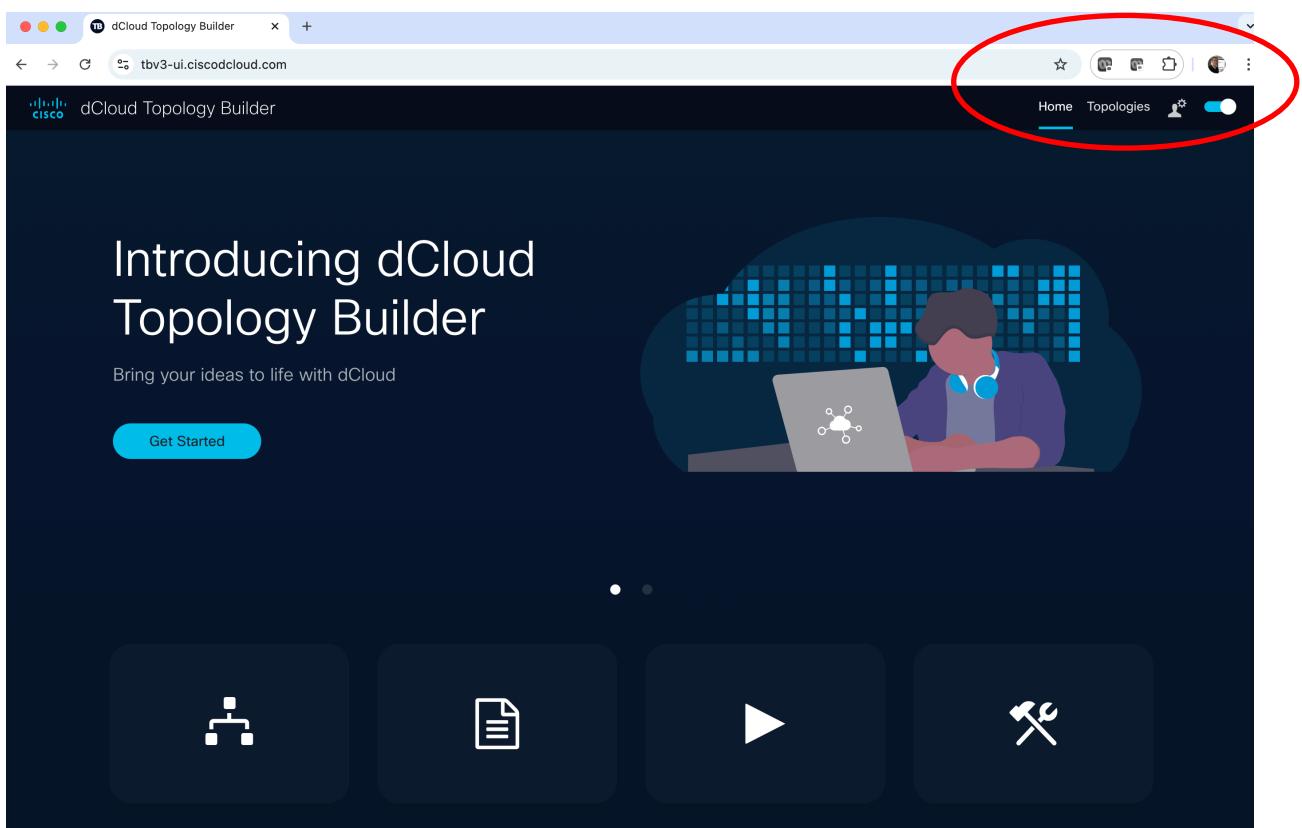


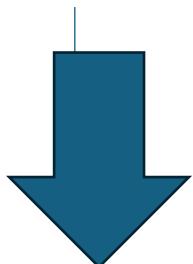
Lab Guide for BYO dCloud SRv6 Lab

Part 1 – dCloud Topology Builder Tool

1. dCloud Topology Builder:
<https://tbv3-ui.ciscodcloud.com/>
2. CEC login if prompted
3. Select “Topologies”:



4. In the My Topologies screen select “Create”



The screenshot shows the dCloud Topology Builder interface. At the top, there's a navigation bar with icons for back, forward, search, and refresh, followed by the URL 'tbv3-ui.ciscodcloud.com/topologies'. The main title is 'My Topologies'. Below it is a search bar and a 'Filters' dropdown. On the far right, there are icons for Home, Topologies, and a user profile, along with a toggle switch. In the center, there are four topology cards:

