Anti-Submarine Warfare (ASW)

Virtual Operator Trainer (VOT)

Standard Operating Procedures (SOP)

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Change Page

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# Introduction

This document defines the Standard Operating Procedure (SOP) for the Anti-Submarine (ASW) Virtual Operator Trainer (VOT) System. Included in this document are the Power On/Off Instructions, Instructor User Guide (IUG), Best Practices, and Troubleshooting Guide.

# Power On/Off Instructions

## Power On From Cold-Iron State to Stand-by State

**Cold-Iron State** means that no power is being supplied from the UPS power supply units to the server rack components. This state is to be used during extended periods of non-use (e.g., greater than one month). This is also the state the server rack will be in following a loss of power casualty.

**Stand-By State** means that power is being supplied from the UPS power supply units to the server rack components and the switches and core node are powered on and running. The compute nodes and workstations are powered off. This state is to be used when the VOT labs are not in use (e.g., nights, weekends, etc.).

### Initial Conditions

* Power from the building is being supplied to UPS-1/2/3

### Step-By-Step Instructions

#### POWER ON UPS

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | Open the front locked server rack door |  |
|  | Locate UPS-1/2/3 at the bottom of the server rack |  |
|  | Press the power button on the front display panel above the UPS display |  |
|  | Select “Turn On Immediately” |  |
|  | Repeat this for the remaining UPS units |  |

Once the UPS are powered on, the VME Chassis, Edge Switch, VTTE Switch, and Core Switch will automatically power on.

Wait approximately **fifteen minutes** for switches to complete their boot process.

#### POWER ON Maintenance / CORE

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | Slide out the laptop drawer, located at U21 of the server rack. |  |
|  | Open the laptop and press the power button located at the upper right corner of the laptop keyboard. Observe the power on sequence, which should pause at the decryption credentials entry prompt. Use the maintenance decryption credentials supplied in Appendix A. |  |
|  | Observe the initialization sequence resumes, and the login screen appears. |  |
|  | Login using the maintenance user / password credentials provided in Appendix A. |  |
|  | Observe the desktop environment appears, and the Firefox web browser launches. The core-01 Super Micro page will appear. The credentials will automatically populate, do not change or update the credentials when prompted! Press the Login Button.  Note: If the page does not appear launch Firefox, by moving the cursor to the Activities icon in the upper left corner of the desktop, and then select the Firefox icon. |  |
|  | Observe the Super Micro page appears. Select the Power On button located below the Remote Console Preview frame. A popup window should appear, asking to confirm. |  |
|  | When the Console Preview image appears (approximately 2 minutes), select the image. |  |
|  | A popup window will appear suggesting upgrading to Chrome, select Close. |  |
|  | Observe the core power on sequence which should pause at the decryption credentials entry. Use the core-01 decryption credentials provide in Appendix A. |  |
|  | Observe the initialization sequence resumes, and the core-01 login screen appears. |  |
|  | Power off maintenance laptop by selecting the Power drop down in the upper right corner, and then selecting the power icon in the lower right corner of the drop down. Select power off. |  |
|  | Close the laptop lid. Carefully slide the laptop drawer back into the server rack, ensuring there is no impingement from any of the laptop cables. |  |

Once the core node has completed its boot process, the VOT system will be in a Stand-By State.

## Power On From Stand-By State To Operational State

**Stand-By State** means that power is being supplied from the UPS power supply units to the server rack components and the switches and core node are powered on and running. The compute nodes and workstations are powered off. This state is to be used when the VOT labs are not in use (e.g., nights, weekends, etc.).

