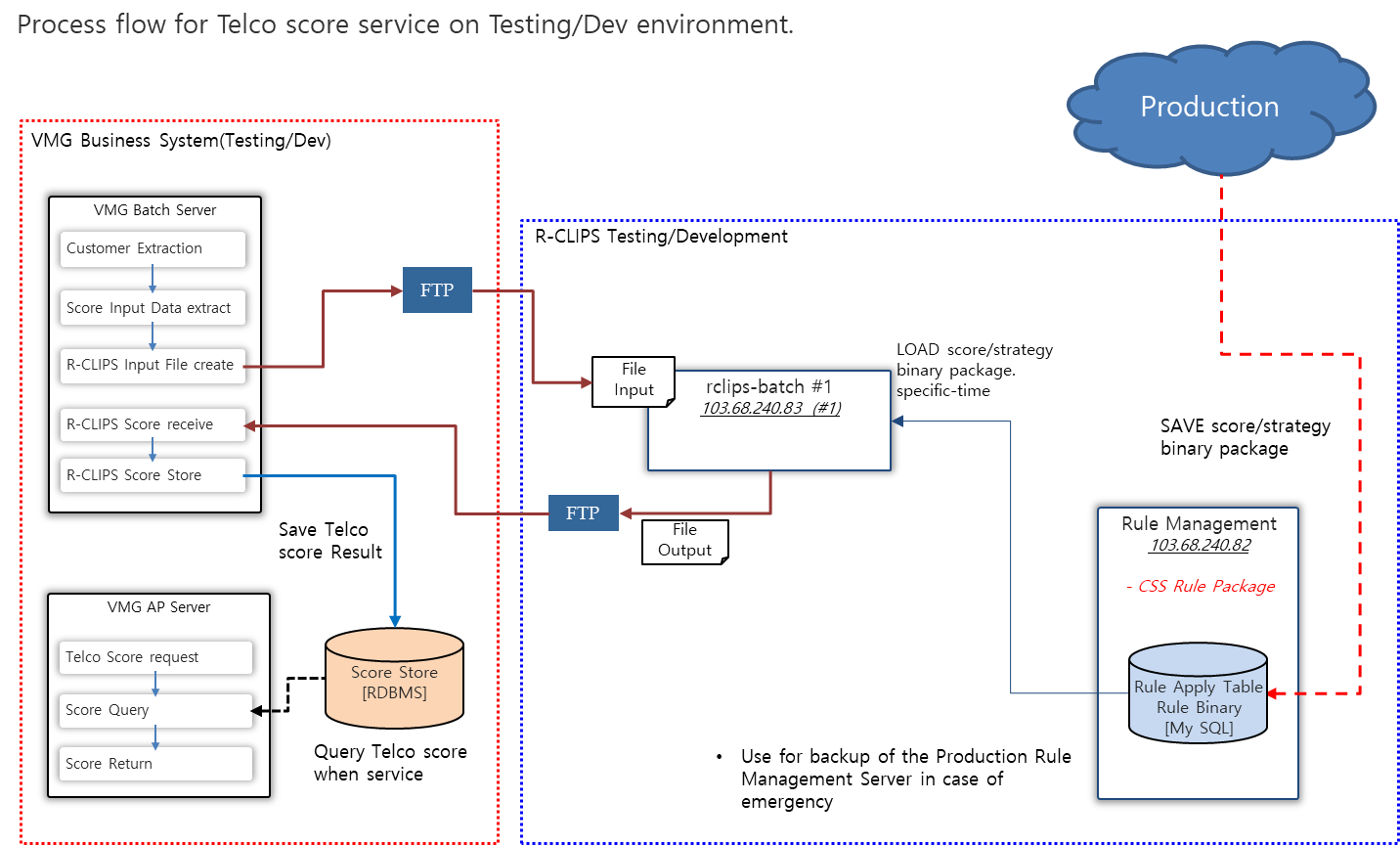
## R-CLIPS Service Configuration[Production Environment]

**R-CLIPS Service Configuration [Production]**



## R-CLIPS Service Configuration[Development Environment]

**R-CLIPS Service Configuration [Development]**



# Service Management

## Start & Shutdown

### Rule Management Service (R-CLIPS Site & R-CLIPS client)

Host: 192.168.169.13

User: rclips

Password: The password must be confirmed by the server administrator.

Path: /home/rclips/app/server/tomcat8

prompt> tboot

prompt> tdown

Check the Rule Management service page.

<VMG Internal Connection>

URL: <http://192.168.169.13:18082/RCLIPS_SITE/>

Id : admin | Password: css123!@#

<VMG External Connection>

URL: <http://103.68.240.101:18082/RCLIPS_SITE/>

Id : admin | Password: css123!@#

## Logging

### Rule Management(R-CLIPS Site & R-CLIPS client)

The Rule management service is deployed to tomcat. If you use the alias command ‘tlog’ named as follows.

prompt> tlog

### Score Batch

prompt> tail -100f /home/rclips/app/batch/logs/rclips-batch.log

## Batch Service

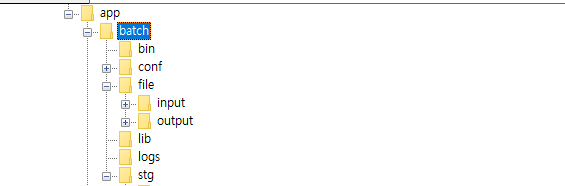
### Directory and Path

Host: 192.168.169.14

User: rclips

Password: The password must be confirmed by the server administrator.

Path: /home/rclips/app/batch/



**/bin**

Batch execution shell file, etc. runBatch.sh, startBatch.sh

**/conf**

Batch Setting about context-job.xml, context-itemWriter.xml, etc..

**/file**

Input file and output file .data files.

**/lib**

The rclips-batch and rclips-batch-build application is in the form of a jar file.

**/logs**

:batch execution logs

**/stg**

Various classes for the strategy of the rule. Includes machine learning.

