

# Introduction : The Gaia Operating System

Module 1: The Gaia Operating System

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# Objectives

- Navigate the file structure of the Gaia Operating System
- Apply competency with the installation of the Gaia Operating System
- Use the command line interface for installation and configuration of the Gaia Operating System
- Execute command of the Web UI for the Gaia Operating System
- Perform a backup of the Gaia Operating System from the Command Line Interface (CLI) and the Web User Interface (WebUI)

# Navigating the Gaia Operating System


## File Structure

- The Command Shells
- CLISH – This is the default shell for users. The path for the shell is /etc/cli.sh
- Bin/Bash – This shell gives the user permissions to navigate the file structure and make changes to files by editing, copying, deleting, etc. The path for the shell is /bin/bash

# clish

- The default shell for administrators and users of the Gaia Operating System is clish.

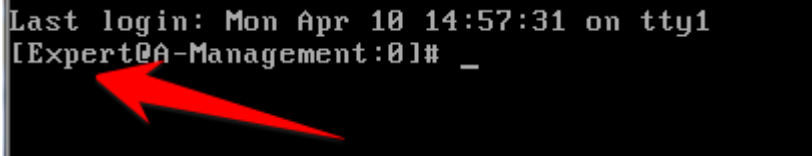
```
This system is for authorized use only.  
login: admin  
Password:  
Last login: Mon Apr 10 14:57:42 on tty1  
A-Management>
```



- The prompt will have the machines hostname followed by a >
- This shell will allow the administrator to make changes to the configuration of the Operating System and should be used anytime those changes need to be made.

# bin/bash or Expert

- The prompt for this shell will show as displayed below



```
Last login: Mon Apr 10 14:57:31 on tty1  
[Expert@A-Management:0]# _
```

A red arrow points to the 'Expert' part of the prompt '[Expert@A-Management:0]# \_'.

- The prompt will have Expert inserted prior to the name of the server and the #.
- This shell allows the user to modify files, navigate the directory structure and make changes to the files.
- Very few users should have access to this shell.

# Installation of the Gaia Operating System

- Installation via DVD or ISO file
- Pre-installed O/S on Appliances
- Installation via USB device
- Network installation via a pixie boot
- Unattended USB Installation of Gaia O/S

# Installation via DVD or ISO file

- Start the installation with the install media mounted in the DVD drive of the server
- Choose to install Gaia on the system and press enter
- Select keyboard language
- Configure Hard Disk Partition sizes
- Enter and confirm password
- Lab 1.1 Installs the Gaia O/S on the Management Server. Review the document for Lab 1.1 and if possible

# Pre-installed O/S on Appliances

- Open a terminal emulation program, while connected to the serial port on the appliance
- Restart the appliance
- When prompted, enter the boot menu
- Select Reset to factory defaults – Security Management Server or Security Gateway
- Type yes and press Enter
- Configure Management IP Address
- Run the First Time Configuration Wizard



# Installation via USB device

- If using a removable USB device, use the following knowledge base article
  - <http://supportcontent.checkpoint.com/solutions?id=sk65205>
- Connect computer to the console port with a db9 serial cable
- Connect the installation media to the USB port
- Redirect the boot sequence to the installation media

# Unattended USB Installation of Gaia O/S

- Gaia can be installed on an appliance using and ISO and a removable USB drive
  - <http://supportcontent.checkpoint.com/solutions?id=sk65205>
- Prepare the installation media(USB) with these pre-configured settings for specified network interfaces
  - IP address
  - Network mask
  - Default gateway

# Gaia Operating System Command Line (CLI) Installation and Modification

- `config_system`
  - Command must have a parameters and value pair separated by &
  - "hostname=myhost&domainname=somedomain.com&timezone='America/Indiana/Indianapolis'"
- `config_system -f`
  - To run the first time configuration wizard from a specified configuration file, that includes a series of configuration command strings
- `config_system -l`
  - To list the configurable parameters

# Gaia Operating System Web User Interface Installation and Modification

- Initial Configuration
  - Open a browser to the WebUI of the machine you wish to configure:  
[https://Mangement\\_Server\\_or\\_Security\\_GW\\_ipaddress](https://Mangement_Server_or_Security_GW_ipaddress)
  - First Time Configuration Wizard
- Modifying Parameters
  - Open a browser to the WebUI of the machine you wish to modify:  
[https://Mangement\\_Server\\_or\\_Security\\_GW\\_ipaddress](https://Mangement_Server_or_Security_GW_ipaddress)

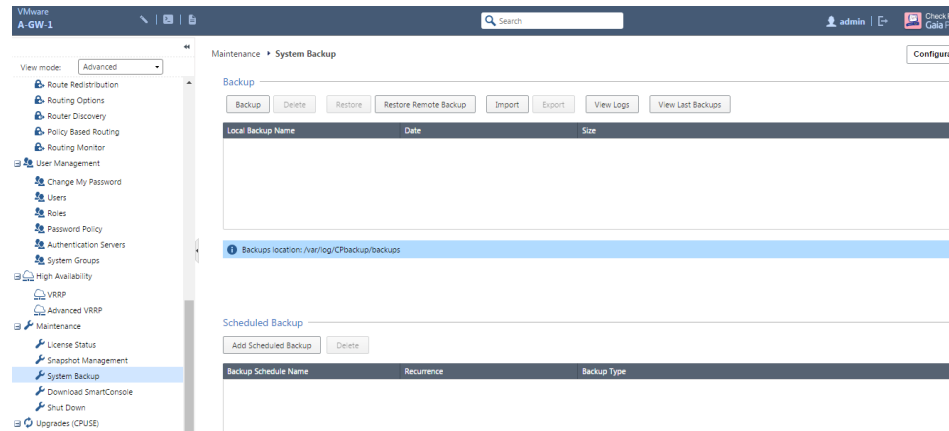
# Gaia Operating System Backup via Web UI and CLI

- WebUI Backup

- Command Line

- Add backup (options)

- local – backup saved on the local machine
    - ip- ip address of the the remote server to store the backup
    - username – username required to login to remote ftp or scp server
    - password plain – password required to login to remote ftp or scp server



# Summary

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- Used the Command Line Interface for installing and configuring the Gaia Operating System
- Executed command of the Web User Interface for the Gaia Operating System
- Performed a backup of the Gaia Operating System from the Command Line Interface and the Web User Interface

# Bibliography

*Command Line Interface Reference Guide* Check Point Software Ltd.  
California, USA

*Gaia Administration Guide* Check Point Software Ltd. California, USA

*Gaia Installation and Upgrade Guide* Check Software Ltd. California, USA