**Operational State** means that the compute nodes and workstations are powered on, and a lab can be deployed.

### Initial Conditions

* Power from the building is being supplied to UPS-1/2/3
* Edge Switch, Core Switch, and VTTE Switch are powered on
* Core Node is powered on, and the fifteen-minute boot cycle has elapsed

### Step-By-Step Instructions

#### POWER ON COMPUTE NODES

***NOTE: DO NOT POWER ON COMPUTE NODES OR WORKSTATIONS UNTIL CORE HAS FINISHED ITS BOOT PROCESS AND THE FULL FIFTEEN MINUTES HAS ELAPSED.***

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | Open the front locked server rack door |  |
|  | Locate compute nodes 1-6. 2U SuperMicro labeled “compute-0x” on the front panel |  |
|  | Press the red power button once to turn on the compute node |  |
|  | Repeat this step for the remaining compute nodes |  |

Wait approximately **fifteen minutes** for compute nodes to complete their boot process, starting from the time of pressing the power button for each one.

***NOTE: DO NOT LAUNCH A VOT LAB UNTIL COMPUTE NODES HAVE COMPLETED THEIR BOOT PROCESS AND THE FULL FIFTEEN MINUTES HAS ELAPSED FOR EACH NODE***

#### POWER ON WORKSTATIONS

***NOTE: DO NOT POWER ON COMPUTE NODES OR WORKSTATIONS UNTIL CORE HAS FINISHED ITS BOOT PROCESS AND THE FULL FIFTEEN MINUTES HAS ELAPSED.***

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | Locate Intel NUC computer for each workstation.   * Workstation-01 – Workstation-06   + Behind monitors on pole arm * Workstation-07   + Underside of DDS drafting table * Workstation-08   + Instructor Podium |  |
|  | Press the power button once to turn on Intel NUC computer |  |

Wait approximately **five minutes** for workstation to complete boot process, starting from the time of pressing the power button for each one.

Workstation will show a login screen once boot process has completed.

#### LOGIN TO WORKSTATIONS

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | For student workstations, workstation-01 – workstation-07, login to the following:  Username: ASWVOT Student  Password: <see password document> |  |
|  | For instructor workstation, workstation-08, login to the following:  Username: ASWVOT Instructor  Password: <see password document> |  |

Once the workstations have been logged into, a lab may be deployed. Refer to the Instructor User Guide (IUG) section for instructions on deploying a VOT lab.

The curriculum is accessible for Instructors and Students after logging in. Open the files program from the favorites bar on the desktop and then click on the “curriculum” shortcut in the left pane.

## Power Off From Operational State to Stand-By State

**Stand-By State** means that power is being supplied from the UPS power supply units to the server rack components and the switches and core node are powered on and running. The compute nodes and workstations are powered off. This state is to be used when the VOT labs are not in use (e.g., nights, weekends, etc.).

**Operational State** means that the compute nodes and workstations are powered on, and a lab can be deployed.

### Initial Conditions

* Power from the building is being supplied to UPS-1/2/3
* Edge Switch, Core Switch, and VTTE Switch are powered on
* Core Node is powered on, and the fifteen-minute boot cycle has elapsed
* Compute nodes are powered on, and the fifteen-minute boot cycle has elapsed
* Workstations are powered on

### Step-By-Step Instructions

#### Power Down Workstations

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | Click on power menu at the top right section of the desktop |  |
|  | Select the power option |  |
|  | Select Power Off |  |

***NOTE: THE WORKSTATIONS NEED TO BE POWERED DOWN AT THE END OF EVERY SESSION OR BEFORE EVERY USE EVERY 24 HOURS. THE SYSTEM LEASE EXPIRES EVERY 24 HOURS AND THE WORKSTATION WILL GO INTO A ZOMBIE STATE IF NOT POWER CYCLED.***

#### POWER DOWN COMPUTE NODES

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | Open the front locked server rack door |  |
|  | Locate compute nodes 1-6. 2U SuperMicro labeled “compute-0x” on the front panel |  |
|  | Press the red power button once to turn off the compute node. This will begin a graceful shutdown of the compute node. Typically, this takes 10-30 seconds. At the end of the graceful shutdown, the compute node fans will turn off and the front hard drive lights will no longer be illuminated. |  |
|  | If 3 minutes elapse and the front hard drive lights do not power off, perform a hard shutdown by pressing and holding the red power button for 10 seconds until the compute node powers off and the front hard drive lights are no longer illuminated. |  |

After the compute nodes and workstations are powered off, the system will be in a **Stand-By State**.

