

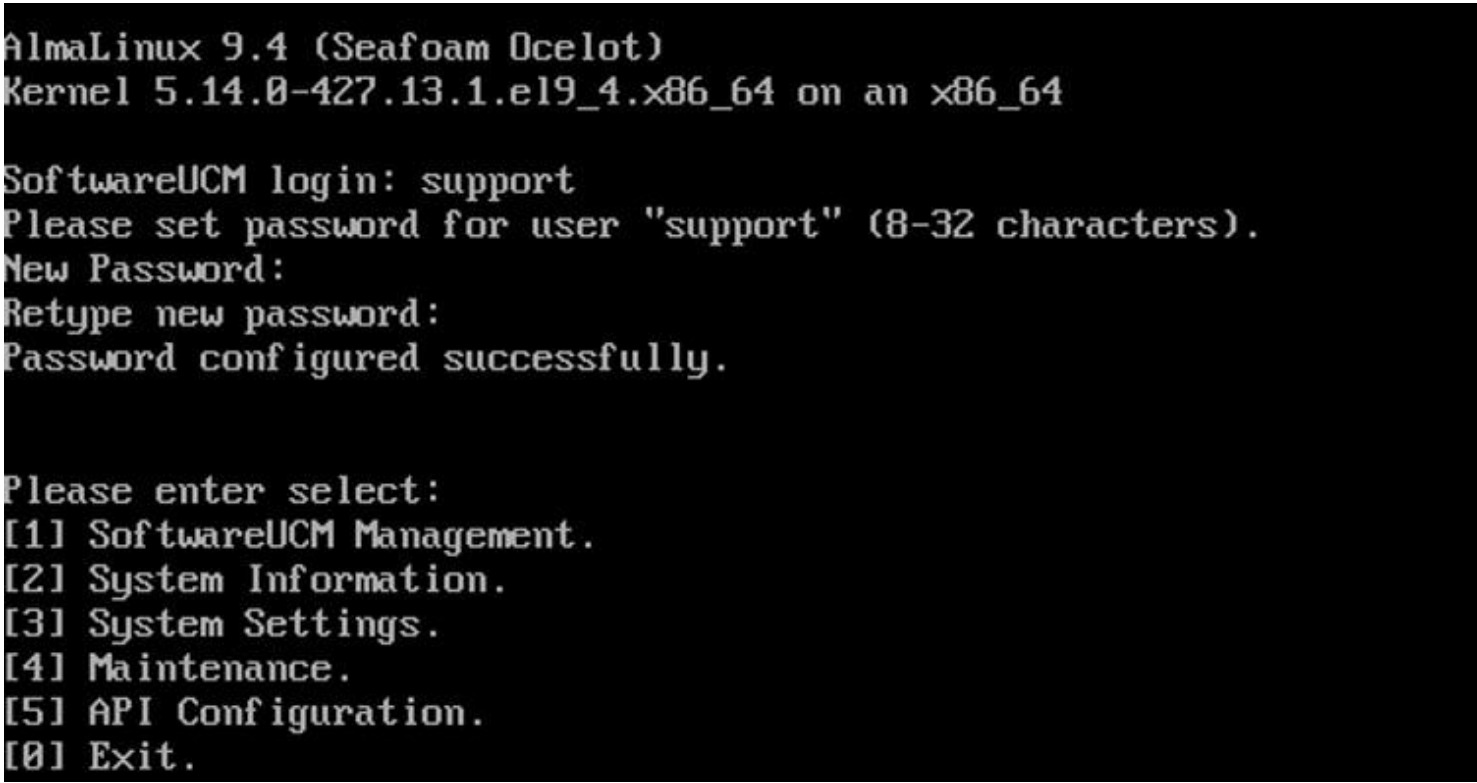
SoftwareUCM Console User Guide

This user guide serves to explain how to manage SoftwareUCM instance(s). SoftwareUCM is deployed in a Linux environment using Alma Linux distribution. This type of deployment allows the creation of multiple instances, which are completely separate entities, to easily address scalability and multi-tenancy.

The console offers a script-based menu where the user can view and change configurations related to the operations of the SoftwareUCM instances using only direct responses to the prompts displayed on the console screen. The user can navigate through the menu by entering the number that corresponds to the menu they want to access.

LOGIN

Log in with the user “support”. You need to set a password for the first login. This password will be required to enter to log in after the first login.



Login Screen

Once logged in, the user will be greeted with a list of parameters that can be used to manage the running instance(s) of SoftwareUCM.