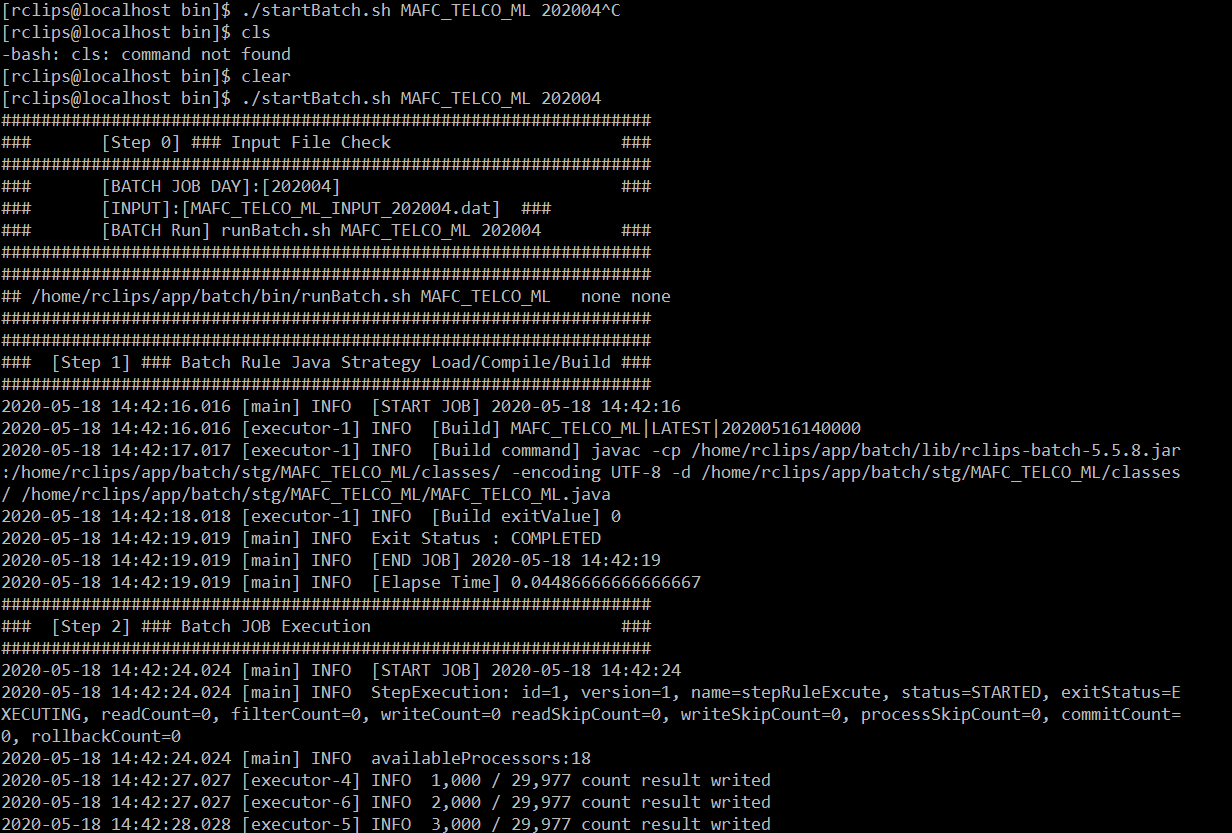
### Batch Excute

Prompt> /home/rclips/app/batch/bin/startBatch.sh {packageId} {WorkYM}

Arguments:

1: PackageId (MAFC\_TELCO\_ML) required

2: WorkYM(format YYYYMM), optional (If there is no input, it is set to the previous month)



When Batch Execution is completed, the input file is moved to the [/home/rclips/app/batch/file/input/DONE] folder.

### Batch Schedule

If you have any schedule, we could the set the schedule like using cron daemon job.

Ex)