The instructor should place the system in a **Stand-By State** when the lab is not being used and at the end of every day.

## Power Off From Stand-By State to Cold-Iron State

**Cold-Iron State** means that no power is being supplied from the UPS power supply units to the server rack components. This state is to be used during extended periods of non-use (e.g., greater than one month). This is also the state the server rack will be in following a loss of power casualty.

**Stand-By State** means that power is being supplied from the UPS power supply units to the server rack components and the switches and core node are powered on and running. The compute nodes and workstations are powered off. This state is to be used when the VOT labs are not in use (e.g., nights, weekends, etc.).

### Initial Conditions

* Power from the building is being supplied to UPS-1/2/3
* Edge Switch, Core Switch, and VTTE Switch are powered on
* Core Node is powered on, and the fifteen-minute boot cycle has elapsed

### Step-By-Step Instructions

***NOTE: DO NOT PLACE THE VOT SYSTEM IN A COLD-IRON STATE UNLESS THE SYSTEM WILL BE ENTERING AN EXTENDED PERIOD OF NON-USE OR THERE IS WARNING OF A CRITICAL POWER FAILURE TO THE BUILDING OR A PLANNED POWER OUTAGE.***

#### POWER DOWN CORE NODE

***NOTE: DO NOT POWER DOWN THE CORE NODE WHILE THE COMPUTE NODES OR WORKSTATIONS ARE POWERED ON.***

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | Open the front locked server rack door |  |
|  | Locate the Core Node. 1U SuperMicro labeled “core” on the front panel. |  |
|  | Press the red power button once to turn off the core node. This will begin a graceful shutdown of the core node. Typically, this takes 10-30 seconds. At the end of the graceful shutdown, the core node fans will turn off and the front hard drive lights will no longer be illuminated. |  |
|  | If 3 minutes elapse and the front hard drive lights do not power off, perform a hard shutdown by pressing and holding the red power button for 10 seconds until the core node powers off and the front hard drive lights are no longer illuminated. |  |

#### POWER DOWN UPS

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | Open the front locked server rack door |  |
|  | Locate UPS-1/2/3 at the bottom of the server rack |  |
|  | Press the power button on the front display panel above the LCD display |  |
|  | Select “Turn Off Immediately” |  |
|  | Repeat this step for the remaining UPS power supply units |  |

This will cut power to the switches and VME Chassis. The VOT system will now be in a **Cold-Iron State**.

# Instructor User Guide (IUG)

## Deploying VOT Lab

Prior to deploying a VOT Lab, the VOT System will need to be in an **Operational State**. Refer to power on/off instructions to ensure that the VOT System is in an **Operational State** before proceeding to deploying a VOT Lab.

The VOT System AMES will need to be reset every 24 hours. It is also recommended to reset AMES prior to switching baselines.