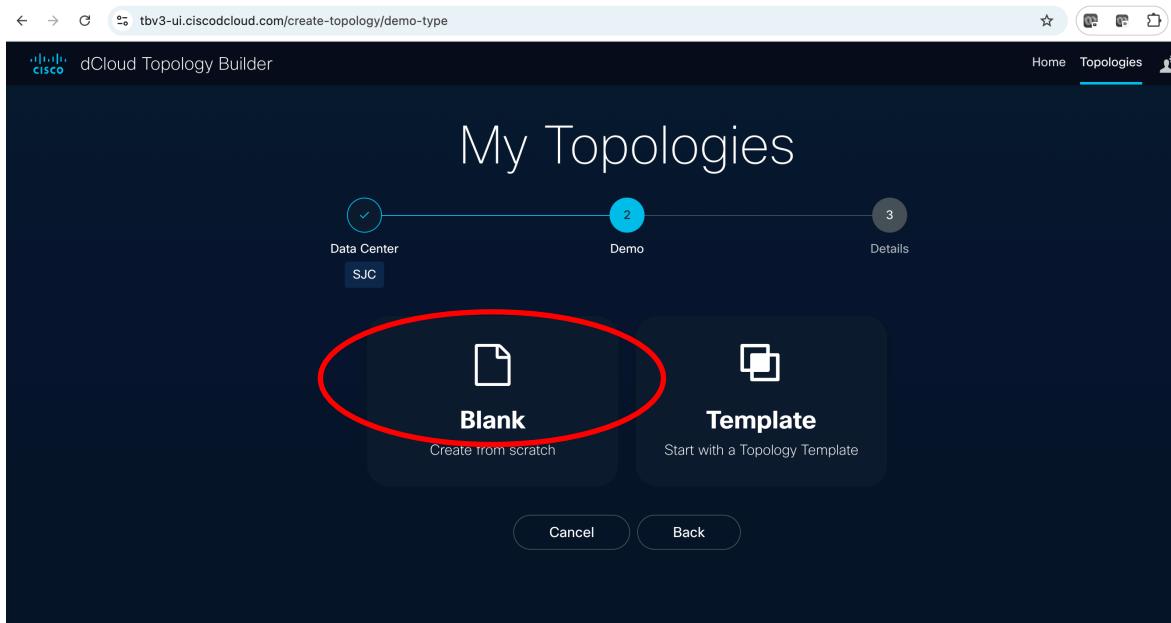
- clab-vxr-k8s**: Demo ID: 1139406, 12/05/2024 08:12:00, Owner: brmcdoug@cisco.com. Status: attempting to get k8s nested vms working. Buttons: In Sync with dCloud, RTP.
- clab-vxr-k8s**: Demo ID: 1124726, 12/04/2024 15:33:04, Owner: brmcdoug@cisco.com. Status: Rebuilt lab, jalapeno105, sonic-vs and 8k images. Buttons: In Sync with dCloud, RTP.
- ASP - SONiC SRv6**: 11/20/2024 14:39:30, Owner: robermur@cisco.com. Status: Lab for showcasing the use of SRv6 load balancing techniques in a SONiC DC Fabric. Buttons: Push to Custom Content, RTP.
- srv6-labs-large**: Demo ID: 1131816, 11/17/2024 10:14:04, Owner: brmcdoug@cisco.com. Status: jalapeno103, srv6-ai-backend. Buttons: In Sync with dCloud, RTP.

5. Then select a Data Center to host your topology (US East or West)

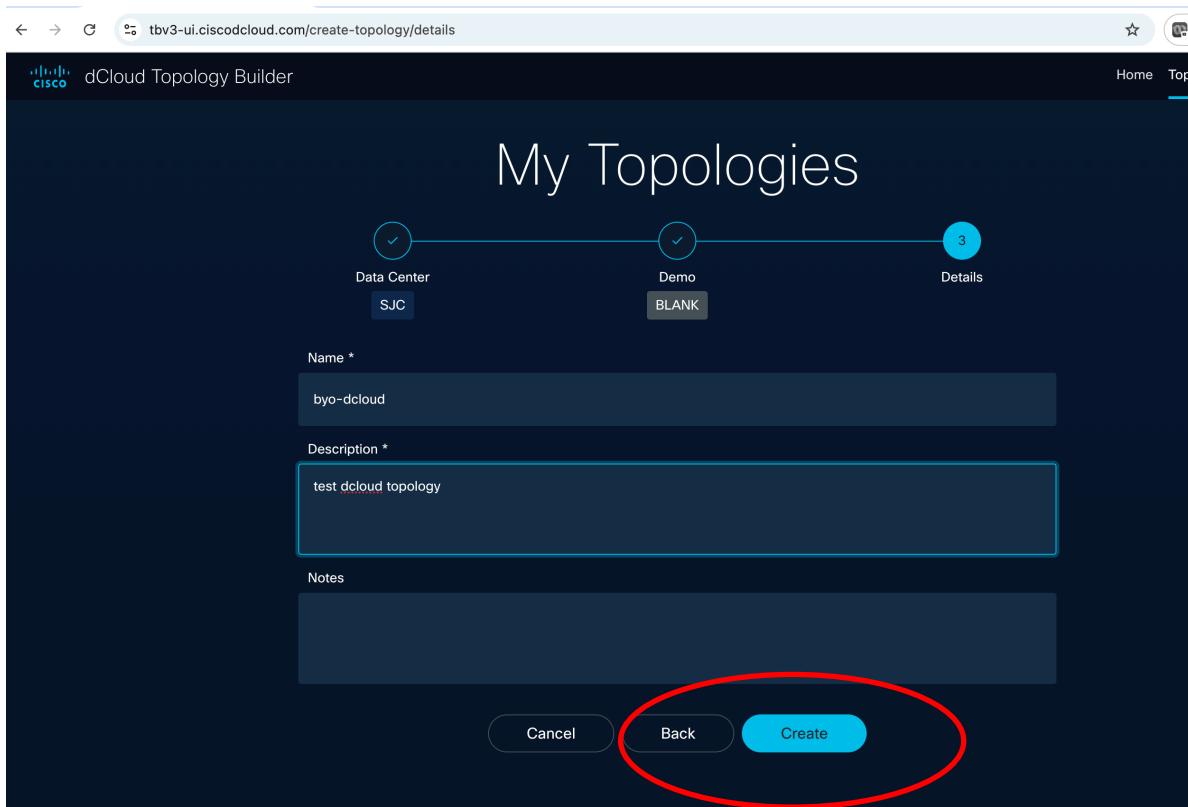
The screenshot shows the 'Create Topology' wizard at step 1: Data Center. The title is 'My Topologies'. Above the data centers are three numbered circles: 1. Data Center, 2. Demo, and 3. Details. The data centers are arranged in two rows:

Data Center	Demo	Details
ANZ Sydney, Australia		
APJ Singapore		
EMEA London, United Kingdom		
US East Raleigh, North Carolina, USA		
US West San Jose, California, USA		

6. We'll create a topology from scratch. Select Blank/Create from scratch



7. Give your topology a name, description, and click “create”



8. We're going to build a very simple topology with one Big VM. Select “Virtual Machines”:

The screenshot shows the dCloud Topology Builder interface. The left sidebar has a red circle around the "Virtual Machines" option under the "General" category. The main panel is titled "General" and contains fields for "Name" (set to "byo-dcloud") and "Description" (set to "test dcloud topology"). A "Save" button is at the bottom right.

9. Select “New” to construct a new VM

The screenshot shows the dCloud Topology Builder interface. The left sidebar has a red circle around the "Virtual Machines" option under the "General" category. The main panel is titled "Virtual Machines" and displays the message "No Virtual Machines". A prominent blue "New" button is located at the top right of the main panel, with a red circle around it.

10. In the Add Virtual Machine screen do a search for “***ubuntu-22-04-server-80gb-preconfig***” (you can also search for just “ubuntu” to see other options

The screenshot shows the 'Add Virtual Machine' screen in the Cisco Cloud UI. On the left, a sidebar lists various configuration categories like General, Networks, Virtual Machines (selected), Hardware, etc. The main area displays a table of VM templates. A search bar at the top right contains the query "ubuntu-22-04-server-80gb-preconfig". A red oval highlights this search bar. One template row is visible, showing the name "ubuntu-22-04-server-80gb-preconfig", a description of IP 198.18.133.100 and login details, and a "Misc" tag.

11. Select the Ubuntu 22 server VM template that comes up in search, then in the configure network screen select “Default Network” from the dropdown. Then click Add:

The screenshot shows the 'Configure Network' screen for the selected VM template. The sidebar remains the same. The main area shows a table with columns for NIC Name, Network, and IP address. For the first row (Network adapter 0), the 'Network' dropdown is set to "Default Network", which is highlighted with a red oval. The IP address field shows "198.18.133.100" and has a checked checkbox next to it. A large red oval highlights the "Add" button in the top right corner.

