FAQ on DevCloud Connection Issues

1. I'm not able to connect to Intel AI DevCloud. How do I solve the problem?

   Connectivity issues could be due to multiple factors. Given below are some of the suggestions that could be checked by yourselves before raising a thread in forum:

   i. Please check if you are are behind a firewall or using a closed internet connection or proxy. If so, kindly try connecting once from an open internet connection to check if the issue has something to do with internet connection
   ii. Make sure that you followed the instructions to connect from the link provided with the DevCloud Welcome mail and you faced no errors in the process.
   iii. Please make sure that your access keys are still valid. DevCloud free access is for 28 days following which the access gets expired.

2. In addition to the general guidelines stated above, what are the additional things that I should check for connectivity issues in windows with putty?

   i. Make sure that the .ppk file is loaded to pageant every time you try to connect.
   ii. Make sure that the plink setting is properly given under "Telnet command or local proxy command" as given below: "plink guest@cluster.colfaxresearch.com -nc %host:%port". There are times when it's not able to find plink, in which case you need to spell out the complete path to plink.exe
   iii. Try connecting to DevCloud Jupyter Hub using https://jupyter.devcloud.intel.com/ to check if your DevCloud access is still valid

3. What are some of the commonly seen connection errors in putty and how do I interpret them?

   i. 'NETWORK ERROR: CANNOT ASSIGN REQUESTED ADDRESS' : Network connection parameters might be wrong

ii. ‘NETWORK ERROR: CONNECTION TIMED OUT’: Check that you have correctly entered the host name or IP address of your server machine because this error means that the connection received no response from server
iii. ‘NETWORK ERROR: CONNECTION REFUSED’: Check that you are connecting with the correct protocol (SSH, Telnet or Rlogin), and check that the port number is correct, since the error occurs when the server rejects the connection because it does not provide that service.
iv. ‘NETWORK ERROR: CONNECTION RESET BY PEER’ : Check if you are connecting through a firewall or a NAT router, because the error occurs when network connection lose track of the state of the connection between them
v. ‘NETWORK ERROR: SOFTWARE CAUSED CONNECTION ABORT’: This is a generic error produced by the Windows network code when it kills an established connection for some reason. Check if your network cable is still connected & your internet is still connected. Try reconnecting or use keepalives
vi. ‘NO SUPPORTED AUTHENTICATION METHODS AVAILABLE’: Check if your authentication key is correct
vii. ‘ACCESS DENIED’, ‘AUTHENTICATION REFUSED’: Check if you have provided a valid key.
viii. SERVER REFUSED OUR PUBLIC KEY’ OR ‘KEY REFUSED’ : Check your server configuration carefully for common errors like having the wrong permissions or ownership set on the public key or the user's home directory on the server

4. What are some of the commonly seen connection errors when using SSH in linux based machines and how do I interpret them?

i. ssh: connect to host xxx.xxx.xxx.xx port 22: Connection timed out : This error occurs when server failed to respond within the timeout period. Verify that the host IP address is correct. Verify that your network supports connectivity over the SSH port being used.
ii. ssh: connect to host xxx.xxx.xxx.xx port 22: Connection refused : The error occurs when request is being routed to the SSH host, but the host does not successfully accept the request. Verify that the host IP address is correct. Verify that your network supports connectivity over the SSH port being used.
iii. ssh: Could not resolve hostname example.com: Name or service not known : The error is almost exclusively DNS related, the root cause isn’t always a DNS issue. Verify the hostname is properly spelled. Verify that you can resolve the hostname on your client machine using the system ping command.
iv. Bad owner or permissions ssh_exchange_identification: read: Connection reset by peer: This means that, your SSH keys have the wrong permissions. Run the following commands and check if that solves your error:
chmod 600 <PATH_TO_colfax-access-key-xxxxx>
chmod 600 ~/.ssh/config

5. What are the details that I need to mention when I raise a connection issue thread in forum(https://forums.intel.com/s/topic/0TO0P00000018NNWAY/intel-ai-developer-forum)?