[rclips@localhost bin]$ crontab -l

30 6 \* \* \* /home/rclips/app/batch/bin/startBatch.sh MAFC\_TELCO\_ML

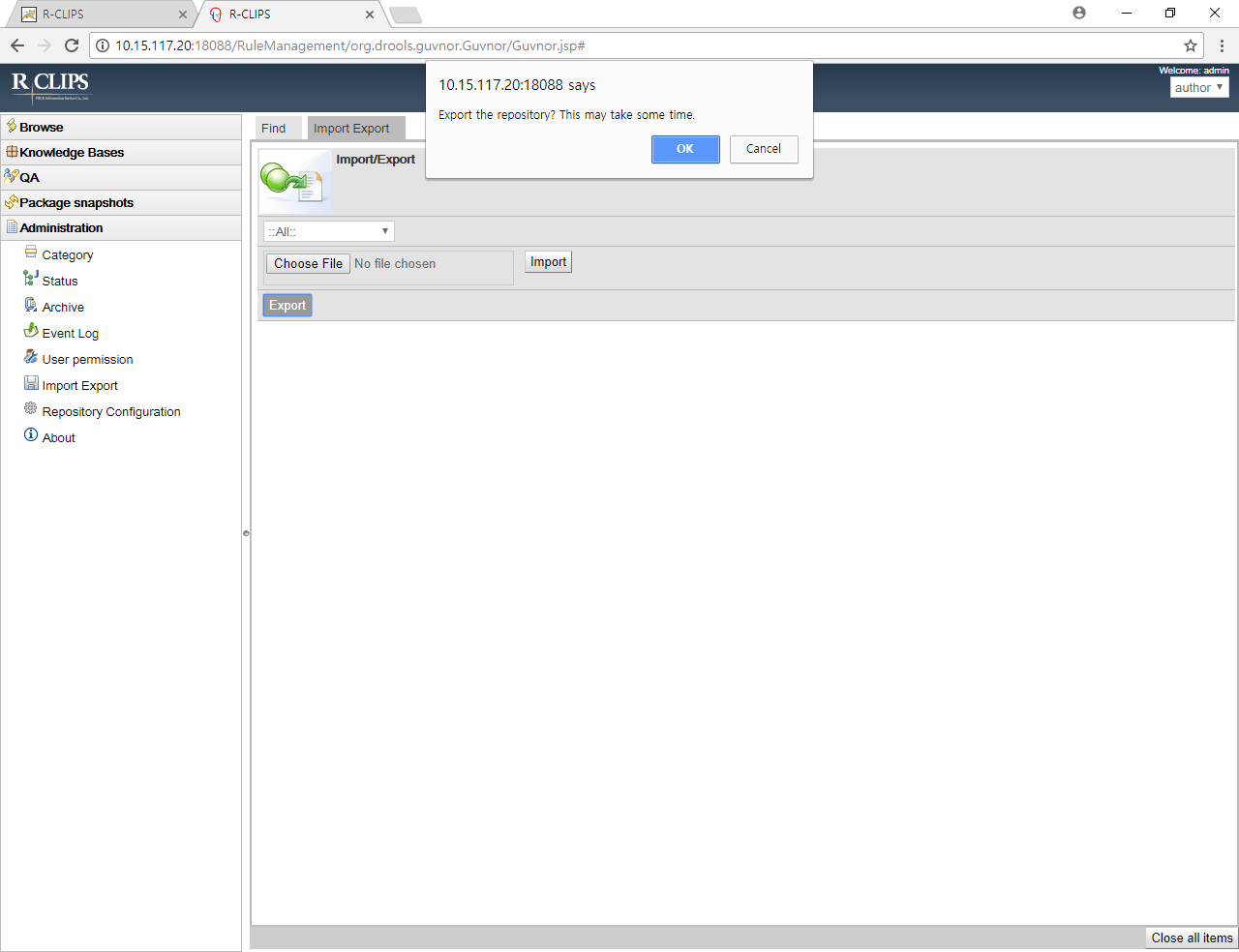
[rclips@localhost bin]$

# Rule Repository Export/Import

## Repository Export(Backup)

1) Rule Administrator > Rule Repository

2) [All or Package] Select export button click repository\_export.zip file download.