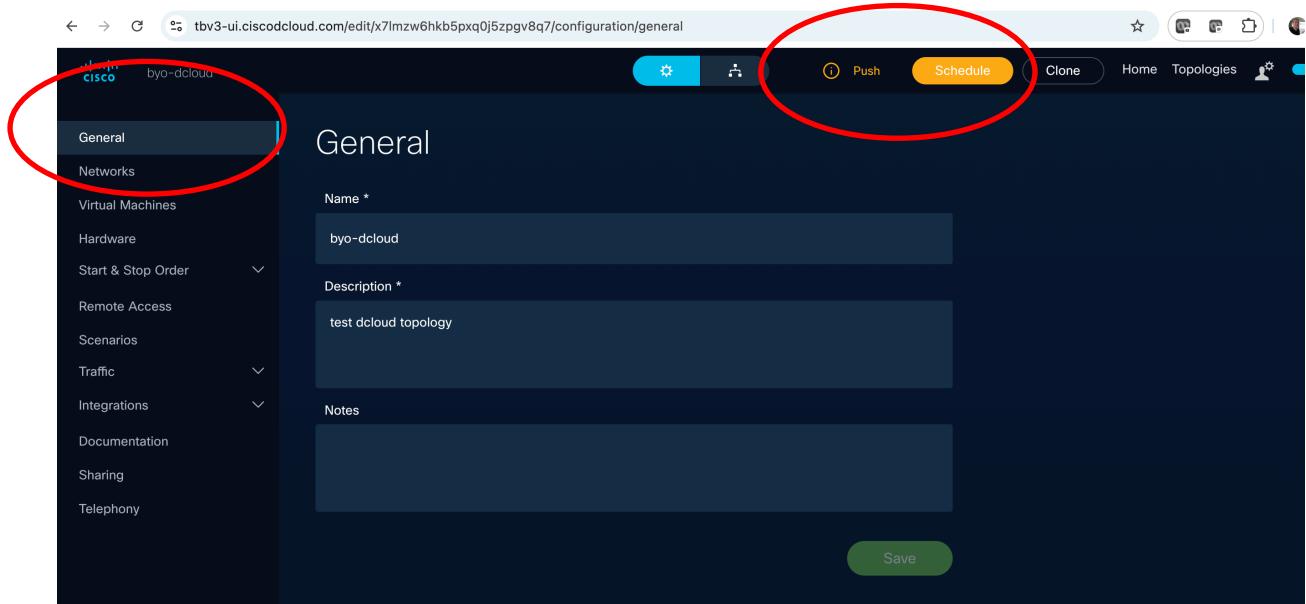
12. Your Virtual machine has been added. Now we want to edit it to increase memory and CPUs. Hover your mouse/trackpad to the right of the screen as shown...select the pencil thing to edit the VM parameters:

The screenshot shows the 'Virtual Machines' section of the dCloud Topology Builder. On the left is a sidebar with various configuration tabs: General, Networks, Virtual Machines (selected), Hardware, Start & Stop Order, Remote Access, Scenarios, Traffic, Integrations, Documentation, Sharing, and Telephony. The main area displays a table of virtual machines. One row is selected, showing 'ubuntu-22-04-server-80gb-preconfig' with 8GB Memory, 2 CPUs, and 1 NIC. To the right of the table is a blue 'New' button. At the bottom right of the table row, there is a red circle highlighting a pencil icon used for editing.

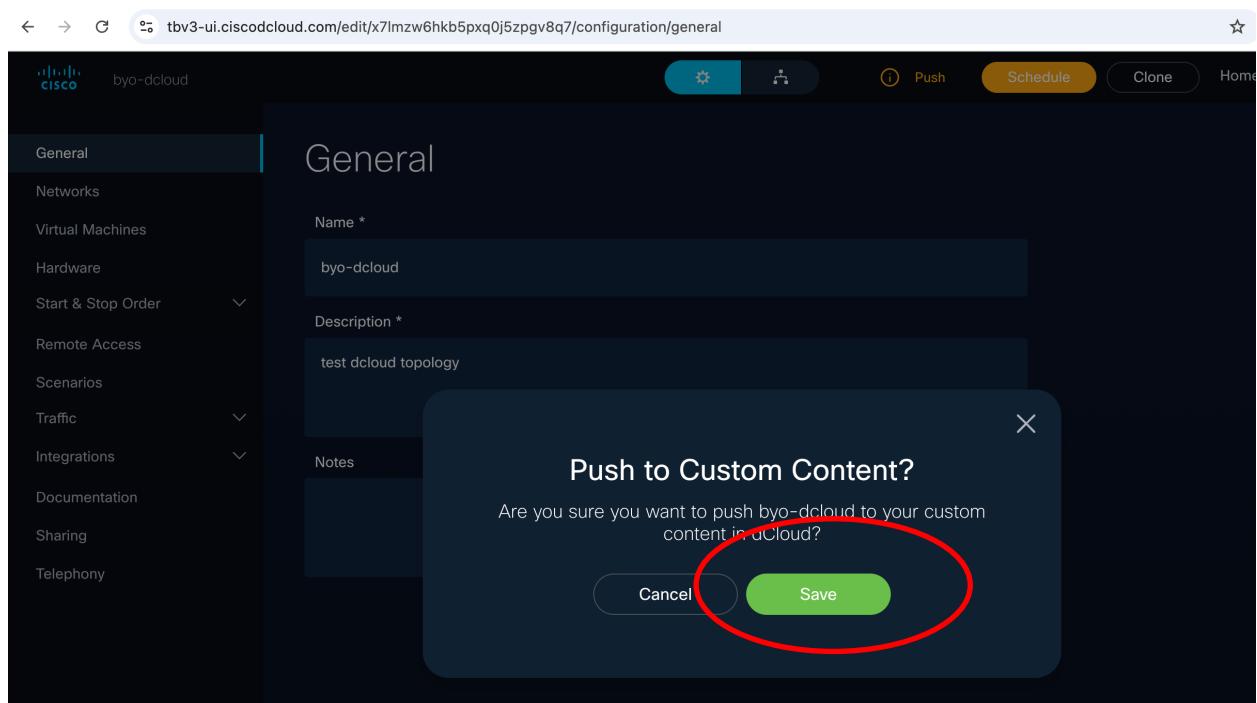
13. Change CPUs to 16 and Memory to 32. Note other options on this screen such as Nested Hypervisor (enable/disable) and Networking, etc. After editing CPU/Memory click “Update”