   Kindly provide the following while raising a connectivity issue:

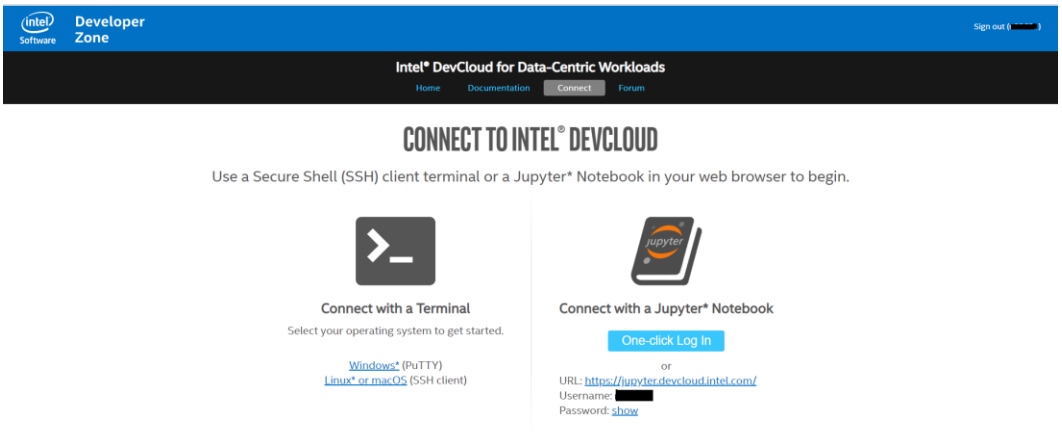
   i. Did you try connecting from an open internet connection?
   ii. Did you face any issues while following the steps detailed on the link provided in the welcome mail for connecting?
   iii. Are you trying to connect for the first time or did you lose connectivity after having successfully connected at least once?
   iv. Is your DevCloud access key still valid?
   v. If you had already connected before and you are not able to connect now, could you please try connecting after some time to check if this is a temporary network glitch?
   vi. Please provide the error screenshot and mention if you are trying to connect from windows/linux/mac.

6. What are some of the commonly seen connection issues when connecting to Jupyter hub (https://jupyter.devcloud.intel.com/) how do I fix them?

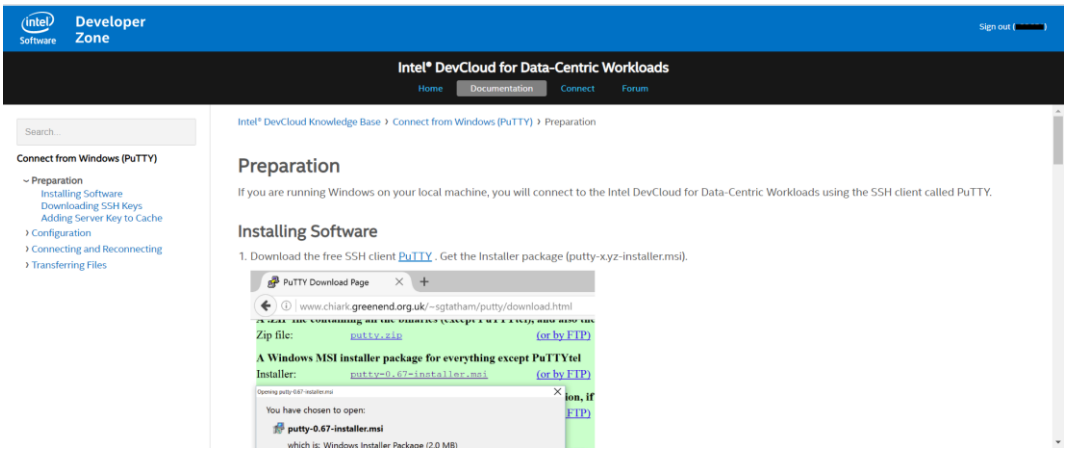
   i. Proxy Error: Try connecting using an open internet connection. If the issue still persist, the user account might have got corrupted and you might need to raise a thread in forum (https://forums.intel.com/s/topic/0TO0P00000018NNWAY/intel-ai-developer-forums) to get a new account.
   ii. Internal Server Error: Might be a temporary network glitch. Please try after sometime. If the issue still persists, please raise a new thread with details.
   iii. Jupyter notebooks disconnect automatically while running code: This can happen due to heavy memory workload or issues with code. For e.g.: loading heavy data in memory can cause this issue. Try running the code as qsub job or cross check your code for any issues.