SOFTWAREUCM MANAGEMENT

Enter SoftwareUCM Management

In this menu, the user can view, create, delete, and restart the instances of SoftwareUCM. The user can also change the networking settings of each instance and view information related to the resources allocated for all the instances.

```
Please enter select:
[1] SoftwareUCM Management.
[2] System Information.
[3] System Settings.
[4] Maintenance.
[5] API Configuration.
[0] Exit.
1

Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
```

SoftwareUCM Management Screen

View The Current SoftwareUCM Instances

To view the SoftwareUCM instances created, enter “1”. The console will display a list of the instances including the name of each instance, the operational status of the instance, the version installed, the admin portal web access address with the port, the initial username, and the initial password.

```
Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
1

Current Mode: Single Tenant

SoftwareUCM Information:
  Instance Name: ucm1
  Remark:
  Status: running
  Version: 1.0.32.4
  Admin Portal: https://172.16.138.163:8089
  Initial Username: admin
  Initial Password: SoftUCM@admin
```

SoftwareUCM Created Instances

Note

ISO installation defaults to single-tenant mode and automatically creates an instance.

Switch From Single-tenant Mode to Multi-tenant Mode

To run multiple instances of SoftwareUCM, the user must switch from single-tenant mode to multi-tenant mode. When multiple instances are created, they run as independent entities from each other and don't share the same processes.

When creating a new SoftwareUCM, the system will prompt the user to switch to multi-tenant mode before creating the instance.

```
Please enter select:
(1) List SoftwareUCMs.
(2) Create SoftwareUCM.
(3) Delete SoftwareUCM.
(4) Restart SoftwareUCM.
(5) Network Details.
(6) Network Settings.
(7) Show Resource Usage.
(8) Change Resource Limit.
(9) Reset Factory Password.
(10) Factory Reset.
(11) Modify Remark.
(12) Disk Management.
(13) Migrate SoftwareUCM.
(0) Exit.
2

Currently using Single Tenant mode. Do you want to switch to Multi-Tenant mode?[y/n] y

In Single Tenant mode, the instance shares the host's network and has no resource limits. To switch to Multi-Tenant mode, you will need to configure the network
and resource limits for instance ucm1, and the instance will be restarted during the configuration process.
Do you want to modify the configuration of instance ucm1?[y/n] y

Configuring the network for instance.

Please select method:
(1) Single Network Interface Card.
(2) Dual Network Interface Card.
2

Please select network ineterface for LAN1:
(1) eth0(00:0C:29:1F:9B:22).
(2) eth1(00:0C:29:1F:9B:2C).
1

Please select network ineterface for LAN2:
(1) eth1(00:0C:29:1F:9B:2C).
1

Please select default ineterface:
(1) LAN1.
(2) LAN2
```

Switch to Multitenant Mode

```
Please select default ineterface:
(1) LAN1.
(2) LAN2.
2

Configuring IPv4 address.

Please enter preferred DNS server (optional):

Configuring IPv4 Address for LAN 1 (eth0).

Please select the IP assignment method:
(1) DHCP.
(2) Static.
1

Configuring IPv4 Address for LAN 2 (eth1).

Please select the IP assignment method:
(1) DHCP.
(2) Static.
1

Configuring IPv6 address.

Configuring IPv6 Address for LAN 1 (eth0).

Please select the IP assignment method:
(1) DHCP.
(2) Static.
(3) Disabled.
1

Configuring IPv6 Address for LAN 2 (eth1).

Please select the IP assignment method:
(1) DHCP.
(2) Static.
(3) Disabled.
1

Configuring resource limits for instance.

Please enter CPU limit (min 1, max 2, default 1):
2

Do you want to configure CPU affinity for this instance? [y/n] y

Please specify the CPU cores for CPU affinity configuration (e.g. 0-3,5,7): 0-1

Please enter memory limit (unit MB, min 1024MB, max 1935MB, default 1024MB):
1024

Please enter storage limit (unit GB, min 4GB, max 29GB, default 4GB):
5

Saving and applying the configuration for instance ucm1.
Modified configuration for SoftwareUCM instance successfully.

Waiting for SoftwareUCM instance initialization to complete.
The SoftwareUCM instance ucm1 is already accessible.

Instance Name: ucm1
Admin Portal: https://172.16.138.62:8089
https://192.168.1.152:8089

It has switched to Multi-Tenant mode. Currently there is only one instance named ucm1. You can reselect "Create SoftwareUCM" to create a new instance.
```

Multitenant Instance Configuration

1. Select network
 - Select single or dual network interface
 - Select the physical host NICs corresponding to LAN1 or LAN2
 - Select default network interface
 - Configure IPv4 and IPv6 addresses for LAN1 and LAN2
2. Configure resource limit
 - Configure CPU core limits
 - Configure CPU affinity
 - Configure memory limits
 - Configure storage limits

Note

Available only when the instance is running.

