



**Advanced Simulation Technology inc.**  
500A Huntmar Park Drive  
Herndon, Virginia 20170 USA  
Tel. (703) 471-2104 • Fax. (703) 471-2108  
[www.asti-usa.com](http://www.asti-usa.com)

# **SERA Cold Start Guide**

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Product Name: SERA

SERA Cold Start Guide

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ASTi

500A Huntmar Park Drive

Herndon, Virginia 20170 USA

Red Hat® Enterprise Linux

Red Hat® Subscription

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# Revision history

Date	Revision	Version	Comments
9/19/2017	A	0	Initial baseline version.
11/15/2017	B	0	Added "(Optional) Configure network settings via the web interface," "Back up the SERA server," and "Restore a backup of the SERA server." Changed "Configure network settings via the terminal" to an appendix at end of document.



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# 1.0 Introduction

The cold start procedure(s) described in this document allow you to build SERA systems from scratch. There are three main reasons for using the cold start procedure:

- Installing the latest software version
- Rebuilding a damaged hard disk
- Creating spare hard disks

The following steps outline the SERA cold start procedure:

1. To create a backup of the SERA server, see Section 2.0, "Back up the SERA server" on the next page.
2. To cold start the SERA server, see Section 3.0, "Cold start the SERA server" on page 3.
3. To restore your backup of the SERA server, see Section 4.0, "Restore a backup of the SERA server" on page 4.
4. To configure the server's IP address and subnet mask, see Section 5.0, "(Optional) Configure network settings via the web interface" on page 5.

## 1.1 Required equipment

The following equipment is required for the SERA cold start procedure:

- Power cord
- SERA server
- USB license key
- Monitor
- Keyboard
- CAT5e cable or better
- Network connection

## 2.0 Back up the SERA server

To back up the SERA server, follow these steps:

1. Open a web browser on a computer sharing the same network as the SERA server.
2. In the address bar, enter the SERA server's IP address.
3. Log into the SERA web interface using the following default site-admin credentials:

Username	Password
site-admin@asti-usa.com	astirules

4. From the top navigation bar, click **System**, and then click **Backup/Restore**.
5. On the **Backup & Restore** page, click **+ Create Backup**. The **System Backup** window opens.
6. In the **Backup Name:** box, type a name for your backup.
7. *(Optional)* To include network settings in the backup, select **Include network settings in backup**.

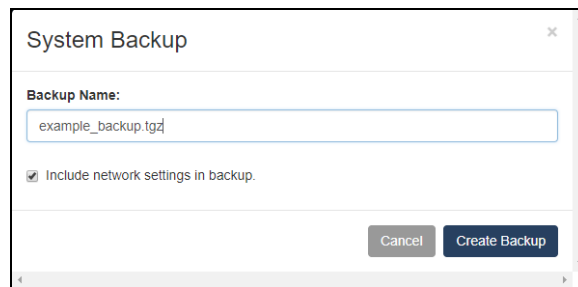


Figure 1: System Backup window

8. Click **Create Backup**, and wait for the backup to complete. When finished, the new backup displays as an archive (.tgz) file on the **Backup & Restore** page.



Figure 2: New SERA backup

## 3.0 Cold start the SERA server

To complete the SERA cold start procedure, follow these steps:

1. Insert the Red Hat 7 Installation DVD for SERA, and press the Reset button.
2. To install Red Hat, wait five seconds for the disc to mount, and press Enter.
3. Wait several minutes for installation to complete. When the disc automatically ejects, remove it from the drive.
4. Insert the SERA Core Software Installation DVD, wait five seconds, and press Enter.
5. Wait several minutes for installation to complete. When the disc ejects, remove it from the drive.
6. Insert the SERA Speech Software Installation DVD, wait five seconds, and press Enter. Wait several minutes for installation to complete.
7. When the SERA Speech Software Installation DVD ejects, remove the disc from the drive. The system automatically reboots, and the screen displays, “Installing SERA, this may take a while.”



**Important:** *If the system hangs and does not automatically reboot, press the Reset button.*

Wait 20–25 minutes for installation to complete, and the system automatically reboots.

8. Log into the system using the following default credentials:




Username	Password
root	abcd1234

## 4.0 Restore a backup of the SERA server



*Caution: Only restore a backup on a freshly cold-started server. Otherwise, previous configurations may interfere with the new restoration.*

To restore a backup of the SERA server in the SERA web interface, follow these steps:

1. From the top navigation bar, click **System**, and then click **Backup/Restore**.
2. On the **Backup & Restore** page, locate the backup you created in Section 2.0, "Back up the SERA server" on page 2. Click .
3. In the **Restore Archive** window, click .
4. When restoration is complete, a pop-up window prompts you to reboot the system. Click .
5. Wait four to five minutes for the system to reboot. When the reboot is complete, the **Backup & Restore** page refreshes.