The screenshot shows the 'Edit Virtual Machine' dialog. The left sidebar is identical to the previous screenshot. The main area is titled 'Edit Virtual Machine' and contains a form for modifying a virtual machine named 'ubuntu-22-04-server-80gb-preconfig'. The 'vCPUs' field is set to 16 and the 'Memory' field is set to 32. A red circle highlights the 'Update' button at the top right of the dialog. Another red circle highlights the 'vCPUs' and 'Memory' fields. Below the form, there is a 'Description' section with some text and a checked checkbox for 'Nested Hypervisor'. At the bottom, there is a 'Networking' section with a 'Change Icon' button.

14. Go back to the “General” screen. You should see “Push” and “Schedule” lit up in Orange. Click “Push”



15. Click Save to push the topology template to your “Custom Content” on dCloud



16. Your “topology” has now been pushed to dCloud (in this case SJC). For reference log into dCloud sjc or rtp:

<https://dcloud2-sjc.cisco.com/>

<https://dcloud2-rtp.cisco.com/>

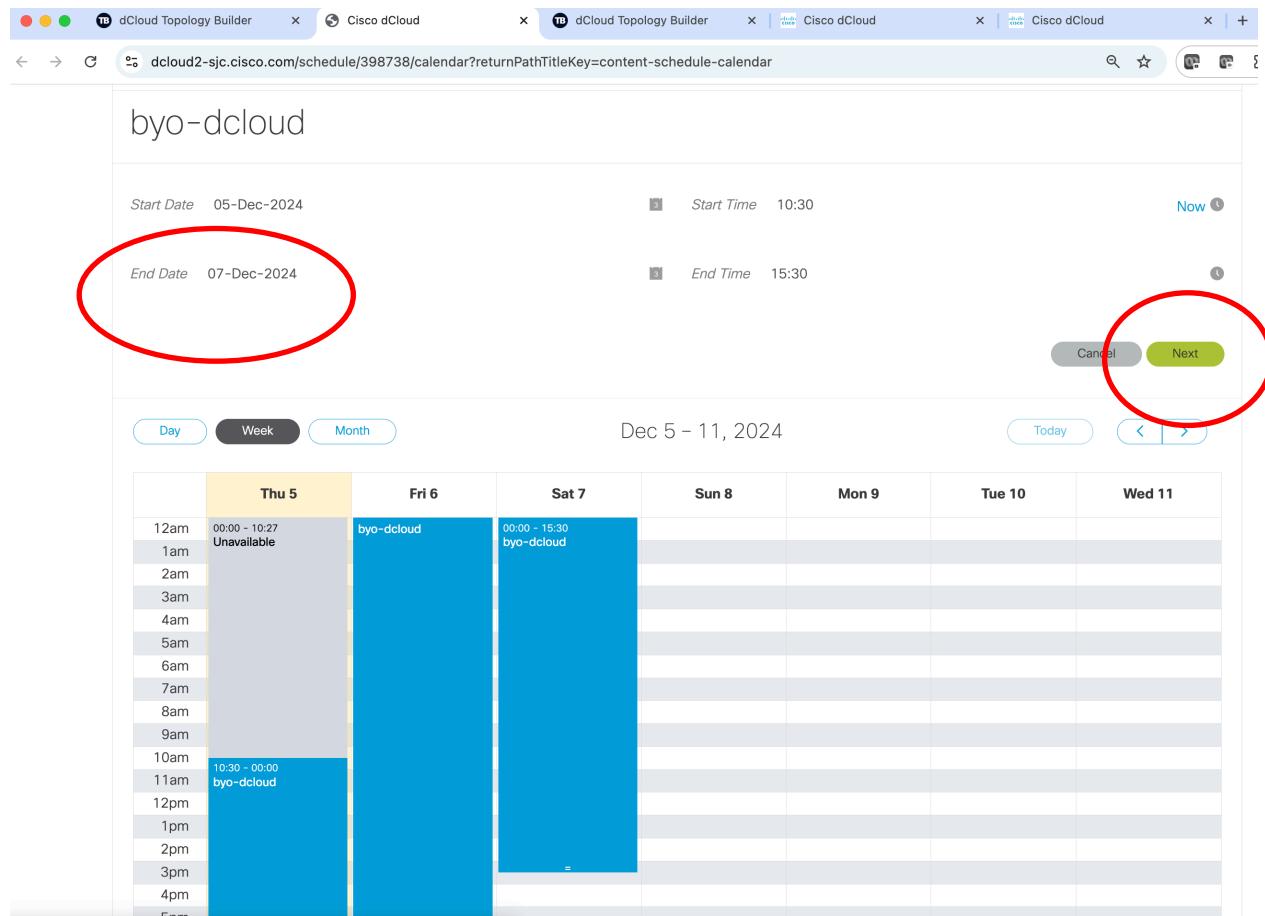
17. Select “My Hub” at the top right, then “Custom Content” in the left side menu. Here you should see your session is ready to schedule.