Create a New Instance

Using the menu, the user can create multiple instances of SoftwareUCM to run separate telephony services that are independent of each other. Each instance runs in its own containerized environment which makes the system more flexible, more confidential, and more secure. The user can allocate the resources individually depending on the need of each instance. Refer to [\[View The Resource Allocation of the Current Instance\]](#) and [\[Change Instance Resource Limits\]](#) for more information regarding the resource management of each instance.

```
Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
2

Please enter remark for instance (Optional. Supports 1-128 letters, digits, special characters and spaces):
test

Please select a storage disk:
[1] VMware Virtual SATA Hard Drive: sda (/container 24.1GB Avail/29.9GB Total).
[2] VMware Virtual SATA Hard Drive: sdb (20.0GB).
2

This disk is a new disk and will be formatted. Do you want to continue?[y/n] y

The disk is formatted successfully and mounted to the directory /container1.
```

Creating SoftwareUCM Instance 1

```
Configuring the network for instance.

Please select method:
[1] Single Network Interface Card.
[2] Dual Network Interface Card.
2

Please select network ineterface for LAN1:
[1] eth0(00:0C:29:1F:9B:22).
[2] eth1(00:0C:29:1F:9B:2C).
1

Please select network ineterface for LAN2:
[1] eth1(00:0C:29:1F:9B:2C).
1

Please select default ineterface:
[1] LAN1.
[2] LAN2.
2
```

Creating SoftwareUCM Instance 2

```
Configuring IPv4 address.
Please enter preferred DNS server (optional):
Configuring IPv4 Address for LAN 1 (eth0).
Please select the IP assignment method:
[1] DHCP.
[2] Static.
1

Configuring IPv4 Address for LAN 2 (eth1).
Please select the IP assignment method:
[1] DHCP.
[2] Static.
1

Configuring IPv6 address.
Configuring IPv6 Address for LAN 1 (eth0).
Please select the IP assignment method:
[1] DHCP.
[2] Static.
[3] Disabled.
1

Configuring IPv6 Address for LAN 2 (eth1).
Please select the IP assignment method:
[1] DHCP.
[2] Static.
[3] Disabled.
1
```

Creating SoftwareUCM Instance 3

```
Configuring resource limits for instance.
Please enter CPU limit (min 1, max 2, default 1):
1
Do you want to configure CPU affinity for this instance? [y/n] y

Please specify the CPU cores for CPU affinity configuration (e.g. 0-3,5,7): 0

Please enter memory limit (unit MB, min 1024MB, max 1935MB, default 1024MB):
1024
Please enter storage limit (unit GB, min 4GB, max 19GB, default 4GB):
5

Creating SoftwareUCM instance ucm2.
Created SoftwareUCM instance ucm2 successfully.

Waiting for SoftwareUCM instance initialization to complete.
The SoftwareUCM instance ucm2 is already accessible.

Instance Name: ucm2
Version: 1.0.32.5
Admin Portal: https://172.16.130.64:8089
               https://192.168.1.155:8089
Initial Username: admin
Initial Password: ggHmNa0HpV
```

Creating SoftwareUCM Instance 4

- 1. Select **Create SoftwareUCM**
- 2. Optional: Enter a remark for easier instance identification.
- 3. Select the disk for instance installation. The disk will be formatted on first use.
- 4. Configure network
- 5. Configure resource limit

Delete Instance

Note

Deleting the SoftwareUCM instance will result in deleting the license. The license cannot be recovered after deletion.

```
Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
3

Current Instances:
+-----+-----+-----+-----+-----+
| Instance Name | Remark | Status | Version | IP Address |
+-----+-----+-----+-----+-----+
| ucm1          |        | running | 1.0.32.5 | 192.168.1.152 |
+-----+-----+-----+-----+-----+

Please enter SoftwareUCM instance name:
ucm1

If the instance has an activated license, deleting the instance will invalidate the license.
Do you want to delete it?[y/n] y

Deleted SoftwareUCM instance ucm1 successfully.
```

Delete SoftwareUCM Instance

Restart Instance

The user can restart individual instances without having to restart the entire system. Ensure that no calls are ongoing before restarting, otherwise, the ongoing calls will be interrupted. The other instances will not be affected by restarting one instance.

```
Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
4

Current Instances:
+-----+-----+-----+-----+-----+
| Instance Name | Remark | Status | Version | IP Address |
+-----+-----+-----+-----+-----+
| ucm1          |        | running | 1.0.32.5 | 192.168.1.152 |
+-----+-----+-----+-----+-----+

Please enter SoftwareUCM instance name:
ucm1

Restarted SoftwareUCM instance ucm1 successfully.

Waiting for SoftwareUCM instance initialization to complete.
The SoftwareUCM instance ucm1 is already accessible.

Instance Name: ucm1
Admin Portal: https://172.16.138.62:8089
              https://192.168.1.152:8089
```

Restart SoftwareUCM Instance

View The Network Details of The Instance

```
Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
5

Current Instances:
+-----+-----+-----+-----+-----+
| Instance Name | Remark | Status | Version | IP Address |
+-----+-----+-----+-----+-----+
| ucm2          | test   | running | 1.0.32.5 | 192.168.1.155 |
+-----+-----+-----+-----+-----+

Please enter SoftwareUCM instance name:
ucm2

Instance Name:      ucm2
Method:             Dual Network Interface Card
Default Interface:   LAN 2

LAN 1
Network Interface:   eth0
IPv4 Address:        172.16.138.64
IPv6 Address:

LAN 2
Network Interface:   eth1
IPv4 Address:        192.168.1.155
IPv6 Address:

HA
HA Enable:          OFF
```