### INitial Conditions

* VOT System is in an **Operational State**

### STEp-BY-STEP INSTRUCTIONS

#### POWERING/RESETTING VOT SYSTEM AMES

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | From the Instructor Workstation (Workstation-08) desktop, click on the “Remote Desktop Viewer” icon in the favorites bar at the bottom middle of the screen. |  |
|  | With the Remote Desktop Viewer open, click on “bookmarks” |  |
|  | Select the “spice://core-01:5900” option from the bookmarks menu. This will open a display connection to the VOT System AMES. |  |
|  | Login to AMES desktop using the following credentials:  Username: ames  Password: <see password document> |  |
|  | If there is a running AMES Simulator window open, close the window. This will send a soft reboot signal to the VOT System AMES. |  |
|  | At the top left of the AMES desktop display, press:  Applications🡪AMES🡪Simulator |  |
|  | Note the FODMS Channels in red. After the soft reboot completes, the FODMS Channels will turn green, as well as the VME Connection bullet. |  |
|  | Once the FODMS Channels and VME Connection bullet are green (this can take anywhere from 0-120 seconds), press “Initiate”  ***NOTE: DO NOT PRESS INITIATE IF FODMS CHANNELS ARE RED***  If the FODMS Channels and VME Signal do not turn green after 120 seconds, power cycle the VME Chassis inside the server rack by pressing the power button off and then back on again. |  |
|  | Verify ownship track data automatically populates (course, speed, etc). Edit track data if desired. Press the “Play” button at the top right and verify the time counter begins. |  |
|  | Close the Remote Viewer Window. Do not close the Ground Truth GEOSIT window unless resetting AMES. |  |

After VOT System AMES has been reset, a Lab may now be deployed.

#### Deploying a VOT Lab

***NOTE: PRIOR TO DEPLOYING A VOT LAB, VERIFY THAT ALL WORKSTATIONS ARE POWERED ON AND LOGGED IN. WORKSTATIONS NEED TO BE POWER CYCLED EVERY 24 HOURS TO MAINTAIN THEIR SYSTEM LEASE.***

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | From the Instructor Workstation (Workstation-08) desktop, open the VOT Manager by clicking on the icon in the favorites bar at the bottom center of the screen. |  |
|  | Once the VOT Manager is open, select the desired VOT Baseline, Segment, and Injection. |  |
|  | Click on the “Deploy Lab” button. Note time (use stopwatch if desired). Depending on the selected VOT element, the deploy process will take anywhere from 5-15 minutes. If the deployment process takes longer than 20 minutes, please refer to the Troubleshooting section. |  |

During the Deploy Lab process, the progress bar will advance with a status area showing the current task the deployment is performing.

Once the status area notification says that the deployment is complete, displays can now be deployed.

Displays do not immediately need to be deployed if the instructor wants to setup the scenario prior to deploying the displays to the student workstations.

Use the Displays section to setup the scenario.

#### DEPLOYING DISPLAYS

***NOTE: ONLY DEPLOY DISPLAYS AFTER THE LAB DEPLOYMENT HAS FINISHED***

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | From the Instructor Workstation (Workstation-08) desktop, the VOT Manager should still be open from the lab deployment. If not, re-open the VOT Manager and verify the desired lab is deployed. |  |
|  | Select “Deploy Displays” from the VOT Manager. |  |

This will deploy the tactical SQQ-89 displays onto the student workstations.

Displays can be dismissed and deployed at will without affecting the deployed lab. Instructors can use this capability to facilitate their training style.

#### VOT Manager OPTIONS

**Baseline**: Software version of SQQ-89 to be launched. Currently ACB-11, ACB-13, and ACB-15 are available in the VOT System.

**Segment**: Not all segments are available for each baseline. For instance, only ACB-11 has the individual segments available.

Team: Ability to bring up 6 tactical workstations and dual display system in the VOT. Team will lead to RECFS and SASTFS injections.

Common: Ability to bring up 12 tactical workstations in the VOT. Due to processing limitations, some tactical display functionality was taken out of the system.

Individual: Only available in ACB-11. Ability to bring up focused training for specific functional segments and common displays in ACB-11.

**Injection:** Determines whether playback for ELAST tapes or scenarios with SAST will be used.

RECFS: Ability to put the SQQ-89 in playback mode to run ELAST cuts stored in the VOT System ELAST database. External tape playback is not currently supported.

SASTFS: Ability to put the SQQ-89 in training mode in order to run scenarios.

