Cheat Sheet for comprehensive Cisco Certified Technician (CCT) - Data Center

Cisco UCS Manager (Cisco UCSM)

Navigation and Interface

- **Web Interface**: Access via `https://<UCS-Manager-IP>`

- **CLI Commands**:

- `connect local` - Connect to local UCS Manager
- `show fabric-interconnect` - Display fabric interconnect status
- `show chassis` - Display chassis information

Basic Configuration

- **Creating a Service Profile**:

- Navigate to `Equipment > Service Profiles`
- Click `Create Service Profile`
- Configure:
- Name
- Template
- Associated Server

- **VLAN Configuration**:

- Navigate to `Fabric > VLANs`
- Click `Create VLAN`
- Configure:
- Name
- ID
- Associated VLAN Group

Troubleshooting

- **Check Server Status**:

- Navigate to `Equipment > Servers`
- Check `Operational State` and `Availability`

- **Network Issues**:

- Check `Fabric > LAN > Network Control Policies`
- Verify `Port Channel` and `VLAN` configurations

Cisco UCS Director

Navigation and Interface

- **Web Interface**: Access via `https://<UCS-Director-IP>`

- **CLI Commands**:

- `connect ucsd` - Connect to UCS Director
- `show tasks` - Display current tasks

Basic Configuration

- **Adding a Data Center**:

- Navigate to `Infrastructure > Data Centers`
- Click `Add Data Center`
- Configure:
- Name
- IP Address
- Credentials

- **Creating a Workflow**:

- Navigate to `Automation > Workflows`
- Click `Create Workflow`
- Configure:
- Name
- Steps (e.g., VM Creation, Network Configuration)

Troubleshooting

- **Task Failures**:

- Navigate to `Monitoring > Tasks`
- Check `Status` and `Logs`

- **Inventory Issues**:

- Navigate to `Infrastructure > Inventory`
- Verify `Servers`, `Storage`, and `Networks`

Cisco Nexus Switches

Navigation and Interface

- **CLI Access**:

- `ssh admin@<Nexus-Switch-IP>`

- **Basic Commands**:

- `show interface status` - Display interface status
- `show vlan` - Display VLAN information

- **VLAN Configuration**:

- `conf t`
- `vlan <VLAN-ID>`
- `name <VLAN-Name>`
- `exit`

- **Interface Configuration**:

- `conf t`
- `interface ethernet 1/1`
- `switchport mode access`
- `switchport access vlan <VLAN-ID>`
- `exit`

- **Interface Issues**:

- `show interface ethernet 1/1`
- Check `Line Protocol` and `Physical` status

- **VLAN Issues**:

- `show vlan brief`
- Verify VLAN status and membership

Cisco MDS Switches

- **CLI Access**:

- `ssh admin@<MDS-Switch-IP>`

- **Basic Commands**:

- `show interface status` - Display interface status
- `show fcns database` - Display FCNS database

- **Zone Configuration**:

- `conf t`
- `zone name <Zone-Name>`

- `member pwwn <WWN>`
- `exit`
- `zone commit`

- **VSAN Configuration**:

- `conf t`
- `vsan database`
- `vsan <VSAN-ID> name <VSAN-Name>`
- `exit`

Troubleshooting
- **Interface Issues**:

- `show interface brief`
- Check `State` and `Mode`

- **Zone Issues**:

- `show zone status`
- Verify zone membership and status

Cisco HyperFlex

Navigation and Interface
- **Web Interface**: Access via `https://<HyperFlex-Cluster-IP>`

- **CLI Commands**:

- `connect hx` - Connect to HyperFlex cluster
- `show cluster status` - Display cluster status

Basic Configuration
- **Adding Nodes**:

- Navigate to `Infrastructure > Nodes`
- Click `Add Node`
- Configure:
- IP Address
- Credentials

- **Storage Configuration**:

- Navigate to `Storage > Datastores`
- Click `Create Datastore`
- Configure:

- Name
- Size
- Associated Nodes

Troubleshooting
- **Cluster Issues**:

- Navigate to `Monitoring > Cluster`
- Check `Health` and `Performance`

- **Storage Issues**:

- Navigate to `Storage > Datastores`
- Verify `Status` and `Capacity`

Cisco ACI (Application Centric Infrastructure)

Navigation and Interface
- **Web Interface**: Access via `https://<APIC-IP>`

- **CLI Commands**:

- `connect apic` - Connect to APIC
- `show fabric status` - Display fabric status

Basic Configuration
- **Tenant Creation**:

- Navigate to `Tenants`
- Click `Create Tenant`
- Configure:
- Name
- Description

- **EPG (Endpoint Group) Creation**:

- Navigate to `Tenant > Application Profiles > EPGs`
- Click `Create EPG`
- Configure:
- Name
- Associated VLAN

Troubleshooting
- **Fabric Issues**:

- Navigate to `Fabric > Inventory`

- Check `Status` and `Health`

- **Network Issues**:

- Navigate to `Tenants > Application Profiles > EPGs`
- Verify `Status` and `Configuration`

Cisco Intersight

Navigation and Interface
- **Web Interface**: Access via `https://www.intersight.com`

- **CLI Commands**:

- `connect intersight` - Connect to Intersight
- `show inventory` - Display inventory status

Basic Configuration
- **Adding a Device**:

- Navigate to `Inventory`
- Click `Add Device`
- Configure:
- IP Address
- Credentials

- **Policy Configuration**:

- Navigate to `Policies`
- Click `Create Policy`
- Configure:
- Name
- Type (e.g., Power, Thermal)

Troubleshooting
- **Device Issues**:

- Navigate to `Inventory`
- Check `Status` and `Health`

- **Policy Issues**:

- Navigate to `Policies`
- Verify `Status` and `Configuration`

Cisco UCS Central

Navigation and Interface

- **Web Interface**: Access via `https://<UCS-Central-IP>`

- **CLI Commands**:

• `connect ucsc` - Connect to UCS Central
• `show cluster status` - Display cluster status

Basic Configuration

- **Adding a UCS Domain**:

• Navigate to `Infrastructure > UCS Domains`
• Click `Add UCS Domain`
• Configure:
• IP Address
• Credentials

- **Policy Configuration**:

• Navigate to `Policies`
• Click `Create Policy`
• Configure:
• Name
• Type (e.g., Power, Thermal)

Troubleshooting

- **Domain Issues**:

• Navigate to `Infrastructure > UCS Domains`
• Check `Status` and `Health`

- **Policy Issues**:

• Navigate to `Policies`
• Verify `Status` and `Configuration`

Cisco DCNM (Data Center Network Manager)

Navigation and Interface

- **Web Interface**: Access via `https://<DCNM-IP>`

- **CLI Commands**:

• `connect dcnm` - Connect to DCNM

- `show fabric status` - Display fabric status

- **Adding a Switch**:

- Navigate to `Inventory`
- Click `Add Switch`
- Configure:
- IP Address
- Credentials

- **Network Configuration**:

- Navigate to `Networks`
- Click `Create Network`
- Configure:
- Name
- VLAN ID
- Associated Switches

Troubleshooting

- **Switch Issues**:

- Navigate to `Inventory`
- Check `Status` and `Health`

- **Network Issues**:

- Navigate to `Networks`
- Verify `Status` and `Configuration`

Cisco Firepower Management Center

Navigation and Interface

- **Web Interface**: Access via `https://<Firepower-IP>`

- **CLI Commands**:

- `connect fmc` - Connect to Firepower Management Center
- `show device status` - Display device status

Basic Configuration

- **Adding a Device**:

- Navigate to `Devices`
- Click `Add Device`

- Configure:
- IP Address
- Credentials

- **Policy Configuration**:

- Navigate to `Policies`
- Click `Create Policy`
- Configure:
- Name
- Type (e.g., Access Control, Intrusion Policy)

Troubleshooting
- **Device Issues**:

- Navigate to `Devices`
- Check `Status` and `Health`

- **Policy Issues**:

- Navigate to `Policies`
- Verify `Status` and `Configuration`

Cisco Tetration

Navigation and Interface
- **Web Interface**: Access via `https://<Tetration-IP>`

- **CLI Commands**:

- `connect tetration` - Connect to Tetration
- `show inventory` - Display inventory status

Basic Configuration
- **Adding a Sensor**:

- Navigate to `Inventory`
- Click `Add Sensor`
- Configure:
- IP Address
- Credentials

- **Policy Configuration**:

- Navigate to `Policies`
- Click `Create Policy`

- Configure:
- Name
- Type (e.g., Flow, Inventory)

Troubleshooting
- **Sensor Issues**:

- Navigate to `Inventory`
- Check `Status` and `Health`

- **Policy Issues**:

- Navigate to `Policies`
- Verify `Status` and `Configuration`

Cisco DNA Center

Navigation and Interface
- **Web Interface**: Access via `https://<DNA-Center-IP>`

- **CLI Commands**:

- `connect dna` - Connect to DNA Center
- `show network status` - Display network status

Basic Configuration
- **Adding a Device**:

- Navigate to `Inventory`
- Click `Add Device`
- Configure:
- IP Address
- Credentials

- **Policy Configuration**:

- Navigate to `Policies`
- Click `Create Policy`
- Configure:
- Name
- Type (e.g., Network, Security)

Troubleshooting
- **Device Issues**:

- Navigate to `Inventory`

- Check `Status` and `Health`

- **Policy Issues**:

- Navigate to `Policies`
- Verify `Status` and `Configuration`

Cisco HyperFlex Edge

Navigation and Interface
- **Web Interface**: Access via `https://<HyperFlex-Edge-IP>`