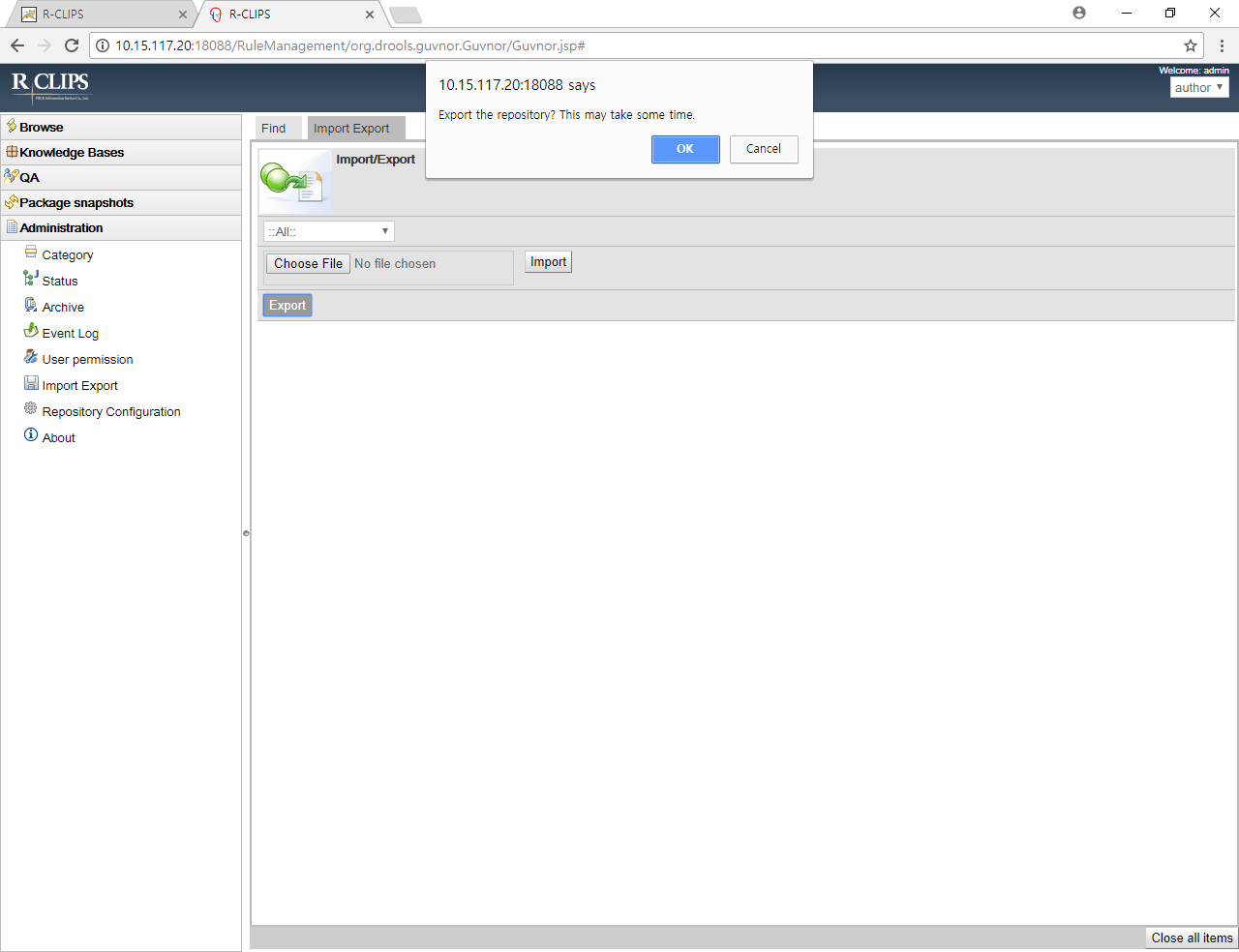


## Repository Import(Restore)

1) Rule Administrator > Rule Repository

2) Import Button > repository\_export.xml File select in your PC

**※ Current Rules is all deleted ( Can Not rollback !! )**

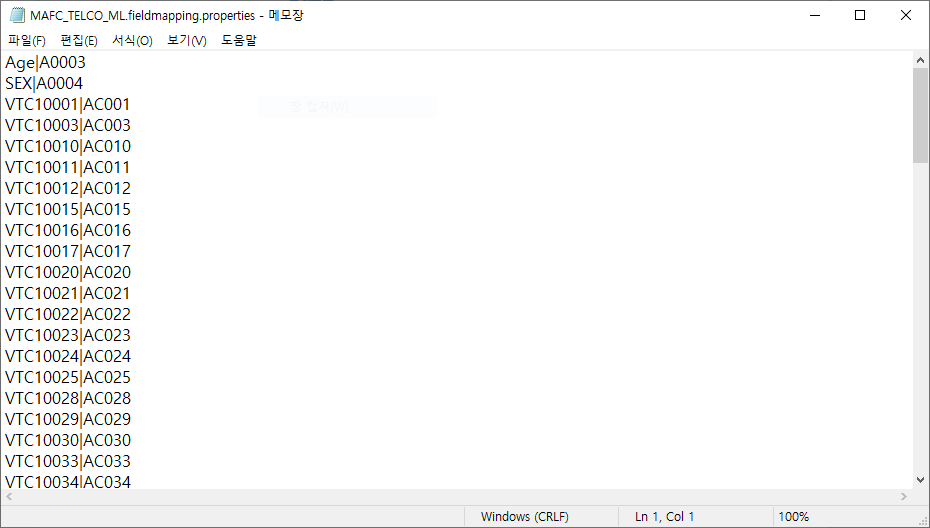


# Model Rule Registration

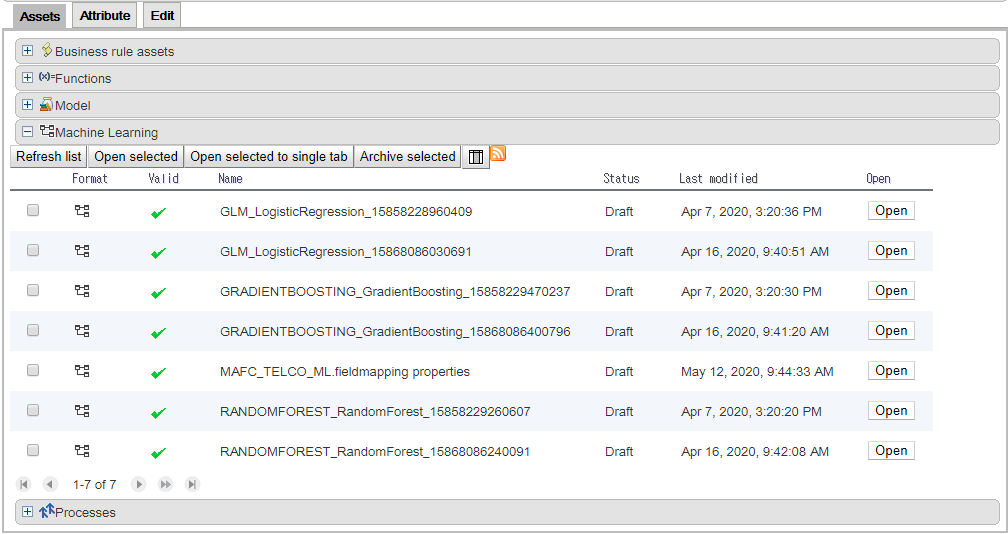
Register the ML Model in the rule package

## Register ML Rule in mapping property

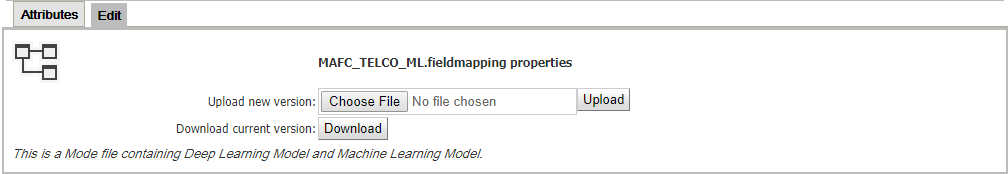
1. Create mapping property file(**Package name**.fieldmapping.properties)