View Network Details

Modify The Network Configuration of an Instance

The user can modify the network setting of the instance.

```

Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
6

Current Instances:
+-----+-----+-----+-----+-----+
| Instance Name | Remark | Status | Version | IP Address |
+-----+-----+-----+-----+-----+
| ucm2          | test   | running | 1.0.32.5 | 192.168.1.155 |
+-----+-----+-----+-----+-----+

Please enter SoftwareUCM instance name:
ucm2

Configuring the network for instance.

Please select method:
[1] Single Network Interface Card.
[2] Dual Network Interface Card.
2

Please select network ineterface for LAN1:
[1] eth0(00:0C:29:1F:9B:22).
[2] eth1(00:0C:29:1F:9B:2C).
2

Please select network ineterface for LAN2:
[1] eth0(00:0C:29:1F:9B:22).
1

Please select default ineterface:
[1] LAN1.
[2] LAN2.
2

```

Instance Network Configuration 1

```

Configuring IPv4 address.

Please enter preferred DNS server (optional):

Configuring IPv4 Address for LAN 1 (eth1).

Please select the IP assignment method:
[1] DHCP.
[2] Static.
1

Configuring IPv4 Address for LAN 2 (eth0).

Please select the IP assignment method:
[1] DHCP.
[2] Static.
1

Configuring IPv6 address.

Configuring IPv6 Address for LAN 1 (eth1).

Please select the IP assignment method:
[1] DHCP.
[2] Static.
[3] Disabled.
3

Configuring IPv6 Address for LAN 2 (eth0).

Please select the IP assignment method:
[1] DHCP.
[2] Static.
[3] Disabled.
3

Configuring the network.
Configured the network successfully.

Modified configuration for SoftwareUCM instance successfully.

Waiting for SoftwareUCM instance initialization to complete.

```

View The Resource Allocation of The Current Instance

To view the resources allocated to each of the instances, follow the options displayed on the menu. The figure displayed below shows an example of viewing the resources of each instance. The user can view, in real time, Number of CPUs/cores, the CPU usage, memory usage, storage usage, as well as the memory limit and storage limited allocated for each instance.

```
Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
7

Total host resources:
CPU: 2
Memory: 1935 MB
Storage: /container (24.1GB Avail/29.9GB Total)
         /container1 (19.9GB Avail/19.9GB Total)

Instance resource usage:
+-----+-----+-----+-----+-----+-----+-----+-----+
| Name | CPU Limit | CPU % | CPU Affinity | Mem Usage / Limit | Mem % | Storage Usage / Limit | Storage Dir |
+-----+-----+-----+-----+-----+-----+-----+-----+
| ucm1 | 1         | 8.28% | 0             | 422.8MB / 1.0GB   | 41.29% | 1.3GB / 5.0GB         | /container |
+-----+-----+-----+-----+-----+-----+-----+-----+
```

View Instance Resource Usage

Change Instance Resource Limits

When creating an instance, the user sets the resource limits for the instance. If the user wants to increase the capacity of the resources of the instance after the creation, they can follow the menu and the prompts of the console.

```
Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
8

Total host resources:
CPU: 2
Memory: 1935 MB
Storage: /container (24.1GB Avail/29.9GB Total)
         /container1 (19.9GB Avail/19.9GB Total)

Instance resource usage:
+-----+-----+-----+-----+-----+-----+-----+-----+
| Name | CPU Limit | CPU % | CPU Affinity | Mem Usage / Limit | Mem % | Storage Usage / Limit | Storage Dir |
+-----+-----+-----+-----+-----+-----+-----+-----+
| ucm1 | 2         | 5.38% | 0,1          | 494.4MB / 1.0GB   | 48.28% | 1.3GB / 5.0GB         | /container |
+-----+-----+-----+-----+-----+-----+-----+-----+

Please enter SoftwareUCM instance name:
ucm1

Configuring resource limits for instance.

Please enter CPU limit (min 1, max 2, default 1):
1
Do you want to configure CPU affinity for this instance? [y/n] y

Please specify the CPU cores for CPU affinity configuration (e.g. 0-3,5,7): 0

Please enter memory limit (unit MB, min 1024MB, max 1935MB, default 1024MB):
1024
Please enter storage limit (unit GB, min 4GB, max 29GB, default 4GB):
5

Update SoftwareUCM instance resource limit successfully.
```

Instance Resource Limit Configuration

Any resources allocated to a specific instance will be reserved for the instance. Therefore, managing the resources depending on the operational need for each instance is very important.

Reset The Account and Password Instance of The Factory

The user can reset the password of the administrator of SoftwareUCM PBXs from the console menu. Follow the instructions on the menu to reset it successfully.

```
Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
9

Current Instances:
+-----+-----+-----+-----+-----+
| Instance Name | Remark | Status | Version | IP Address |
+-----+-----+-----+-----+-----+
| ucm2          | test   | running | 1.0.32.5 | 172.16.138.71 |
+-----+-----+-----+-----+-----+

Please enter SoftwareUCM instance name:
ucm2

Factory reset the password for SoftwareUCM instance successfully.

Instance Name: ucm2
Username: admin
Password: ggHmNaOMpV
```

SoftwareUCM Instance Username and Password Reset

Factory Reset the Instance

The user can reset a specific instance to factory reset using the console menu.