The screenshot shows the Cisco dCloud interface. The left sidebar has a 'Custom content' option selected, highlighted with a blue background. The main area displays a list of saved sessions under 'Custom Content'. One session, 'byo-dcloud', is shown with details: Saved: 05-Dec-2024 10:22, ID: 398738, Shared by: brmcdoug, States: Saved/Config Only/Promoted. Below the session details are 'Edit' and 'Share' buttons. To the right of the session list is a green 'Schedule' button, which is circled in red.

18. You can schedule the session from either the dCloud UI or the Topology Builder UI:

The screenshot shows the Cisco dCloud Topology Builder interface. On the left, a sidebar lists various configuration sections like General, Networks, Virtual Machines, etc. The main area shows a 'General' configuration screen for a session named 'byo-dcloud'. A 'Schedule' button is located in the top right of this screen, circled in red. A modal dialog box is overlaid on the screen, containing the message 'This content has been pushed to dCloud' and the question 'Do you want to schedule?'. A 'Schedule' button is also present in this dialog, circled in red.

19. In the dCloud scheduling window, drag the bottom of the blue section down and across to schedule your session for a couple days, or simply click/edit the “End Date” and set it for a couple days out, then click Next



20. The “Please tell us how you will use this dcloud session screen”...Let “Primary Use” default to Customer Demo/Lab/POC/POV

21. For “Account Name – Country” enter the country where your customer is based. Then type in customer name. The tool should provide a drop down of options for customer location. Select one of them:

The screenshot shows the dCloud interface with a red circle highlighting the dropdown menu for 'Account Name (English)'. The menu lists several entries, with 'MICROSOFT US MICROSOFT' being selected. The 'Primary Use' field is set to 'Customer Demo/Lab/POC/POV'.

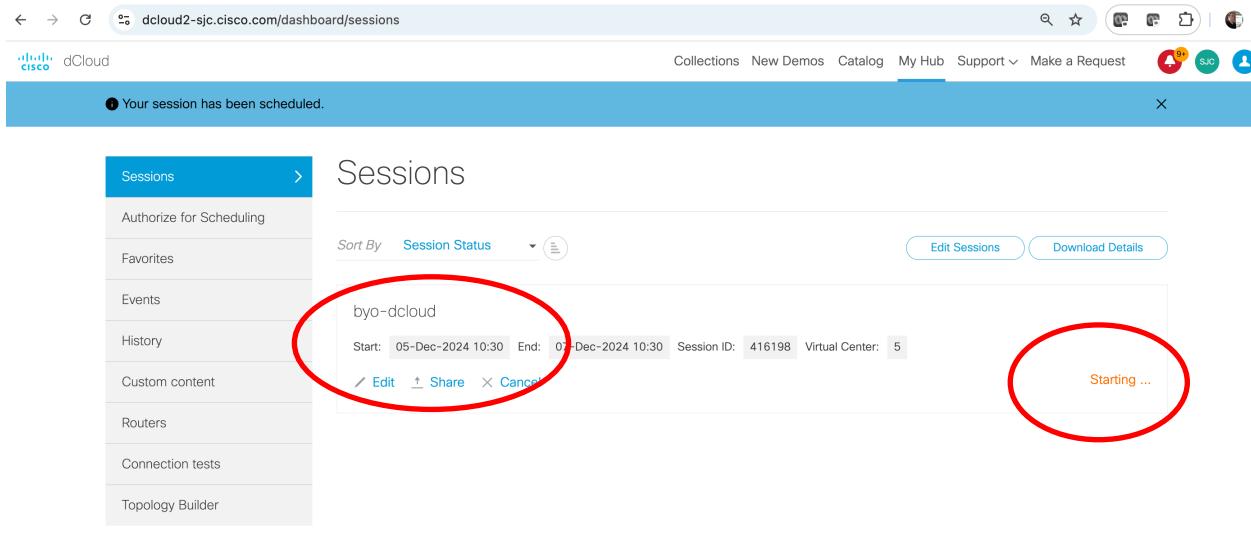
Account Name (English)	City	SAVM ID
MICROSOFT US MICROSOFT	SAMMAMISH	283347795
MICROSOFT US MICROSOFT	SAN ANTONIO	283347795
MICROSOFT US MICROSOFT	REDMOND	283347795
MICROSOFT US MICROSOFT	ATLANTA	283347795
MICROSOFT US MICROSOFT	TINLEY PARK	283347795

Show more results for "Microsoft"