1. Select mapping properties(Package - Machine Learning)

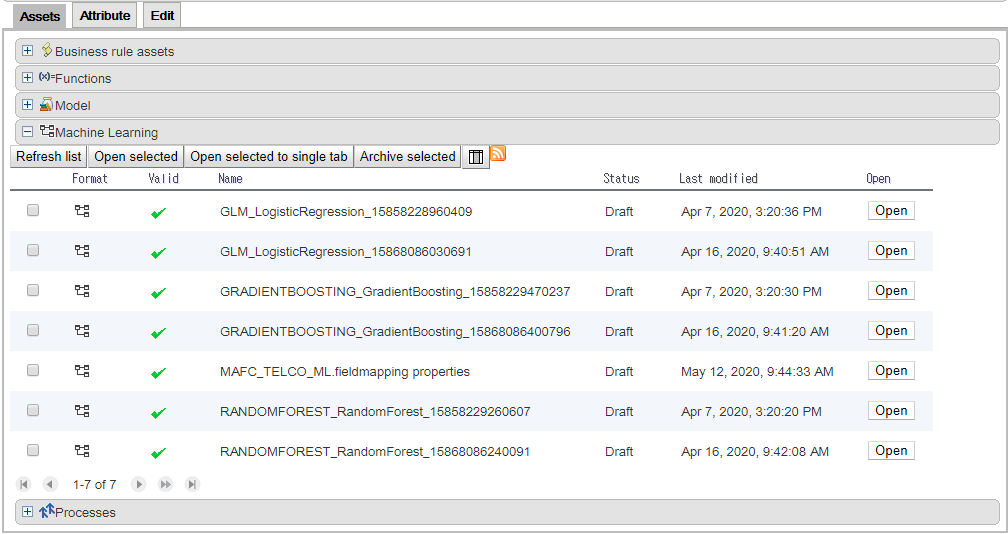


1. Upload mapping properties file

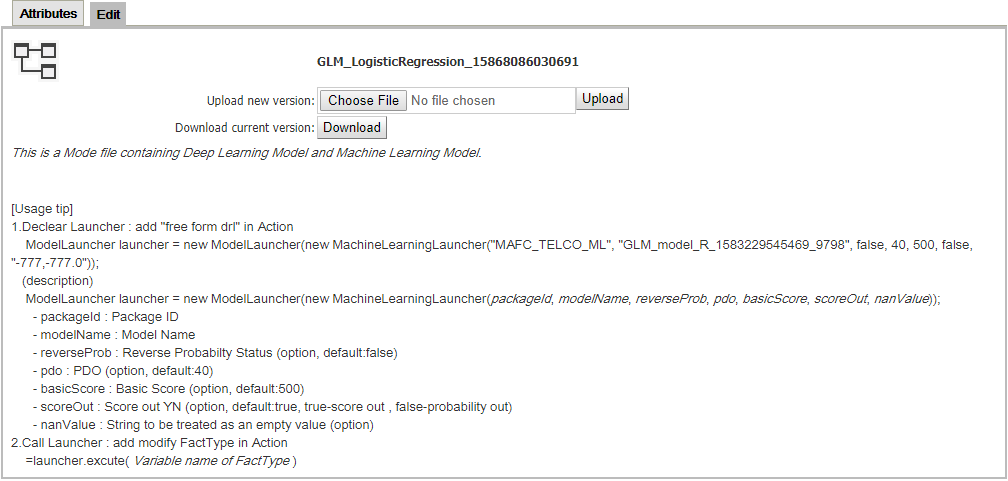


## ML Model Registration

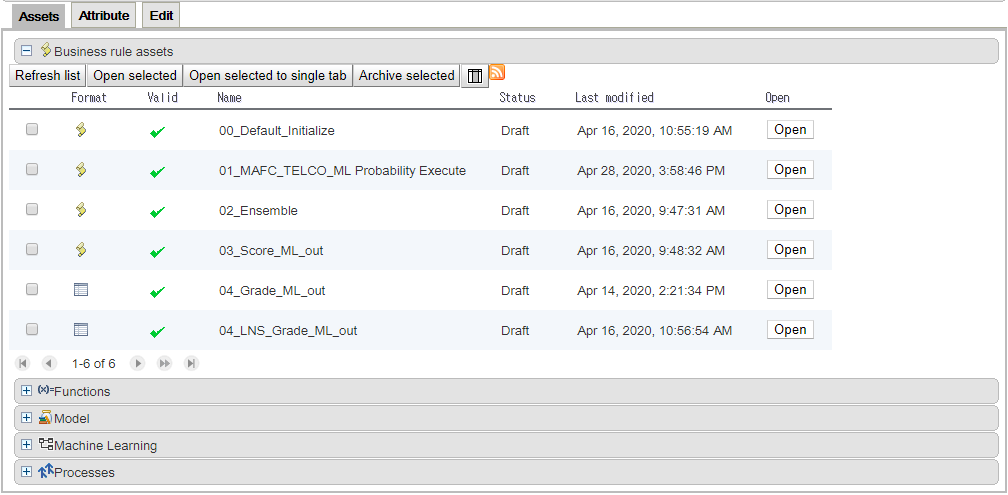
1. Select ML Model(Package-Machine Learning)