 **Warning**

Resetting an instance to factory settings will delete all the data and configuration of the specific instance. Make sure to backup the data and configuration before performing a factory reset.

 **Note**

Resetting one instance to factory reset will not affect other instances.

```
Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
10

Current Instances:
+-----+-----+-----+-----+-----+
| Instance Name | Remark | Status | Version | IP Address |
+-----+-----+-----+-----+-----+
| ucm2          | test   | running | 1.0.32.5 | 172.16.138.71 |
+-----+-----+-----+-----+-----+

Please enter SoftwareUCM instance name:
ucm2

Factory resetting will delete all configuration data and files. Proceed?[y/n] y

Factory reset for SoftwareUCM instance ucm2 successfully.

Waiting for SoftwareUCM instance initialization to complete.
The SoftwareUCM instance ucm2 is already accessible.

Instance Name: ucm2
Version: 1.0.32.5
Admin Portal: https://192.168.1.178:8089
               https://172.16.138.71:8089
Initial Username: admin
Initial Password: ggHmNaOMpV
```

SoftwareUCM Instance Factory Reset

Modify Remark

The administrator can add a remark for each SoftwareUCM instance as a description to help identifying each instance easily.

```
Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
11

Current Instances:
+-----+-----+-----+-----+-----+
| Instance Name | Remark | Status | Version | IP Address |
+-----+-----+-----+-----+-----+
| ucm2          | test   | running | 1.0.32.5 | 192.168.1.178 |
+-----+-----+-----+-----+-----+

Please enter SoftwareUCM instance name:
ucm2

Please enter remark for instance (Optional. Supports 1-128 letters, digits, special characters and spaces):
test 123

Successfully modified remark for SoftwareUCM instance ucm2.
```

Modify Remark

Disk Management

List Disks

In Disk Management, the user can view information about the disk(s) attached to the system. The information displayed include the disk name, the total capacity of the disks, the disk model, whether the disk is used or not, and on which container the disk is mounted.

```
Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
12

Please enter select:
[1] List Disks.
[2] Disk Expansion (only for non-RAID mount points of virtual machines).
[0] Exit.
1

+-----+-----+-----+-----+-----+-----+
| Device |          Model          | State | Mounted on |
+-----+-----+-----+-----+-----+-----+
| sda    | Dahua C800 2.5 inch SATA 256GB SSD | Active | /container (default) |
228.4GB | Over-allocation | firmware(1.7GB) ucml(228.0GB) |
+-----+-----+-----+-----+-----+-----+
| sdb    | WDC WD5000AZLX-60K2TA0          | Unused |              |
465.8GB | -                               |        |              |
+-----+-----+-----+-----+-----+-----+

Warning: The allocated space for the /container directory has been exceeded. It
is recommended to upgrade the container to the same version to optimize firmware
usage, or to migrate the affected instances to another disk to prevent any pote
ntial disruption.
```

Disk Expansion

Please refer to the following guides for disk expansion depending on the hypervisor used.

- **VMware Workstation:** <https://documentation.grandstream.com/knowledge-base/softwareucm-disk-expansion-vmware-workstation/>
- **Oracle Virtualbox:** <https://documentation.grandstream.com/knowledge-base/softwareucm-disk-expansion-virtualbox/>
- **KVM:** <https://documentation.grandstream.com/knowledge-base/softwareucm-disk-expansion-kvm/>
- **HyperV:** <https://documentation.grandstream.com/knowledge-base/softwareucm-disk-expansion-hyperv/>

Migrate SoftwareUCM

Using this feature, the user can migrate the SoftwareUCM files from one partition to another or from a disk to another.

 **Caution**

During the migration process, the target partition will be formatted and any data which had been stored prior will be permanently lost.

Follow the instructions below to migrate a SoftwareUCM to a different disk.

1. Access "SoftwareUCM Management" by typing 1, press enter.
2. Access "Migrate SoftwareUCM" by entering 13.
3. Enter the name of the instance of the SoftwareUCM.
4. Enter the number that corresponds to the disk that you want to migrate the files to.

```
SoftwareUCM ISO 1.0.3.6

Please enter select:
[1] SoftwareUCM Management.
[2] System Information.
[3] System Settings.
[4] Maintenance.
[5] API Configuration.
[0] Exit.
1

Please enter select:
[1] List SoftwareUCMs.
[2] Create SoftwareUCM.
[3] Delete SoftwareUCM.
[4] Restart SoftwareUCM.
[5] Network Details.
[6] Network Settings.
[7] Show Resource Usage.
[8] Change Resource Limit.
[9] Reset Factory Password.
[10] Factory Reset.
[11] Modify Remark.
[12] Disk Management.
[13] Migrate SoftwareUCM.
[0] Exit.
13

Current Instances:
+-----+-----+-----+-----+-----+
| Instance Name | Remark | Status | Version | IP Address |
+-----+-----+-----+-----+-----+
| ucm1          |        | running | 1.0.33.7 | 10.0.2.15  |
+-----+-----+-----+-----+-----+

Please enter SoftwareUCM instance name:
ucm1

Please select a storage disk:
[1] VBOX HARDDISK: sdb (20.0GB).
_
```