22. Click Schedule:

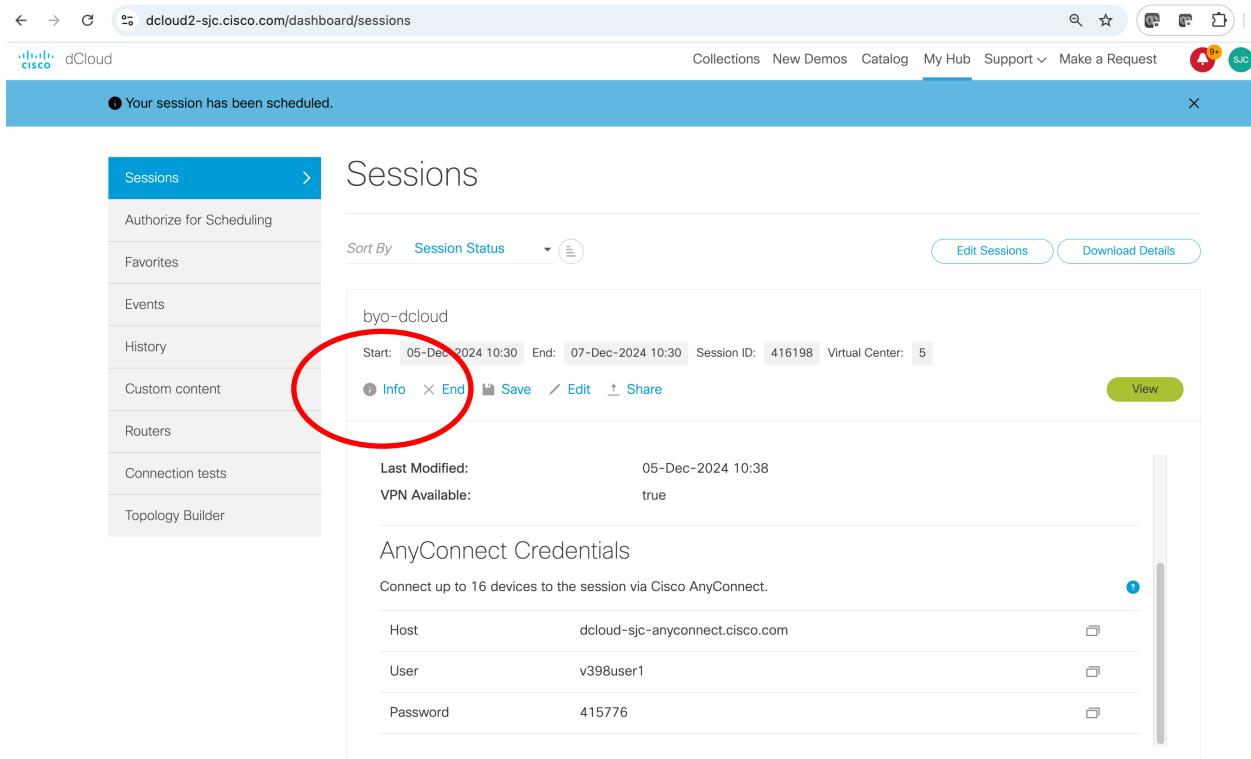
The screenshot shows the dCloud interface with the 'Schedule' button circled in red at the bottom right. The 'Account Name (English)' field is populated with 'MICROSOFT US MICROSOFT'. The 'City' and 'SAVM ID' fields are also filled in.

23. Your dCloud session will start at the time shown...we may get to wait a few minutes.
Coffee break



The screenshot shows the Cisco dCloud session dashboard. On the left, a sidebar lists options like Authorize for Scheduling, Favorites, Events, History, Custom content, Routers, Connection tests, and Topology Builder. The main area is titled 'Sessions' and shows a table with one row. The row for 'byo-dcloud' has a red oval around it. The table columns include 'Start', 'End', 'Session ID', and 'Virtual Center'. Below the table are buttons for Edit, Share, and Cancel. To the right of the table, another red oval surrounds the status 'Starting ...'.

24. Once the Session has started, we can AnyConnect VPN in. Click “Info” then scroll down to AnyConnect Credentials.



The screenshot shows the Cisco dCloud session dashboard with the 'Info' button circled in red. The session details are visible, including the start and end times, session ID, and virtual center. Below the session details, the 'AnyConnect Credentials' section is shown, which includes fields for Host, User, and Password. A red arrow points from the 'Info' button to the 'AnyConnect Credentials' section.

25. Optionally you can click the green View button, which will open a new topology view tab. Click “Info” and scroll down on the left-hand menu to see AnyConnect Credentials here as well:

The screenshot shows the Cisco dCloud Session View interface. At the top, there's a navigation bar with icons for back, forward, search, and session details. Below it is a toolbar with buttons for Info, End, Save & End, Rename, and Documentation. A red circle highlights the 'Info' button. To the right, a network topology diagram shows a 'Default Network' with the IP range 198.18.128.0 /18. A blue arrow points from the 'Info' button to this network diagram.

request

Parent Demo	byo-dcloud
Owner	brmcdoug
Session Id	416198
End Time	07-Dec-2024 10:30
Last Modified	05-Dec-2024 10:38
VPN Available	Yes
Virtual Center	5
Session Licenses	There are no session Licenses configured in this demo.

