



Akkadian Contact Manager

4.0.0 — Last update: 2020/01/21

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Introduction

Akkadian Contact Manager simplifies directory management for IT while providing an intuitive directory search interface, making it easy to locate and connect with contacts. This manual will guide you through the process of deploying and configuring Akkadian Contact Manager. This manual will guide you through the process of deploying and configuring Akkadian Contact Manager.

1. Requirements and Limitations

The following sections provide information about the requirements that your system must meet, and limitations that apply when you install or upgrade Akkadian Contact Manager.

1.1 Virtual Machine Requirements

Akkadian Contact Manager 4.0 is a Linux based Virtual Appliance supported on VMware ESXi.

Supported Versions of VMware vSphere ESXi = 5.0 U1, 5.1, 5.5, 6.0, and 6.5.

The recommended server requirements for Akkadian Contact Manager depend on several variables.

To assist with allocating the proper resources for Contact Manager 3.5, use the Table below to determine the appropriate system resources.

Size	Contacts	End Users	vCPU	vRAM	vDISK	vNIC
Small	500,000	1 – 5,000	2	8	1 × 120 GB	1
Medium	1,000,000	5,000 – 15,000	2	12	1 × 120 GB	1
Large	1,000,000+	15,000 – 30,000	4	16	1 × 120 GB	1

- Applications servers are defined as configured applications servers in Contact Manager and are not related to the number of servers with a cluster.
- Minimum of 2000 MHz reserved

1.2 Application Support

Contact Manager provides support for the following applications:

Application	Versions
Cisco Unified Communications Manager	10.x – 12.x

1.3 Supported Devices

Akkadian Contact Manager supports the following Cisco IP Phones:

- Cisco 7925
- Cisco 7937
- Cisco 794X/796X
- Cisco 797X
- Cisco 88XX
- Cisco 8961
- Cisco 9951
- Cisco 9971
- Cisco DX650
- Cisco DX70
- Cisco DX80

1.4 SMTP Requirements

Akkadian Contact Manager requires an SMTP server to send users their initial password as well as other important notifications. Ensure that Contact Manager is authorized to send mail via the configured SMTP server.

1.5. Browser Support

Contacting Manager supported browsers:

- Microsoft Internet Explorer 11+
- Microsoft Edge 39+
- Mozilla Firefox 53+
- Chrome 50+

1.6 Network Requirements

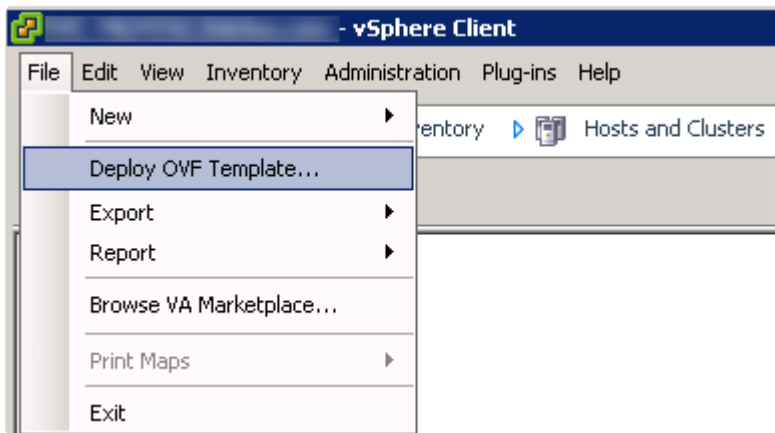
Akkadian Contact Manager communicates on the following ports:

Traffic	Port	Direction
Application Web Access	TCP Port 80 (HTTP) TCP Port 443 (HTTPS)	Inbound —> Contact Manager
SSH	TCP Port 22	Inbound —> Contact Manager
SMTP	TCP Port 25	Contact Manager —> Outbound to Mail Server
FTP	TCP Port 21	Contact Manager —> Outbound to FTP Server
Secure FTP	TCP Port 22	Contact Manager —> Outbound to SFTP Server
LDAP	TCP Port 389	Contact Manager —> LDAP Server
LDAP Global Catalog	TCP Port 3268	Contact Manager —> LDAP Global Catalog Server
CUCM UDS/AXL	TCP Port 8443	Contact Manager —> CUCM UDS/AXL

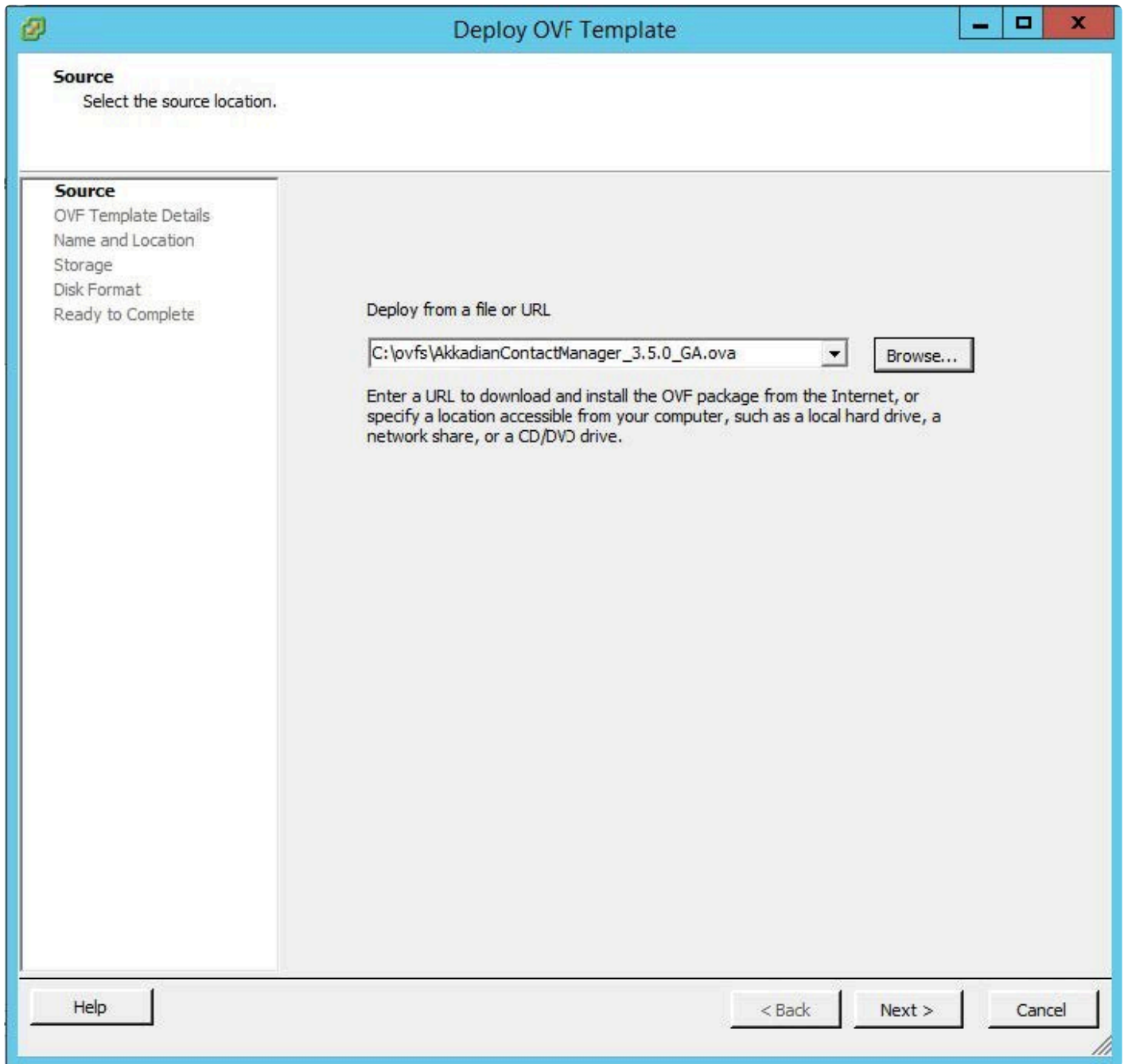
2. Virtual Appliance Deployment

Akkadian Contact Manager is deployed as a virtual appliance on VMware ESXi versions 5.x and above. The steps below will help guide you through the process of deploying the virtual appliance; however, you should understand VMware or contact your VMware administrator for assistance.

1. Download the latest Akkadian Contact Manager OVA to a location accessible by the vSphere client.
2. From the vSphere client select **Deploy OVF Template** from the **File** menu.



3. Select the OVA from the computer or network location and click Next to continue.



4. Review the License Agreement and click **Next** to continue.

End User License Agreement

Accept the end user license agreements.

[Source](#)
[OVF Template Details](#)
End User License Agreement
 Name and Location
 Storage
 Disk Format
 Ready to Complete

AKKADIAN LABS LLC
END-USER LICENSE AGREEMENT

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 - Limitations On Reverse Engineering, Decompilation, Disassembly.** You agree not to, or

5. Specify the name and location for the VMware machine and click Next to continue.

The screenshot shows a Windows-style window titled "Deploy OVF Template". The window has a standard title bar with minimize, maximize, and close buttons. The main content area is divided into a left sidebar and a main panel. The sidebar contains a list of steps: "Source", "OVF Template Details", "End User License Agreement", "Name and Location" (which is highlighted with a plus icon), "Host / Cluster", "Resource Pool", "Disk Format", and "Ready to Complete". The main panel is titled "Name and Location" with the instruction "Specify a name and location for the deployed template". It contains a "Name:" label followed by a text input field containing "akkadian Contact Manager". Below this is a note: "The name can contain up to 80 characters and it must be unique within the inventory folder." Below the note is an "Inventory Location:" label followed by a large, empty text area. At the bottom of the window, there are three buttons: "Help", "< Back", and "Next >", and a "Cancel" button on the far right.

Deploy OVF Template

Name and Location
Specify a name and location for the deployed template

[Source](#)
[OVF Template Details](#)
[End User License Agreement](#)
Name and Location
[Host / Cluster](#)
Resource Pool
Disk Format
Ready to Complete