SoftwareUCM Instance Migration Configuration

5. Wait for migration process to finish. Once done, the message in the screenshot below will be displayed.

```
Please select a storage disk:
[1] VBOX HARDDISK: sdb (20.0GB).
1

This disk is a new disk and will be formatted. Do you want to continue?[y/n] y

The disk is formatted successfully and mounted to the directory /container1.

The instance ucm1 was successfully migrated.

Waiting for SoftwareUCM instance initialization to complete.
The SoftwareUCM instance ucm1 is already accessible.

Instance Name: ucm1
Admin Portal: https://10.0.2.15:8089
```

Successful Migration

SYSTEM STATUS

View System Status

To view the resources occupied by SoftwareUCM system access “System Information”, then access “System Status”, the console will display periodic updates about the resources of the system.

```
Please enter select:
[1] SoftwareUCM Management.
[2] System Information.
[3] System Settings.
[4] Maintenance.
[5] API Configuration.
[0] Exit.
2

Please enter select:
[1] System Status.
[2] Storage Usage.
[0] Exit.
1

top - 05:45:17 up 1:36, 1 user, load average: 0.07, 0.09, 0.10
%Cpu0  :  6.2 us,  6.2 sy,  0.0 ni, 87.5 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
%Cpu1  :  0.0 us,  0.0 sy,  0.0 ni,100.0 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
%Cpu2  :  0.0 us,  0.0 sy,  0.0 ni,100.0 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
%Cpu3  :  0.0 us,  0.0 sy,  0.0 ni,100.0 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :  3915.2 total,  1566.8 free,  1023.4 used,  1592.5 buff/cache

top - 05:45:20 up 1:36, 1 user, load average: 0.06, 0.08, 0.10
%Cpu0  :  1.0 us,  1.7 sy,  0.0 ni, 97.3 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
%Cpu1  :  1.0 us,  2.7 sy,  0.0 ni, 96.0 id,  0.0 wa,  0.3 hi,  0.0 si,  0.0 st
%Cpu2  :  0.7 us,  2.3 sy,  0.0 ni, 96.7 id,  0.0 wa,  0.0 hi,  0.0 si,  0.3 st
%Cpu3  :  1.3 us,  2.0 sy,  0.0 ni, 96.3 id,  0.0 wa,  0.0 hi,  0.3 si,  0.0 st
MiB Mem :  3915.2 total,  1565.3 free,  1024.9 used,  1592.5 buff/cache
```

System Status

View Disk Usage

The system allows viewing the information related to the disk(s). To display the disk usage statistics, access “System Information”, then access “Storage Usage”.

```
Please enter select:
[1] SoftwareUCM Management.
[2] System Information.
[3] System Settings.
[4] Maintenance.
[5] API Configuration.
[0] Exit.
2

Please enter select:
[1] System Status.
[2] Storage Usage.
[0] Exit.
2

+-----+-----+-----+-----+-----+
| Mounted on | Size  | Used  | Avail | Use%  |
+-----+-----+-----+-----+-----+
| /          | 8.9GB | 1.4GB | 7.6GB | 15.19% |
| /container | 9.9GB | 1.4GB | 8.5GB | 13.97% |
+-----+-----+-----+-----+-----+
```

System Information

SYSTEM SETTINGS

The System Settings menu allows the user to view and change the network settings of the system, and perform a ping test to ensure that the system can reach LAN and WAN hosts.

Network Settings

Enter network settings by following the instructions.

```
Please enter select:
[1] SoftwareUCM Management.
[2] System Information.
[3] System Settings.
[4] Maintenance.
[5] API Configuration.
[0] Exit.
3

Please enter select:
[1] Network Settings.
[2] NTP Settings.
[0] Exit.
1

Please enter select:
[1] View current network configuration.
[2] Update network configuration.
[3] IP Ping.
[0] Exit.
```

Network Settings

- View current network configuration

```
Please enter select:
[1] View current network configuration.
[2] Update network configuration.
[3] IP Ping.
[0] Exit.
1

Device: eth0
Link State: up
Method: Static
IP: 172.16.138.84
Netmask: 255.255.255.0
Gateway: 172.16.138.1
DNS: 8.8.8.8
```

View Network Configuration

- Update network configuration

```

Please enter select:
[1] View current network configuration.
[2] Update network configuration.
[3] IP Ping.
[0] Exit.
2

Please select method:
[1] DHCP.
[2] Static.
[0] Exit.
2

Please enter IP address:
172.16.138.84
Please enter netmask:
255.255.255.0
Please enter gateway:
172.16.138.1
Please enter DNS server:
8.8.8.8

Configured the network successfully.