**Displays:** Allows the instructor to pull up AMES, AIC and STC at the instructor console. **APPEARS AFTER LAB HAS BEEN LAUNCHED.**

AMES: To have command and decision involved in the scenario, AMES must be in training and running. Engagement orders will not be able to be sent to the SQQ-89 without AMES running. THIS IS NOT TO BE CONFUSED WITH THE VOT SYSTEM AMES.

AIC: When selected, brings up the SAST display in order to develop or load a scenario.

STC: System training configuration; allows the instructor to go from tactical to training or playback mode.

WORKSTATIONS: Selecting one of the workstation displays will pull the display from the selected student workstation and show it on the instructor workstation. A dismiss/deploy of displays will be required for the display to show back up on the student workstation.

## Dismissing VOT Lab

### INitial Conditions

* VOT System is in an **Operational State**
* VOT Lab is deployed

### STEp-BY-STEP INSTRUCTIONS

#### DISMISSING DISPLAYS

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | From the Instructor Workstation (Workstation-08) desktop, the VOT Manager should still be open from the lab deployment. If not, re-open the VOT Manager and verify the desired lab is deployed. |  |
|  | Select the “Dismiss Displays” button |  |

This will dismiss all running displays on the student workstations. There is no need to shutdown the SQQ-89 system from within the tactical software as the VOT Lab will reset to a known state after the Lab as been dismissed. There is no persistent data while running VOT Labs.

#### Dismissing VOT LAB

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | From the Instructor Workstation (Workstation-08) desktop, the VOT Manager should still be open from the lab deployment. If not, re-open the VOT Manager and verify the desired lab is deployed. |  |
|  | Select the “Dismiss Lab” button. |  |
|  | Verify dismiss by selecting “Ok” at the prompt |  |

This will start the dismiss script for the running VOT Lab. Typically this takes about 1-2 minutes.

<There is a bug in the system where multiple remote viewer windows will pop up after selecting “Dismiss Lab”. Close all open remote viewer windows and verify lab is dismissing. If VOT Manager closes, re-open and re-select “Dismiss Lab”.>

***NOTE: DO NOT CLOSE VOT MANAGER WINDOW UNTIL THE DISMISS SCRIPT HAS FINISHED, THE PROGRESS BAR IS AT 0% AND THE STATUS WINDOW READS “READY TO DEPLOY LAB”***

After the dismiss script finishes, a new VOT Lab may be selected and deployed, or the system can be returned to a **Stand-By State**.

# Best Practices

## ACB11

After deploying displays, if any workstation (other than workstation-07 since ACB11 does not deploy displays to the DDS) does not show the SQQ-89 tactical display, click on the “VTTE-CLIENT” icon in the favorites bar. This should deploy the display to the individual workstation. This should also be fixed doing Dismiss/Deploy Displays until the display shows up.

Refer to the “Display Management” section for pulling screens from workstations.

DDS does not need to be logged in for deploying ACB11. This includes both the Small Screen Display (SSD) and Large Screen Display (LSD).

Start or verify COMMON and DRMFP are running for s830a501 – s835a501 consoles.

Scroll through Display Families to ensure programs did not hang up after lab has deployed.

Refer to Troubleshooting Guide if DRMFP does not turn on the Touchpanels.

For ACB11 and ACB13, Lab AMES must be placed into training. AMES is accessible through the Displays section of the VOT Manager and not to be confused with System AMES which is accessible through the bookmarks menu of Remote Viewer Window. Refer to the “Placing AMES Into Training” section.

Fire Control, specifically firing, does not work with ACB11 TEAM SAST. ACB11 TEAM SAST is recommended for acoustics analysis only. Fire Control is confirmed to be working with ACB11 TEAM SUPFS.

When putting UCFS into training and doing Training Without Launchers (TWOL), ensure that after training mode resets that TWOL did not toggle back. If so, re-enter TWOL.

For ACB11 TEAM RECFS, prior to pressing play in rec-a, refer to the ELAST guide for placing the system into playback. Ensure both BFFS and ACIFS are placed into playback in the Segment State Manager.

