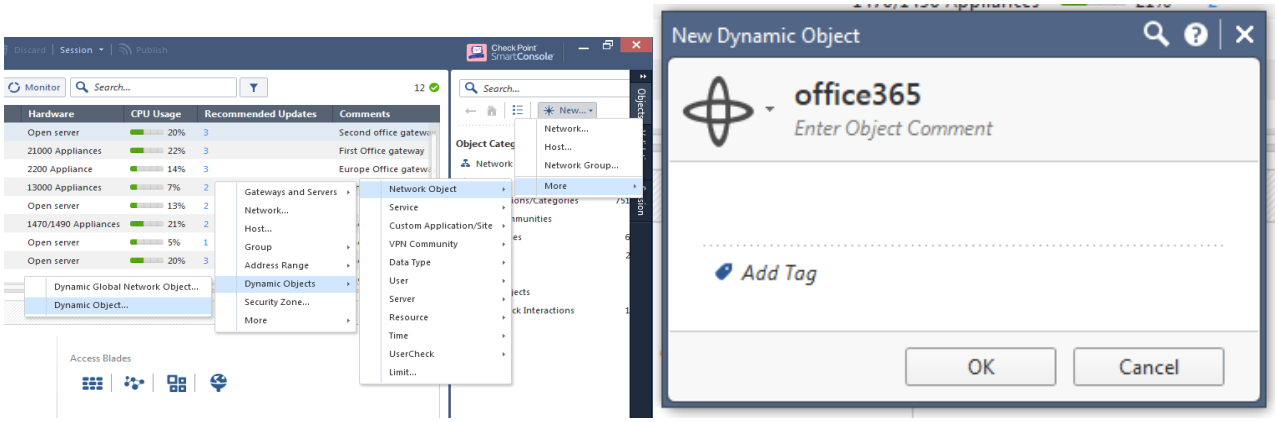
Dynamic objects custom script installation for office 365

Brief: Since Office365 public IPs are always changing we have to create a dynamic object that keeps up with the new IPs. You can accomplish this one of three ways 1) Upgrade to r80.20 where office365 are natively supported 2) add a hotfix in r80.10 3) add a custom script that creates a dynamic object and updates the object through the Microsoft REST API. This document covers the third option.

Dynamic objects are resolved locally on the gateway. Therefore this script will need to be added to each gateway where you would like to use the dynamic object. If there is no IP ranges in the dynamic object or if it not created the traffic will be dropped.

In Smart Console

Create a dynamic object in Smart Console. This is the object that will be used in the policy. The object is created under New > Network Objects > Dynamic Objects > Dynamic Object…
Note: The object must be named **office365** this is case sensitive.

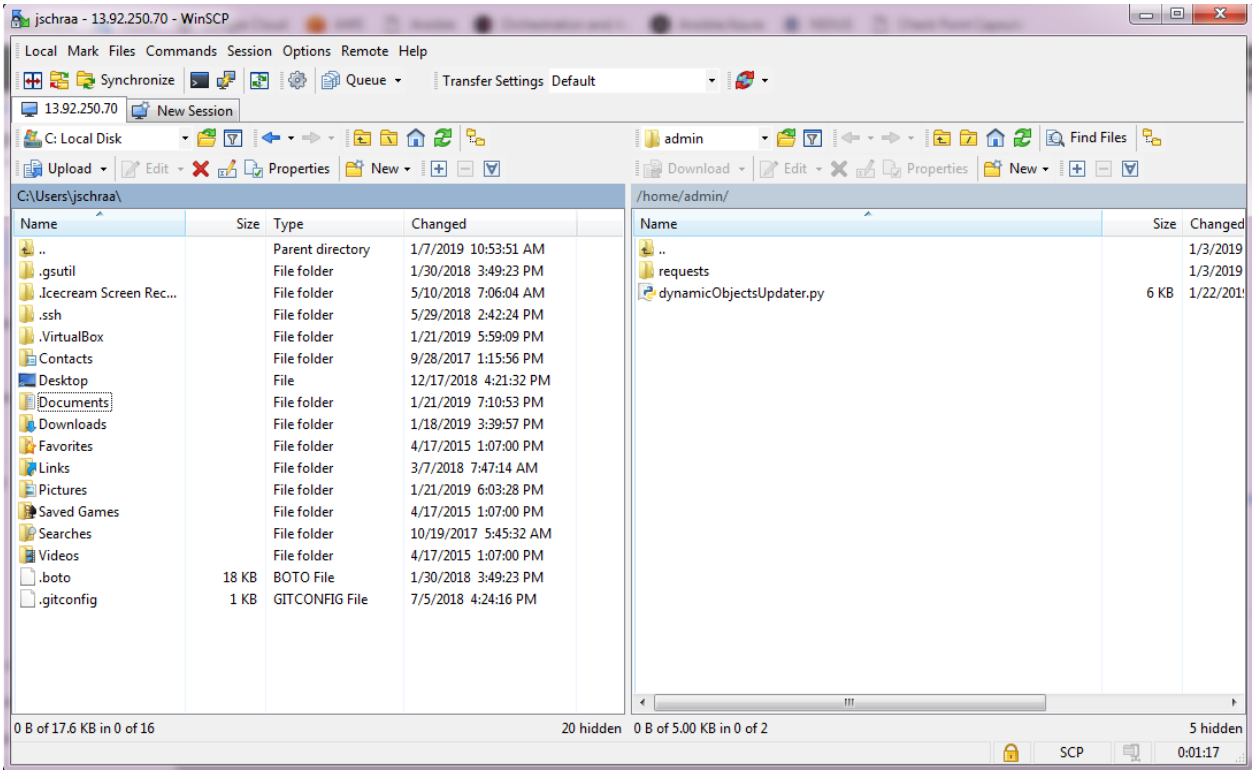


Below is an example of how you can apply the object in the policy

Name	Source	Destination	Services & Applications	Action	Track
office365	Any	office365	http https	Drop	Log

In WinSCP

Connect to the gateway using WinSCP. Place the dynamicObjectsUpdater.py script into a directory. In this guide we will put the script into the **/home/admin/** directory.



In PuTTY (SSH)

Connect to the gateway using PuTTY (or any SSH client) and run the script for the first time. This will generate the office365 dynamic object, and create a log file in the same directory. The command to run the script is the location of python and the location of the dynamicObjectsUpdater.py file. In our case the command would be:
/opt/CPsuite-R80/fw1/Python/bin/python2 /home/admin/dynamicObjectsUpdater.py

Refresh the WinSCP page and you should see a log file called **dynamicObjects.log**
Open the file and check that logs are generated.

In with Web GUI

Login to the WebGUI and create a cronjob to run the script daily.
Under Job Scheduler create a new job.
Job Name: **dynamicObjectUpdater**
Command to run (this will be the same command that we ran in putty):
/opt/CPsuite-R80/fw1/Python/bin/python2 /home/admin/dynamicObjectsUpdater.py
Schedule (we can schedule this job to run at any time but it not essential to have it run during hours): **After hours**