```

Update Network Configuration

- **Initiate ping request from SoftwareUCM**

```

Please enter select:
[1] View current network configuration.
[2] Update network configuration.
[3] IP Ping.
[0] Exit.
3

Please enter target host:
192.168.121.1

PING 192.168.121.1 (192.168.121.1) 56(84) bytes of data.
64 bytes from 192.168.121.1: icmp_seq=1 ttl=254 time=2.88 ms
64 bytes from 192.168.121.1: icmp_seq=2 ttl=254 time=0.875 ms
64 bytes from 192.168.121.1: icmp_seq=3 ttl=254 time=0.803 ms
64 bytes from 192.168.121.1: icmp_seq=4 ttl=254 time=2.19 ms
64 bytes from 192.168.121.1: icmp_seq=5 ttl=254 time=0.697 ms

--- 192.168.121.1 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4005ms
rtt min/avg/max/mdev = 0.697/1.471/2.795/0.856 ms

```

Ping Test

NTP Settings

In NTP settings, the user can define an NTP server address from which the system will acquire the date and time configuration.

1. Enter NTP Settings

```
Please enter select:
[1] SoftwareUCM Management.
[2] System Information.
[3] System Settings.
[4] Maintenance.
[5] API Configuration.
[0] Exit.
3

Please enter select:
[1] Network Settings.
[2] NTP Settings.
[0] Exit.
2

Please enter select:
[1] View current NTP server and time.
[2] Change NTP server.
[3] Sync time now.
[0] Exit.
```

NTP Settings

2. View the current NTP server and time

```
Please enter select:
[1] View current NTP server and time.
[2] Change NTP server.
[3] Sync time now.
[0] Exit.
1

Current Time: 2024-12-26 03:05:55 UTC
NTP Server: cn.pool.ntp.org
```

View Current NTP Server and Time

3. Change the NTP server.

```
Please enter select:
[1] View current NTP server and time.
[2] Change NTP server.
[3] Sync time now.
[0] Exit.
2

Please enter NTP server:
cn.pool.ntp.org

Changed NTP server successfully.
```

Change NTP Server

4. Sync time now

```
Please enter select:
[1] View current NTP server and time.
[2] Change NTP server.
[3] Sync time now.
[0] Exit.
3

Synced time successfully.

Current Time: 2024-12-26 02:54:15 UTC
```

Synchronize the Time and Date

RPS (Receive Packet Steering)

Receive Packet Steering is a technique that used to balance the load between multiple network interfaces to avoid receiving and sending network data over one interface resulting in creating a bottleneck.

 **Note**

RPS (Receive Packet Steering) is enabled by default.

1. Enter RPS Settings

```
Please enter select:
[1] SoftwareUCM Management.
[2] System Information.
[3] System Settings.
[4] Maintenance.
[5] API Configuration.
[0] Exit.
3

Please enter select:
[1] Network Settings.
[2] NTP Settings.
[3] RPS (Receive Packet Steering).
[0] Exit.
3

Please enter select:
[1] View current RPS status.
[2] Enable RPS.
[3] Disable RPS.
[0] Exit.
```

RPS Receive Packet Steering Settings

2. View current RPS Status

```
Please enter select:  
[1] View current RPS status.  
[2] Enable RPS.  
[3] Disable RPS.  
[0] Exit.  
1
```

```
Status: ON
```

```
Please enter select:  
[1] View current RPS status.  
[2] Enable RPS.  
[3] Disable RPS.  
[0] Exit.
```

View RPS Current Status

3. Enable RPS

```
Please enter select:  
[1] View current RPS status.  
[2] Enable RPS.  
[3] Disable RPS.  
[0] Exit.  
2
```

```
Enabled RPS access successfully.
```

```
Please enter select:  
[1] View current RPS status.  
[2] Enable RPS.  
[3] Disable RPS.  
[0] Exit.  
1
```

```
Status: ON
```

Enable RPS

4. Disable RPS

```
Please enter select:
[1] View current RPS status.
[2] Enable RPS.
[3] Disable RPS.
[0] Exit.
3

Disabled RPS access successfully.

Please enter select:
[1] View current RPS status.
[2] Enable RPS.
[3] Disable RPS.
[0] Exit.
1

Status: OFF
```

Disable RPS

MAINTENANCE

Under the Maintenance section, the user can do the following:

- Install a patch for the system.
- Change the password for the user "support".
- Enable or disable SSH access.
- Expand the storage space for the system, in case it is installed on a virtual machine.

```
Please enter select:
[1] SoftwareUCM Management.
[2] System Information.
[3] System Settings.
[4] Maintenance.
[5] API Configuration.
[0] Exit.
4

Please enter select:
[1] Install patch.
[2] Change password for user "support".
[3] SSH Access.
[4] Disk Expansion (only for virtual machines).
[0] Exit.
```