7. How do I connect to DevCloud from my Windows machine?

   Go to the section “Connect” on the link given in the DevCloud welcome mail. You will get the below screen.



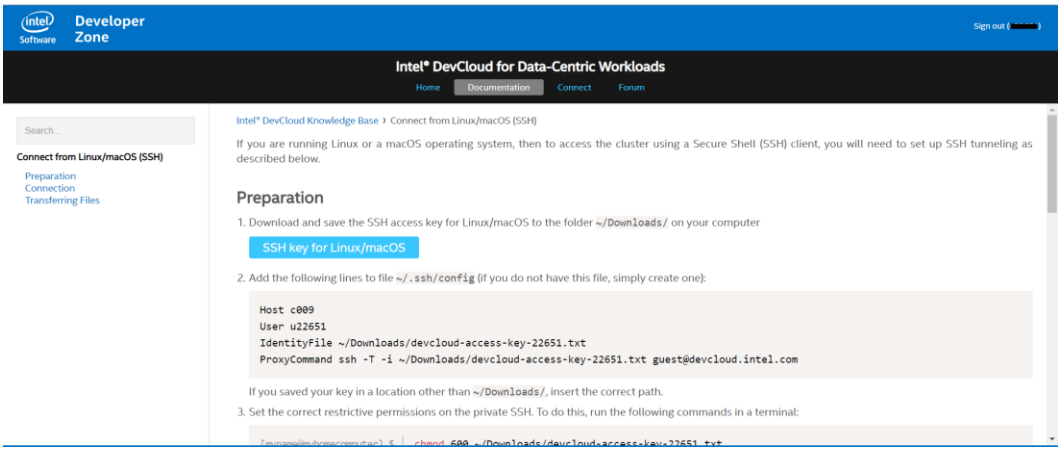
From the page appears, click on the option ‘Windows*(Putty)’ under ‘Connect with a Terminal’. You will see something similar to what is given below:



Follow the instructions given, step by step and you should be able to connect.

8. How do I connect to DevCloud from my Linux/Mac Machine?

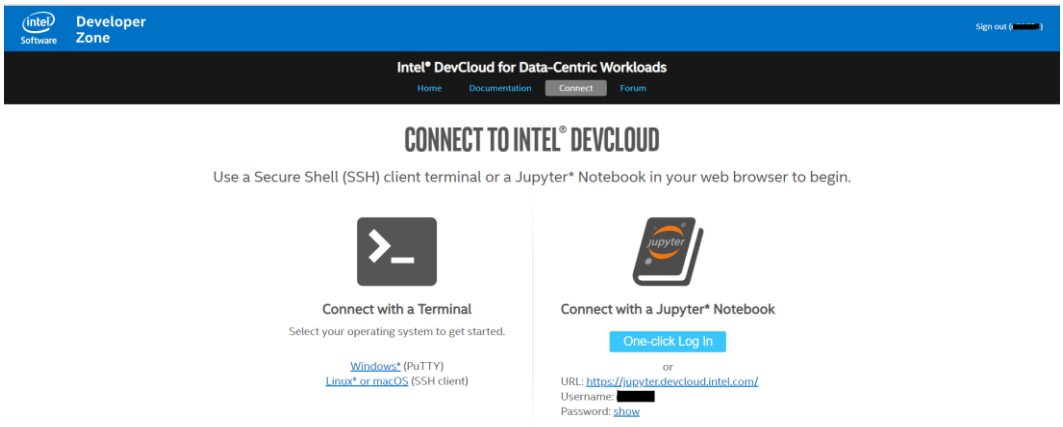
Go to the section “Connect” on the link given in the DevCloud welcome mail. From the page appears, click on the option ‘Linux* or macOS(SSH client)’ under ‘Connect with a Terminal’. You will see something similar to what is given below:



Follow the instructions given, step by step and you should be able to connect.

9. How do I connect to Jupyter Hub from my machine?

Go to the section “Connect” on the link given in the DevCloud welcome mail. You will see something similar to what is given below:



From the page appears, under “Connecting to a Jupyter* Notebook”, you will get your username and password. Click on the link ‘https:s//jupyter.devcloud.intel.com/’ and provide your username & password. Now start your server and start working.