## ACB13

After deploying displays, if any workstation (other than workstation-07 since ACB11 does not deploy displays to the DDS) does not show the SQQ-89 tactical display, click on the “VTTE-CLIENT” icon in the favorites bar. This should deploy the display to the individual workstation. This should also be fixed by doing Dismiss/Deploy Displays until the display shows up.

Refer to the “Display Management” section for pulling screens from workstations.

Start or verify COMMON and DRMFP are running for s830a501 – s835a501 consoles.

Scroll through Display Families to ensure programs did not hang up after lab has deployed.

Refer to Troubleshooting Guide if DRMFP does not turn on the Touchpanels.

For ACB11 and ACB13, Lab AMES must be placed into training. AMES is accessible through the Displays section of the VOT Manager and not to be confused with System AMES which is accessible through the bookmarks menu of Remote Viewer Window. Refer to the “Placing AMES Into Training” section.

## ACB15

Display management works differently with ACB15 than with ACB11 and ACB13. Refer to the section “Display Management”.

It is recommended to reset the SASTFS Training String after lab has deployed.

CAS requires additional management to run properly. See the section on “CAS Operations”

Switching from PAS to CAS has a high percentage of failure. Switching from CAS to PAS has a low percentage of failure.

At times, under system training configuration, the options are greyed out. A reset of the SASTFS Training String or AIC will correct this problem.

## Display Management

After the Lab is deployed, the SQQ-89 displays for each workstation are available to be pulled to the Instructor Workstation through the Displays section of the VOT Manager.

For ACB11 and ACB13, this works pretty seamlessly. Pulling a workstation display will open the display in Remove Viewer Window. Resizing or placing the window in fullscreen will allow the user to see the entire screen.

For ACB15, certain display settings need to be in place for the SQQ-89 to show up. Before pulling the workstation display, perform the following:

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | Open the Linux Display Settings by pressing the “super” key and typing in Displays. Select the Displays application. |  |
|  | Verify the following options are set: |  |
|  | NEC TV is turned on |  |
|  | Display Mode: Join Displays |  |
|  | Display Arrangement: Display 1 is directly on top of Display 2. The displays cannot be side by side. |  |
|  | Primary Display: Dell Inc. 24” |  |
|  | Orientation: Landscape |  |
|  | Resolution: 1920x1200 (16:10) |  |
|  | Scale: 100% |  |
|  | After the Displays Application settings are set, pull one of the workstation displays by selecting from the Display section of the VOT Manager. |  |
|  | Drag (1) Remote Viewer Window to the NEC Display (should be top) |  |
|  | Place (1) Remote Viewer Window in fullscreen |  |
|  | Drag (2) Remote Viewer Window to the Dell Display (should be lower) |  |
|  | Place (2) Remote Viewer Window in fullscreen |  |

Displays are not processing on the workstations, but rather on the compute nodes. If the workstations are rebooted while lab is deployed, displays need to be simply re-deployed from the VOT Manager.

While SQQ-89 displays are deployed, users can switch back to the Desktop by placing the cursor in the middle bottom section of the screen to pull open the favorites bar and selecting another application or hitting the “super” key to select a new window.

From the VOT Manager, if the user needs to re-open a display after closing, first open a new display and then close that display and re-select the desired display.

## Placing AMES In Training

For ACB11 and ACB13, the Lab AMES will need to be placed into training.

Lab AMES is not to be confused with System AMES. System AMES is running on the core node and is accessible through the bookmarks section of Remote Viewer Window. Lab AMES is a display option after ACB11 or ACB13 is deployed and is accessible from the Display section of the VOT Manager.