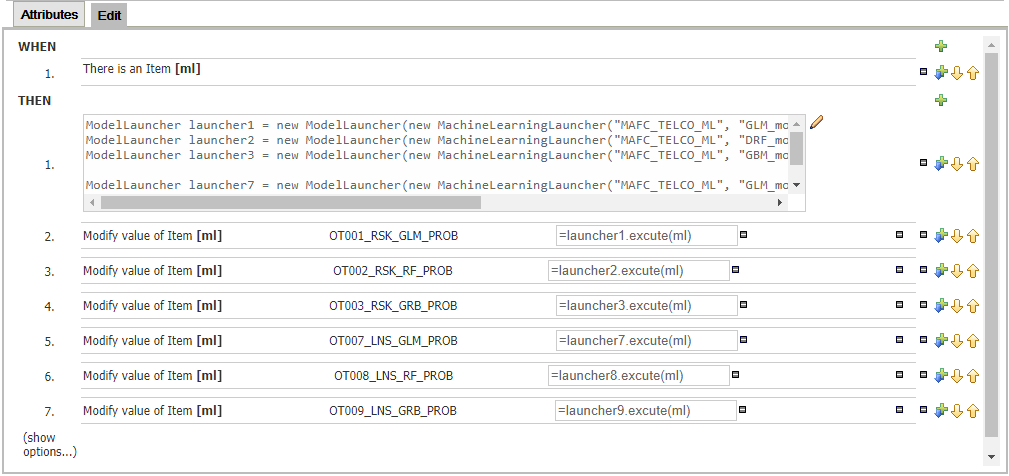
1. Copy rule after Upload ML Model file



1. Select ML Rule Registration file(Package-Business rule assets)

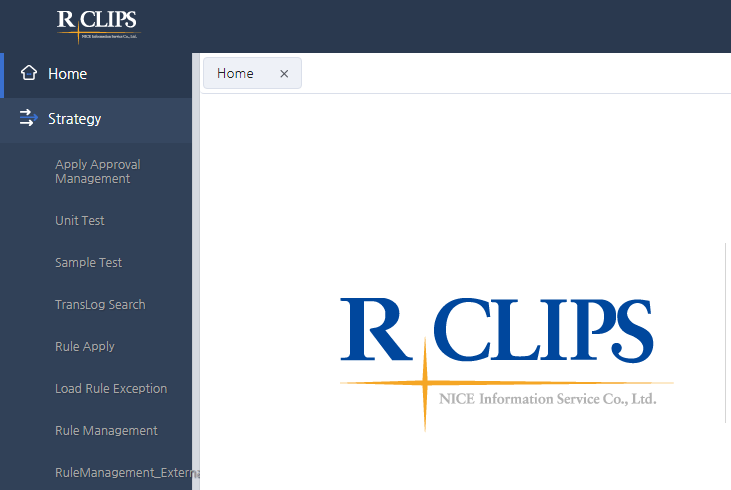


1. ML Rule Registration

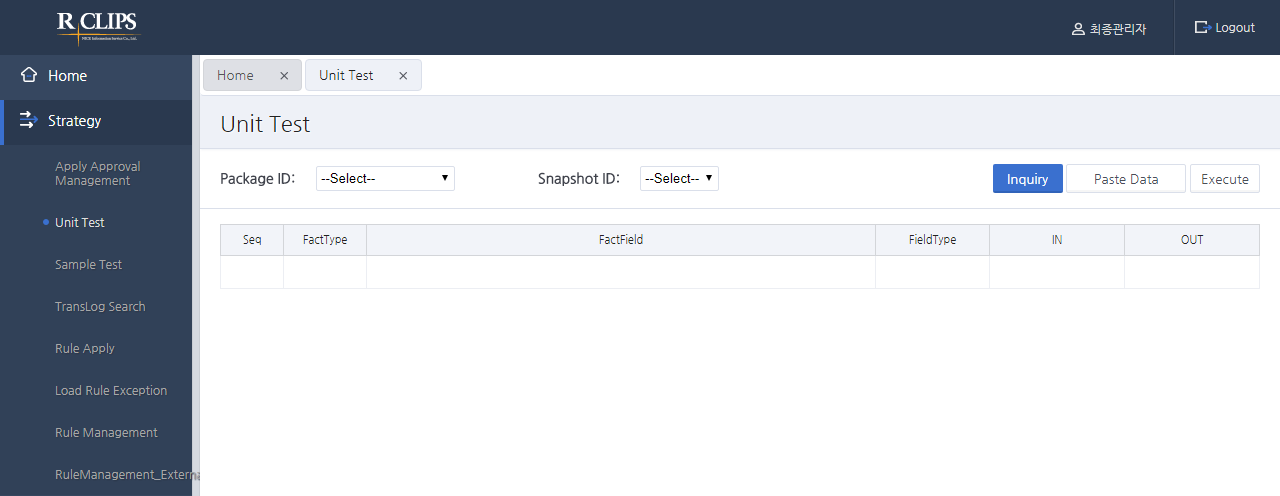


## Unit Test

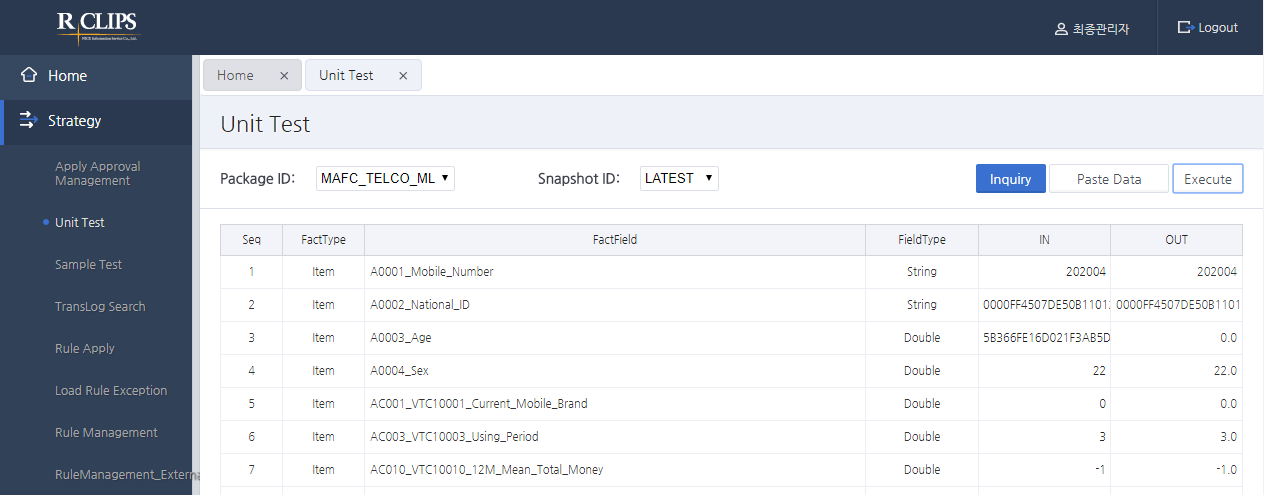
1. Select a Unit Test from the left menu