## 5.0 (Optional) Configure network settings via the web interface

If your network facilitates Dynamic Host Configuration Protocol (DHCP), then the SERA server should automatically receive an IP address, allowing you to connect to the SERA web interface. However, if the SERA server cannot establish an automatic DHCP connection, you must manually set the IP address via the terminal. For manual configuration instructions, see Appendix A, "Configure network settings via the terminal" on page 7.

To change the default network settings in the SERA web interface, follow these steps:

1. Open a web browser on a computer sharing the same network as the SERA server.
2. In the address bar, enter the SERA server's IP address.
3. Log into the SERA web interface using the following default site-admin credentials:

Username	Password
site-admin@asti-usa.com	astirules

4. From the top navigation bar, click **System**, and then click **Network Settings**.
5. On the **General Networking** page, click .
6. Under **Network Devices**, in the **IP Address** box, type xxx.xxx.xxx.xxx, where xxx.xxx.xxx.xxx represents the SERA server's IP address.
7. In the **Subnet Mask** box, type yyy.yyy.yyy.yyy, where yyy.yyy.yyy.yyy represents the SERA server's subnet mask.



Network Devices

Select a device name to view and edit its settings:

eno1

---

**Device Name** eno1

**Status** ↑ Up

**MAC Address** 00:07:b8:de:16:b4

---

**Mode**

Fixed

---

**IP Address**

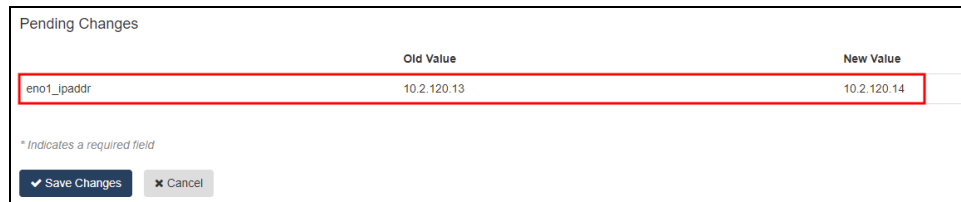
10.2.120.13

**Subnet Mask**

255.255.0.0

*Figure 3: Network device settings*

- Under **Pending Changes**, verify the new settings are correct.



	Old Value	New Value
eno1_ipaddr	10.2.120.13	10.2.120.14

\* Indicates a required field

*Figure 4: Pending Changes*

- Click .
- To reboot the SERA server, press the Reset button on the front of the chassis. Wait for the system to reboot.

## Appendix A: Configure network settings via the terminal



*Note:* These configuration instructions are intended for IT administrators who are familiar with Linux terminology and commands.

Without a Dynamic Host Configuration Protocol (DHCP) network connection, the SERA server is not configured with a default IP address. As a result, you must manually set the network configurations for the following interfaces:

Interface Name	Description
en01	This interface is designated to the SERA web interface network configuration.
enp2s0	(Optional) As needed, use these interfaces for Distributed Interactive Simulation (DIS) and visual system network configurations.
enp2s1	
enp2s2	



*Important:* The SERA system runs on a Red Hat 7 operating system. As a result, the interface names differ from those in Red Hat 5 and 6.

To configure an interface's network, follow these steps:

1. To identify the correct interface, at the terminal prompt, type **sudo ethtool -p interface**, where *interface* represents the name of the interface you want to identify (e.g., en01, enp2s0). Press Enter.
2. Identify which interface is blinking on the SERA server, and insert an Ethernet cable into the interface.
3. To view current interface settings, type **cat /etc/sysconfig/network-scripts/ifcfg-interface**, and press Enter.
4. Ensure the following settings match:

```
TYPE=Ethernet
BOOTPROTO=static
DEFROUTE=yes
IPV4_FAILURE_FATAL=no
ONBOOT=yes
```

5. Navigate to **/etc/sysconfig/network-scripts**.
6. Using the text editor of your choice, open the file corresponding with the interface you want to configure.

7. In the **IPADDR** field, type *xxx.xxx.xxx.xxx*, where *xxx.xxx.xxx.xxx* represents the server's IP address. Press Enter.
8. In the **NETMASK** field, type *yyy.yyy.yyy.yyy*, where *yyy.yyy.yyy.yyy* represents the server's subnet mask. Press Enter.
9. Save and exit the file. To configure the other interfaces for your Distributed Interactive Simulation (DIS) and/or visual system networks, repeat Steps 1–8 if applicable.
10. At the prompt, type **reboot**, and press Enter. Wait for the server to reboot.