Perform the following:

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | Select ames (workstation-08) from the Display section of the VOT Manager |  |
|  | Login if required |  |
|  | Open AMES Simulator by opening Applications 🡪 AMES 🡪 Simulator |  |
|  | Press initiate |  |
|  | Press the play button |  |
|  | Navigate to Subsystem 🡪 AWS |  |
|  | Navigate to C&D-Nrml 🡪 Restart and Mode Control |  |
|  | New Mode: Training |  |
|  | Action: Mode Change Only |  |
|  | Select Send |  |
|  | Select Close |  |
|  | Do not close AMES Simulator |  |
|  | Close the Remote Viewer Window |  |

To reselect ames (workstation-08) after the Remote Viewer Window is closed, simply open another display window (e.g., tcw, stc), close that display and then re-select the ames (workstation-08) display. This is true for all display options.

## CAS Operations

For CAS Operations in ACB15, perform the following:

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | Deploy ACB15 TEAM SASTFS |  |
|  | Quick Reboot SAST Training String |  |
|  | Configure SAST for training |  |
|  | Transition system into training for CAS using STC |  |
|  | Verify CWC CES B is initialized/started with a green status |  |
|  | Shut down CWC CES A (s871a6) |  |
|  | Start SAST scenario |  |
|  | Verify AWESIM starts for MFTA and CRH |  |
|  | Configure the transmitter controller for CAS operations |  |
|  | Apply and **Recycle** |  |

# Troubleshooting Guide

## Workstation Frozen or Unresponsive

For nearly all situations that the workstations becomes frozen or unresponsive, the solution is simply power cycle the Intel NUC by pressing and holding the power button for 5 seconds until the NUC turns off and then turning the NUC back on by pressing the power button once.

The Intel NUC boots from an iSCSI target that is served by the core node. If the core node is turned off, the workstation will not boot.

If power cycling does not bring the workstation back to the login screen, check that the core node is powered on as indicated by the front hard drive status lights. If the core node is off, investigate power to the server rack. If the core node is powered on but the workstation is still not booting to a desktop, perform the “Power Down to Cold-Iron State” and then “Power On to Operational State” actions.

If continue to have issues with the workstations, perform OEM reach back support.

## Lab Does Not Deploy

If the Deploy Lab process is taking longer than 20 minutes and never finishing, perform a Dismiss Lab, close the VOT Manager and re-open and try to deploy again.

If re-opening the VOT Manager does not resolve, verify that the compute nodes are powered on. If compute nodes are powered off, investigate power is being supplied to the server rack.

If compute nodes are powered on and still having issues with the Lab not launching after 20 minutes, perform the “Power Down System to Stand-By State” and then Power On System to Operational State” actions.

If after, bringing the system to Stand-By and then back to Operational, perform the Power Down to Cold-Iron State” and then “Power On to Operational State” actions.

If continue to have issues with the Lab not deploying, perform OEM reach back support.

## Touchpanels Do Not Work

### ACB11

Verify that DRMFP is running for s830a501 – s835a501. If DRMFP does not initialize, perform the following:

|  |  |  |
| --- | --- | --- |
| **Step** | **Instruction** | **🗹** |
|  | Move cursor to bottom middle of SQQ-89 tactical display screen to show the Linux favorites bar |  |
|  | Search “vtte-spice-touch” and click to open |  |
|  | From the opened Remote Viewer Window, select File🡪USB Device Selection |  |
|  | Check if there is:   * DisplayLink MIMO Magic Monster * eGalaxy Inc. USB Touch Controller |  |
|  | If not present, close USB Device Selection window and unplug the Touchpanel USB connection and re-connect |  |
|  | Re-open the USB Device Selection window |  |
|  | Select:   * DisplayLink MIMO Magic Monster * eGalaxy Inc. USB Touch Controller |  |
|  | Do not close the Remote Viewer Window, this needs to continue to run in the background. If accidentally closed, re-search and re-open and perform the previous steps 3-7. |  |
|  | Click behind or minimize the Remote Viewer Window and return back to the SQQ-89 tactical display |  |
|  | Perform a MRD or Default Restart of DRMFP |  |