1. Select a package to Unit Test

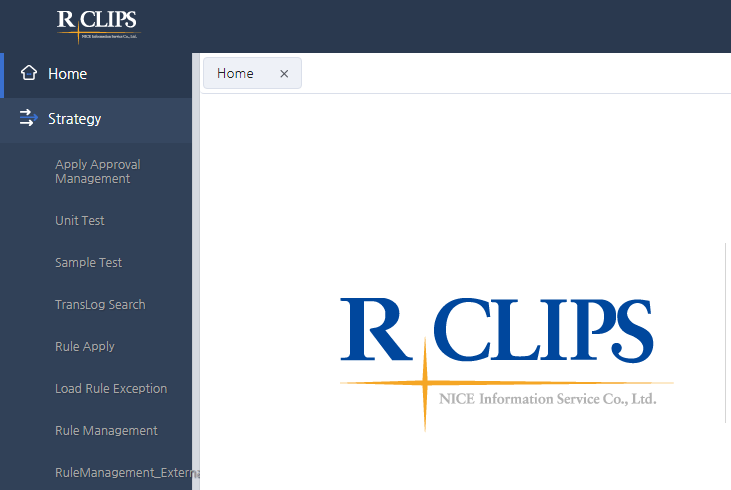


1. After entering th input data IN, click the Execute button

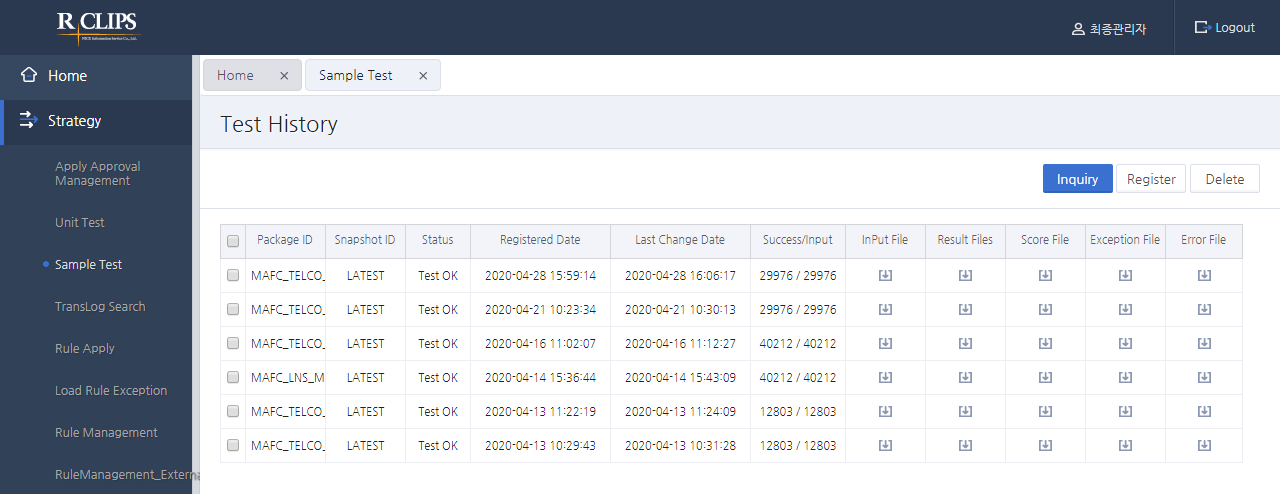


## Rule Sample Test(Multiple data test)

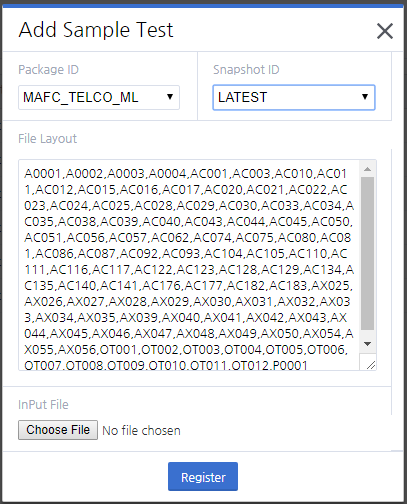
1. Strategy > Sample Test Click



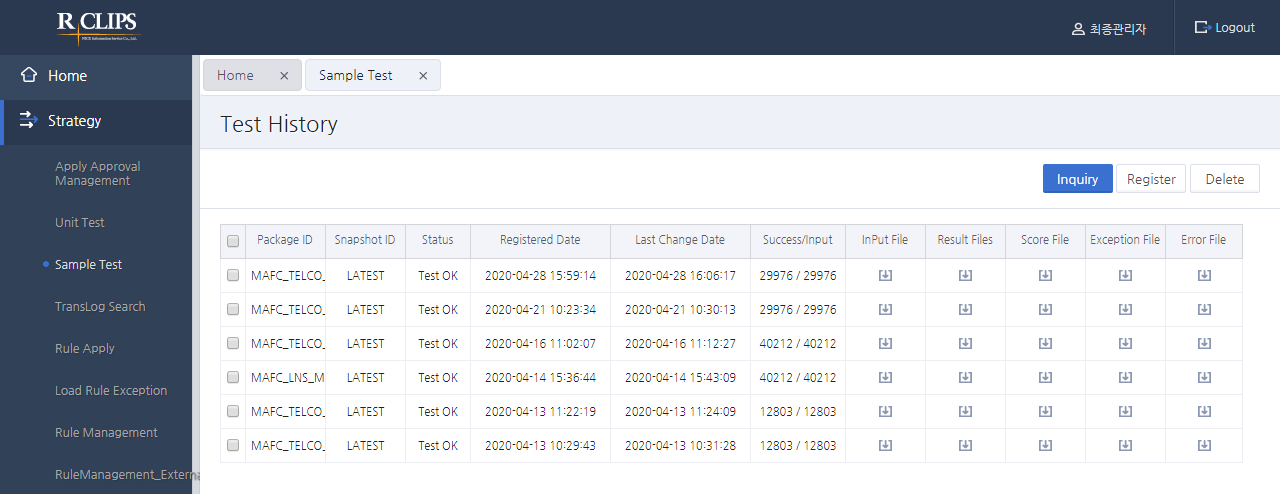
1. Register – sample test data file upload process



1. Package ID and Snapshot ID select > File layout display > Upload the csv file in your PC



1. Result Files – automatic running in the server,you can download result file



# Rule Build & Apply

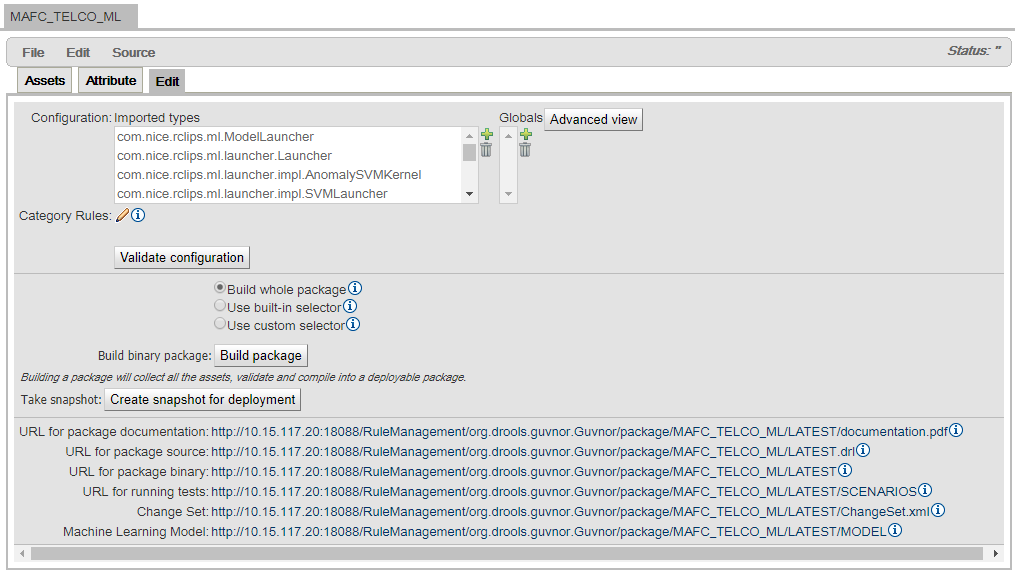
## Rule build & Add snapshot

Once the rule update and implementation are completed, a snapshot is generated for validation through apply.