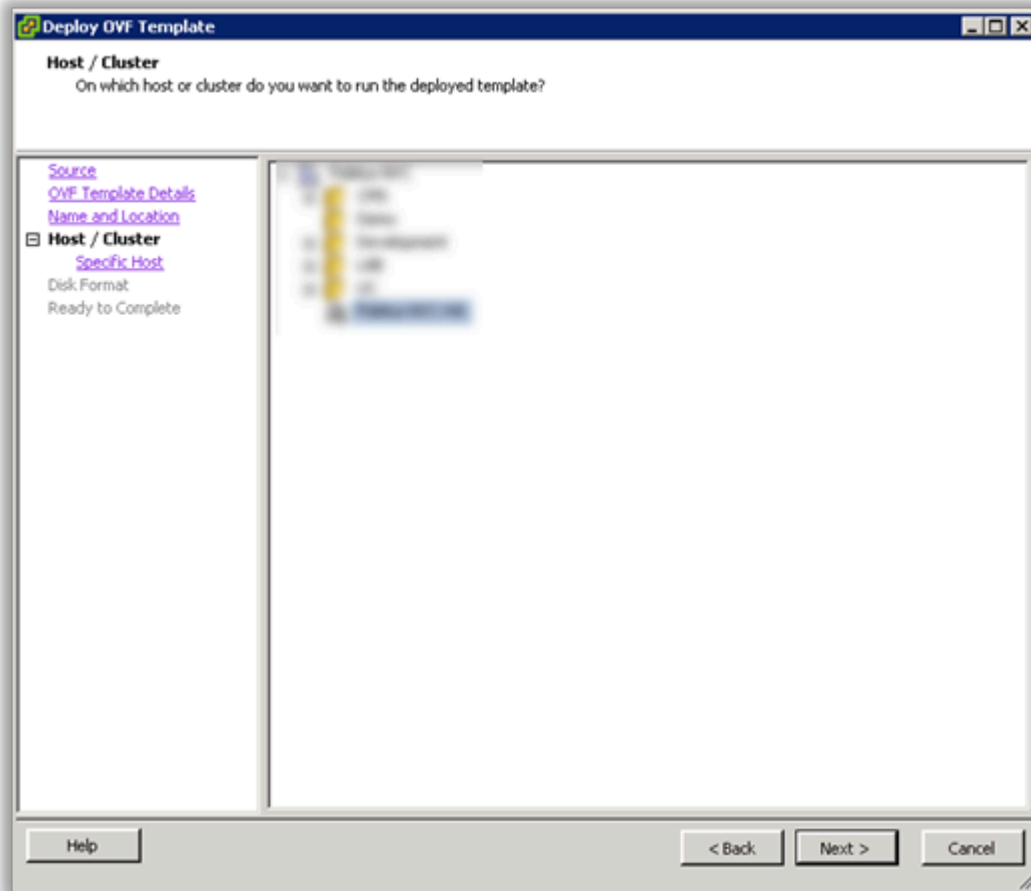
Name:
akkadian Contact Manager

The name can contain up to 80 characters and it must be unique within the inventory folder.

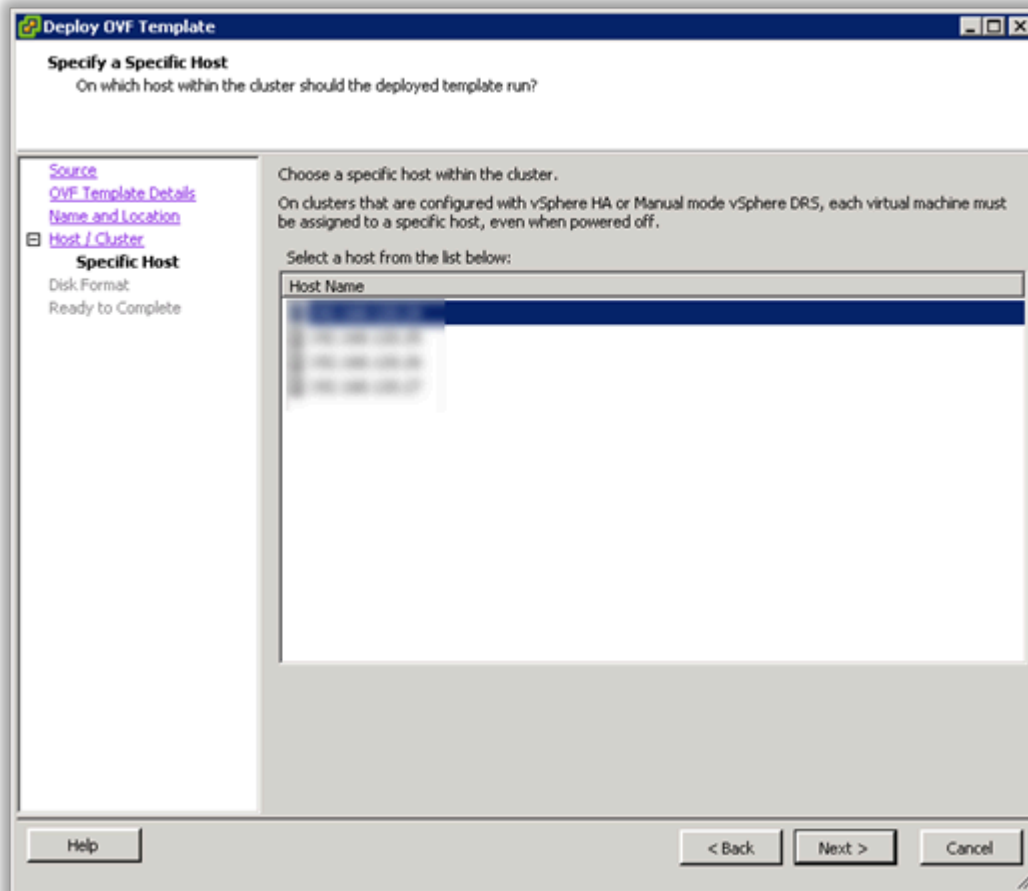
Inventory Location:

Help < Back Next > Cancel

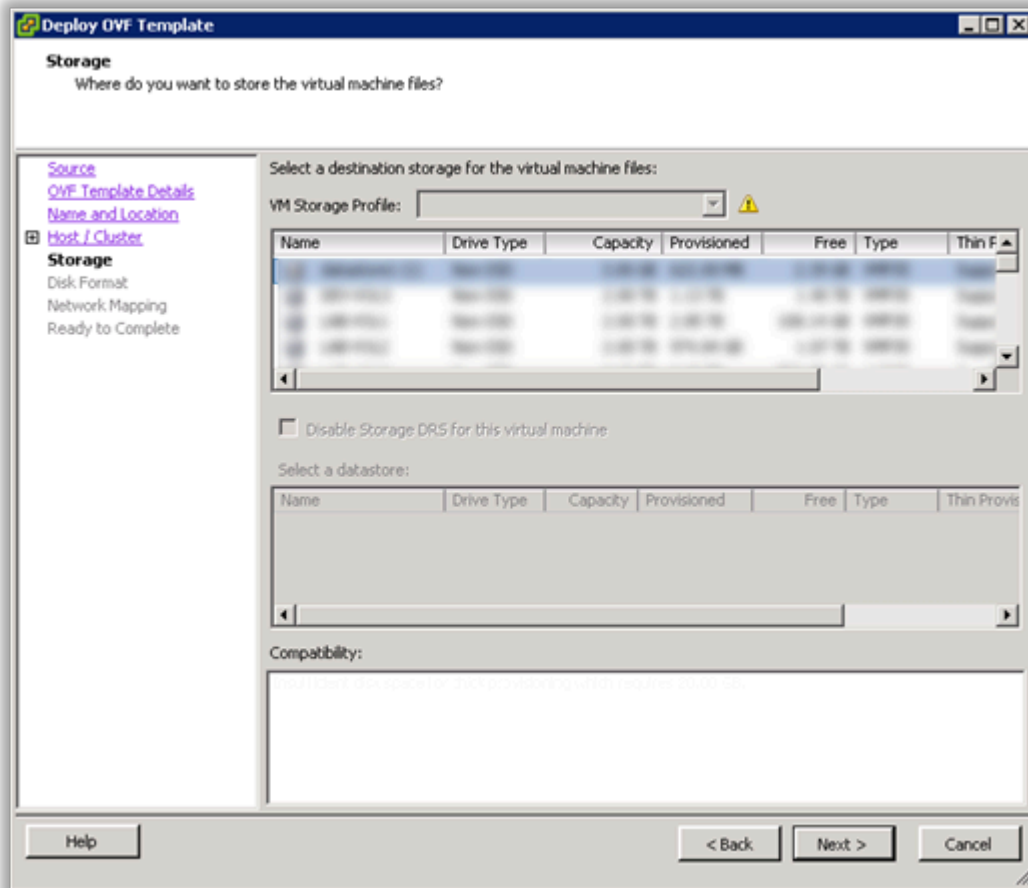
6. Specify the VMware Host / Cluster and click **Next** to continue.



