

Tool “p4_ticket_auth_jenkins” introduction

Abstract

Jenkins CI P4 plug-in didn't support ticket auth. So the P4 source code with ticket auth account cannot be synced to local.

This tool solved this problem by get p4 ticket for Jenkins before code sync.

Source code explanation

Source code structure

Folder	File	Comment
bin\	encry.jar	Java jar for encrypt/decrypt
	p4_ticket_auth_jenkins.exe	Main exe
src\java_part\encryp	PerforcePasswordEncryptor.java	Java encrypt/decrypt source code from Jenkins source code
	run.java	Java main function
src\python_part	p4_ticket_auth_jenkins.py	Py main code
	setup.py	py2exe configuration file

The source code was wrote by Java & **Py 2.7(the Jenkins API only support py2.x)**. The main code is Py. Java code is for encrypt/decrypt function derived from Jenkins itself.

How to build the code

1. Build the Java part (src\java_part\encryp) into a jar (encry.jar).
2. Build the python part (src\python_part) into an exe (p4_ticket_auth_jenkins.exe) by py2exe.

How to run the build

p4_ticket_auth_jenkins.exe <JENKINS_URL> <JENKINS_USER> <JENKINS_PASSWORD> <JOBNAME>

e.g.

p4_ticket_auth_jenkins.exe http://beacon-test-ci.eng.citrite.net:8080 job_cfg citrix Src-Receiver_X1-RfHTML5Chrome-Rainbow

Tool workflow

This is the Jenkins jobs work flow before integrated with this tool



After integrated with this tool, we added a job “P4TicketAuth” for the tool.



Job “P4TicketAuth” should trigger SRC after building passed.

And this is the job “P4TicketAuth” work flow:

1. Copy “p4_ticket_auth_jenkins.exe” & “encry.jar” from master node to slave node.
2. Execute “p4_ticket_auth_jenkins.exe”, which will get ticket and insert it into job SRC.
3. Trigger build SRC.

For p4_ticket_auth_jenkins.exe, let’s explain it by an example:

The following functions will happen if we use the tool to get p4 ticket for job “Src-Receiver_X1-RfHTML5Chrome-Rainbow”:

1. Get P4 account credential from job “P4TicketAuthCredential-Src-Receiver_X1-RfHTML5Chrome-Rainbow”.
2. Decrypt the P4 password.
3. Get the P4 ticket by P4 command.
4. Encrypt the P4 ticket and insert into the configuration file of job “Src-Receiver_X1-RfHTML5Chrome-Rainbow” by Jenkins python API.

So we need to add 2 jobs “P4TicketAuth-Src-Receiver_X1-RfHTML5Chrome-Rainbow” & “P4TicketAuthCredential-Src-Receiver_X1-RfHTML5Chrome-Rainbow” for the ticket auth of job “Src-Receiver_X1-RfHTML5Chrome-Rainbow”.