Maintenance Menu

Install Patch

```
Please enter select:
[1] Install patch.
[2] Change password for user "support".
[3] SSH Access.
[4] Disk Expansion (only for virtual machines).
[0] Exit.
1

Please enter the patch download URL:
https://192.168.121.2:444/softucm/softwareucm.bin

Downloading patch from https://192.168.121.2:444/softucm/softwareucm.bin.
Installing patch.
Installed patch successfully.
```

Install Patch

Change Password for User “support”

```
Please enter select:
[1] Install patch.
[2] Change password for user "support".
[3] SSH Access.
[4] Disk Expansion (only for virtual machines).
[0] Exit.
2

Change password for user "support" (8-32 characters).
Current Password:
New Password:
Retype new password:
Password configured successfully.
```

Password Changed Successfully

SSH Access Configuration

SSH allows to access and manage the system remotely. It requires enabling SSH from the console menu. The steps below illustrate how to enable SSH.

 **Note**

SSH access is disabled by default.

- 1. Enter SSH Access.

```
Please enter select:
[1] SoftwareUCM Management.
[2] System Status.
[3] System Settings.
[4] Maintenance.
[5] API Configuration.
[0] Exit.
4

Please enter select:
[1] Install patch.
[2] Change password for user "support".
[3] SSH Access.
[4] Disk Expansion (only for virtual machines).
[0] Exit.
3

Please enter select:
[1] View current SSH status.
[2] Enable SSH.
[3] Disable SSH.
[0] Exit.
```

SSH Configuration

- 2. View current SSH status.

```
Please enter select:
[1] View current SSH status.
[2] Enable SSH.
[3] Disable SSH.
[0] Exit.
1

SSH access status: disabled

Please enter select:
[1] View current SSH status.
[2] Enable SSH.
[3] Disable SSH.
[0] Exit.
```

View SSH Status

- 3. Enable SSH.

```
Please enter select:
[1] View current SSH status.
[2] Enable SSH.
[3] Disable SSH.
[0] Exit.
2

Please enter SSH port:
222
Please enter SSH access key (8-32 character):
12345678

Enabled SSH access successfully.

SSH access IP: 172.16.138.84
SSH access port: 222

Please enter select:
[1] View current SSH status.
[2] Enable SSH.
[3] Disable SSH.
[0] Exit.
1

SSH access status: enabled
SSH access IP: 172.16.138.84
SSH access port: 222

Please enter select:
[1] View current SSH status.
[2] Enable SSH.
[3] Disable SSH.
[0] Exit.
```

Enable SSH

If the user is encountering issues with the general functioning of the SoftwareUCM, the user can provide the access IP address, the access port, and the access key.

4. Disable SSH.

```
Please enter select:
[1] View current SSH status.
[2] Enable SSH.
[3] Disable SSH.
[0] Exit.
3

Disabled SSH access successfully.

Please enter select:
[1] View current SSH status.
[2] Enable SSH.
[3] Disable SSH.
[0] Exit.
1

SSH access status: disabled

Please enter select:
[1] View current SSH status.
[2] Enable SSH.
[3] Disable SSH.
[0] Exit.
```

Disable SSH

Disk Expansion (Only for virtual machines)

Please refer to the Disk Expansion user guides.

- [SoftwareUCM Disk Expansion – VMWare Workstation Guide.](#)
- [SoftwareUCM Disk Expansion – VirtualBox Guide.](#)
- [SoftwareUCM Disk Expansion – KVM Guide.](#)
- [SoftwareUCM Disk Expansion – Hyper-V Guide.](#)

API CONFIGURATION

API Configuration menu allows the user to enable/disable access to the API of the SoftwareUCM instance(s).

1. Enter the API Configuration.

```
Please enter select:
[1] SoftwareUCM Management.
[2] System Information.
[3] System Settings.
[4] Maintenance.
[5] API Configuration.
[0] Exit.
5

Please enter select:
[1] View current API status.
[2] Enable API.
[3] Disable API.
[0] Exit.
```

API Configuration Menu

2. View API’s current status.

```
Please enter select:
[1] View current API status.
[2] Enable API.
[3] Disable API.
[0] Exit.
1

API status: disabled
```

View API Status

3. Enable API.

```
Please enter select:
[1] View current API status.
[2] Enable API.
[3] Disable API.
[0] Exit.
2

Please enter API ID (8-32 characters):
SoftwareUCM
Please enter API key (8-32 characters):
APIKey@123

Enabled API successfully.

Please enter select:
[1] View current API status.
[2] Enable API.
[3] Disable API.
[0] Exit.
1

API status: enabled
API ID: SoftwareUCM
API Key: APIKey@123
```

Enable API

4. Disable API.

```
Please enter select:
[1] View current API status.
[2] Enable API.
[3] Disable API.
[0] Exit.
3

Disabled API successfully.

Please enter select:
[1] View current API status.
[2] Enable API.
[3] Disable API.
[0] Exit.
1

API status: disabled
```

Disable API