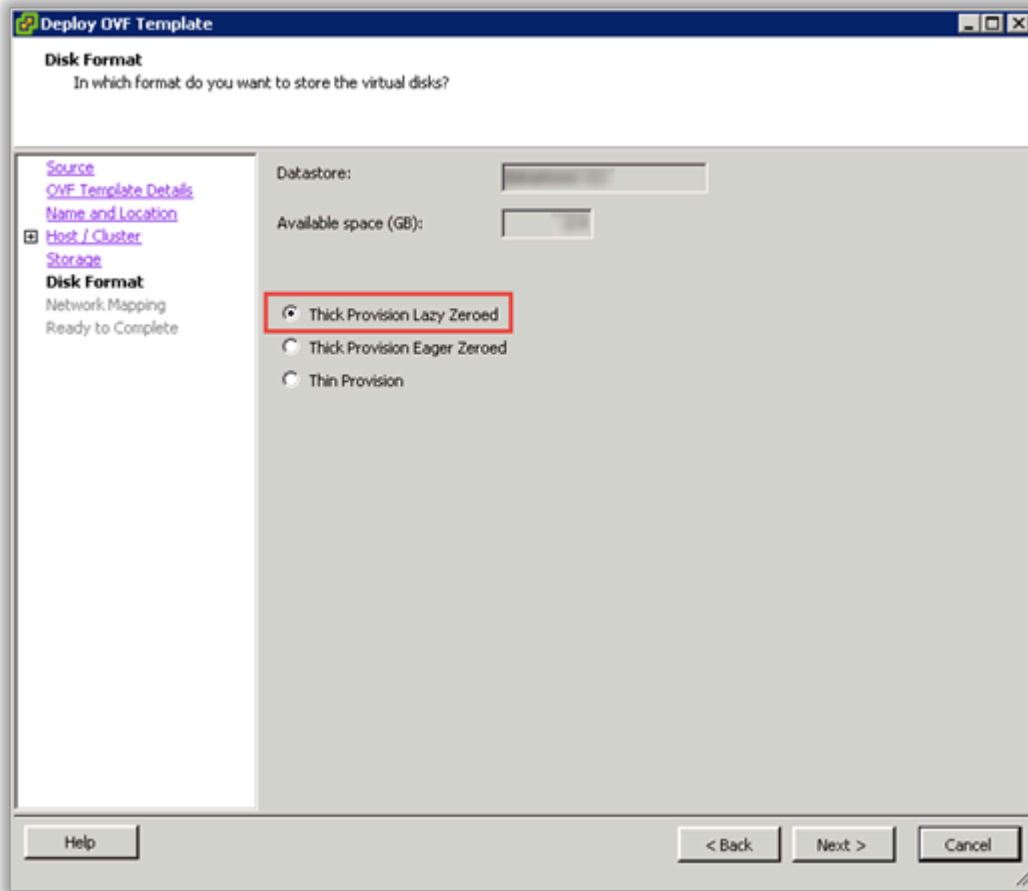
7. Specify a host within the cluster and click Next to continue.