- **CLI Commands**:

- `connect hxedge` - Connect to HyperFlex Edge
- `show cluster status` - Display cluster status

Basic Configuration
- **Adding Nodes**:

- Navigate to `Infrastructure > Nodes`
- Click `Add Node`
- Configure:
- IP Address
- Credentials

- **Storage Configuration**:

- Navigate to `Storage > Datastores`
- Click `Create Datastore`
- Configure:
- Name
- Size
- Associated Nodes

Troubleshooting
- **Cluster Issues**:

- Navigate to `Monitoring > Cluster`
- Check `Health` and `Performance`

- **Storage Issues**:

- Navigate to `Storage > Datastores`
- Verify `Status` and `Capacity`

Cisco UCS Director Express for Big Data

Navigation and Interface
- **Web Interface**: Access via `https://<UCS-Director-Express-IP>`

- **CLI Commands**:

- `connect ucsd-bd` - Connect to UCS Director Express for Big Data
- `show tasks` - Display current tasks

Basic Configuration
- **Adding a Data Center**:

- Navigate to `Infrastructure > Data Centers`
- Click `Add Data Center`
- Configure:
- Name
- IP Address
- Credentials

- **Creating a Workflow**:

- Navigate to `Automation > Workflows`
- Click `Create Workflow`
- Configure:
- Name
- Steps (e.g., VM Creation, Network Configuration)

Troubleshooting
- **Task Failures**:

- Navigate to `Monitoring > Tasks`
- Check `Status` and `Logs`

- **Inventory Issues**:

- Navigate to `Infrastructure > Inventory`
- Verify `Servers`, `Storage`, and `Networks`

Cisco UCS Director Open Automation

Navigation and Interface
- **Web Interface**: Access via `https://<UCS-Director-Open-Automation-IP>`

- **CLI Commands**:

- `connect ucsd-oa` - Connect to UCS Director Open Automation
- `show tasks` - Display current tasks

- **Adding a Data Center**:

- Navigate to `Infrastructure > Data Centers`
- Click `Add Data Center`
- Configure:
- Name
- IP Address
- Credentials

- **Creating a Workflow**:

- Navigate to `Automation > Workflows`
- Click `Create Workflow`
- Configure:
- Name
- Steps (e.g., VM Creation, Network Configuration)

- **Task Failures**:

- Navigate to `Monitoring > Tasks`
- Check `Status` and `Logs`

- **Inventory Issues**:

- Navigate to `Infrastructure > Inventory`
- Verify `Servers`, `Storage`, and `Networks`

Cisco UCS Director Orchestrator

- **Web Interface**: Access via `https://<UCS-Director-Orchestrator-IP>`

- **CLI Commands**:

- `connect ucsd-orch` - Connect to UCS Director Orchestrator
- `show tasks` - Display current tasks

- **Adding a Data Center**:

- Navigate to `Infrastructure > Data Centers`

- Click `Add Data Center`
- Configure:
- Name
- IP Address
- Credentials

- **Creating a Workflow**:

- Navigate to `Automation > Workflows`
- Click `Create Workflow`
- Configure:
- Name
- Steps (e.g., VM Creation, Network Configuration)

Troubleshooting
- **Task Failures**:

- Navigate to `Monitoring > Tasks`
- Check `Status` and `Logs`

- **Inventory Issues**:

- Navigate to `Infrastructure > Inventory`
- Verify `Servers`, `Storage`, and `Networks`

Cisco UCS Director Reporting

Navigation and Interface
- **Web Interface**: Access via `https://<UCS-Director-Reporting-IP>`

- **CLI Commands**:

- `connect ucsd-report` - Connect to UCS Director Reporting
- `show tasks` - Display current tasks

Basic Configuration
- **Adding a Data Center**:

- Navigate to `Infrastructure > Data Centers`
- Click `Add Data Center`
- Configure:
- Name
- IP Address
- Credentials

- **Creating a Report**:

- Navigate to `Reporting > Reports`
- Click `Create Report`
- Configure:
- Name
- Type (e.g., Inventory, Performance)

Troubleshooting

- **Task Failures**:

- Navigate to `Monitoring > Tasks`
- Check `Status` and `Logs`

- **Inventory Issues**:

- Navigate to `Infrastructure > Inventory`
- Verify `Servers`, `Storage`, and `Networks`

Cisco UCS Director Analytics

Navigation and Interface

- **Web Interface**: Access via `https://<UCS-Director-Analytics-IP>`

- **CLI Commands**:

- `connect ucsd-analytics` - Connect to UCS Director Analytics
- `show tasks` - Display current tasks

Basic Configuration

- **Adding a Data Center**:

- Navigate to `Infrastructure > Data Centers`
- Click `Add Data Center`
- Configure:

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