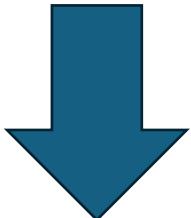
Endpoint Kits

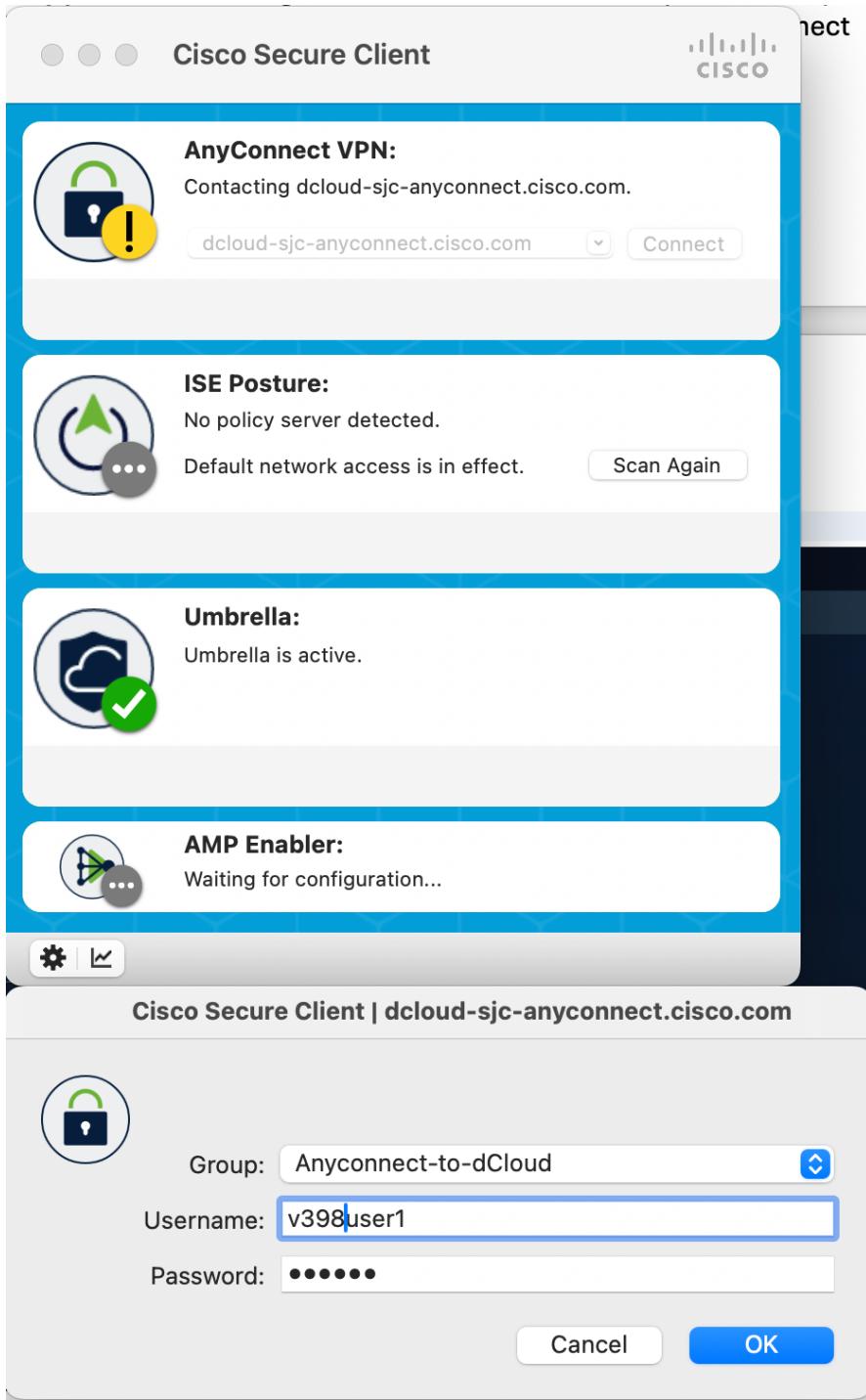
Public NAT IP / Internal NAT IP / Proxy

AnyConnect Credentials

VPN	https://dcloud-sjc-anyconnect.cisco.com
User	v398user1
Password	415776

26. Fire up your VPN:





27. Once connected to VPN we can ssh to our Ubuntu VM.

Ssh dcloud@198.18.133.100

Password = C1sco12345

Part 2 – Everything else is ssh / CLI copy-paste from the lab README on Github:

<https://github.com/brmcdoug/byo-dcloud/blob/main/README.md#install-containerlab>