**Package build**

In Rule Management Screen [packageId] > Edit > Click [Build package] Button

If there are no errors, the message “Package built successfully” is printed

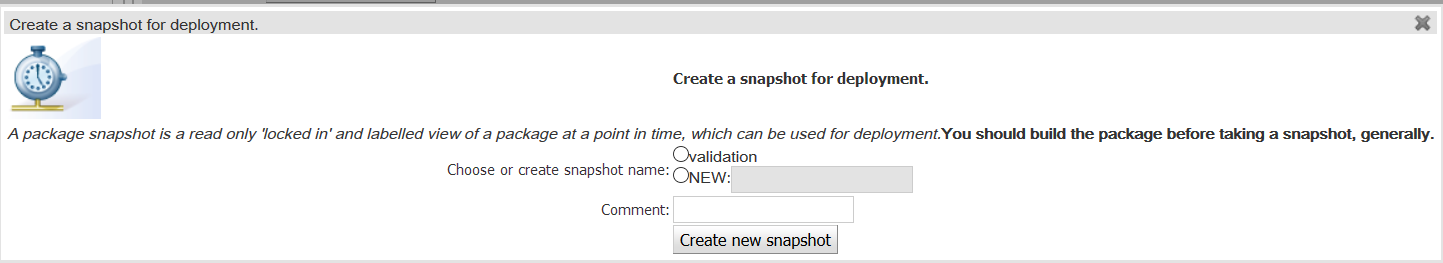


**Create Snapshot**

In Rule Management Screen [packageId] > Edit > Click [Create snapshot for deployment] Button

In the screen below, enter snapshot name in the NEW column. recommend date. Ex) YYYYMMDD

Finally, click the [Create new snapshot] button to create it.



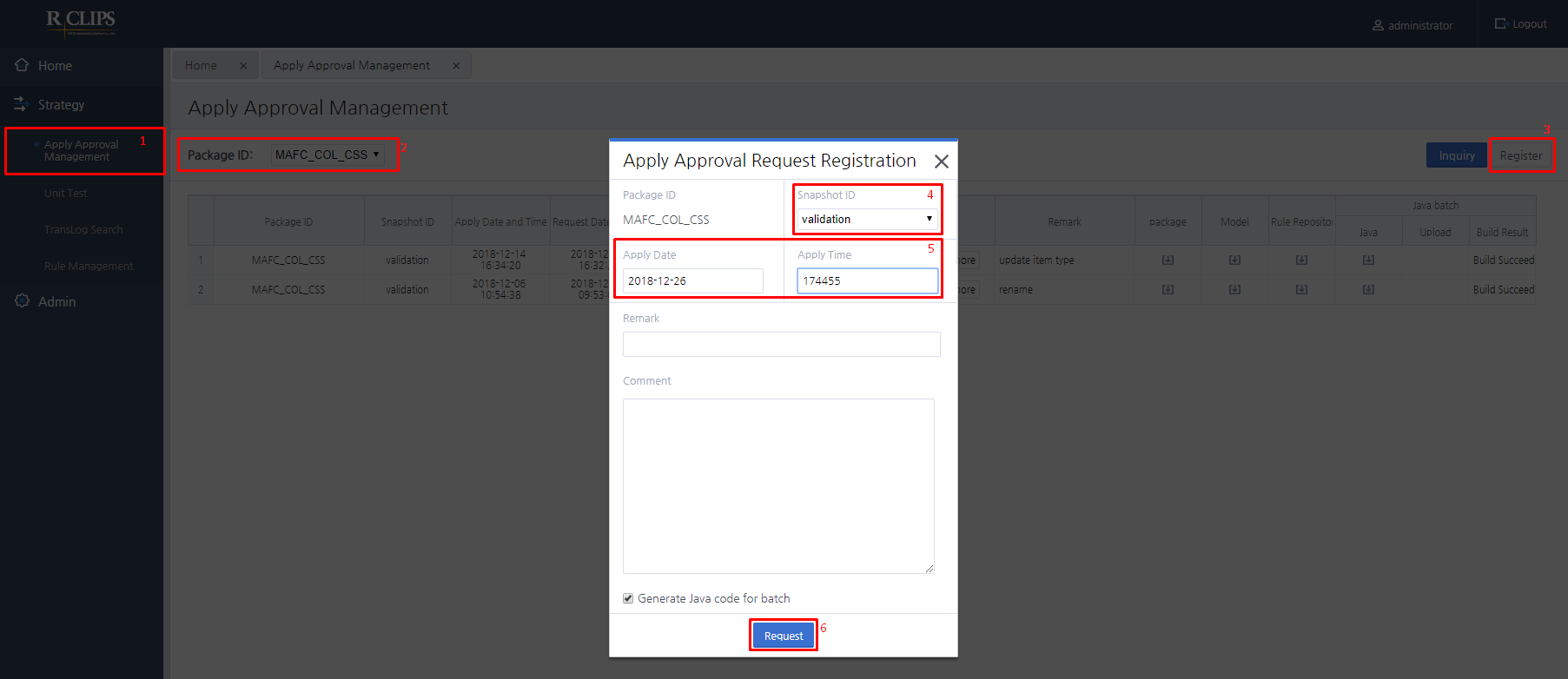
## Rule Apply

This function Apply the generated snapshot. When the Apply is completed, it is Interface with Batch Calcuation

In Apply Approval management Screen

in Package ID choose [pacakgeId]

Request a registration of Build Patch



\* MAFC\_TELCO\_ML package should not have a checked (Generate Java code for batch)

Approve the Request