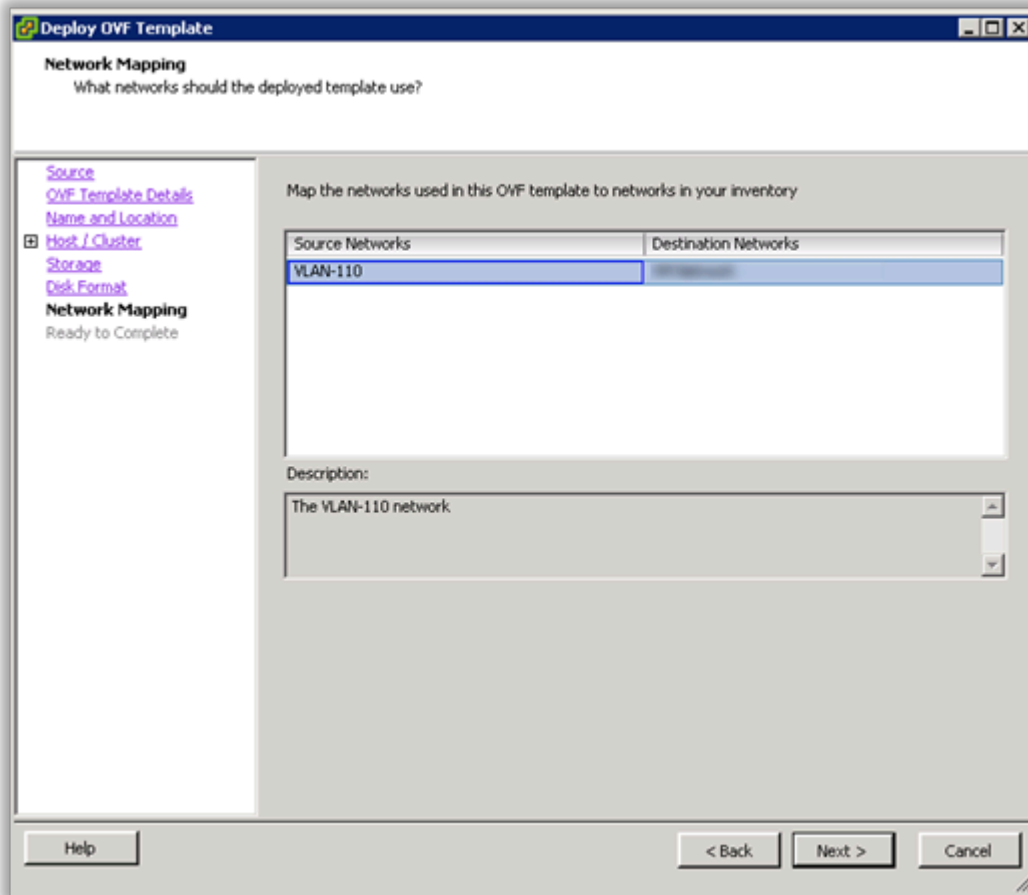
8. Specify the storage location for the virtual machine and click Next to continue.



9. Select Thick Provision Lazy Zeroed and click Next to continue.



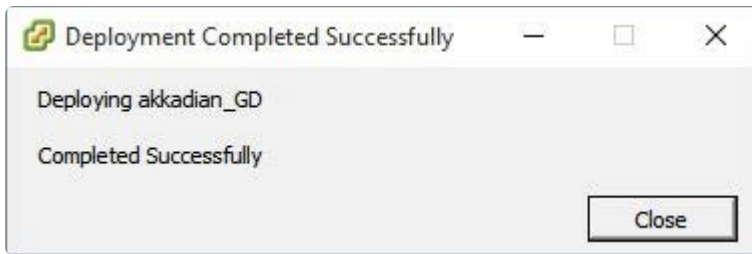
10. Select the Destination Network for the virtual machine and click Next to continue.



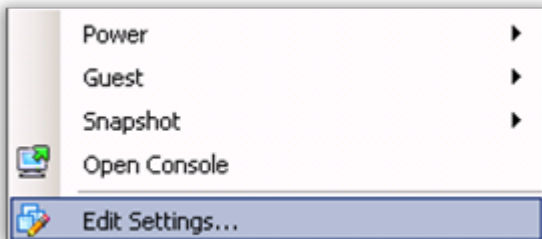
11. Verify the virtual machine settings. The initial OVA deploys with 2 vCPU and 8GB Memory. Depending on your system requirements, you may need to adjust the virtual CPU and Memory settings. Please refer to the [virtual machine requirements](#) to determine the appropriate settings for your environment.



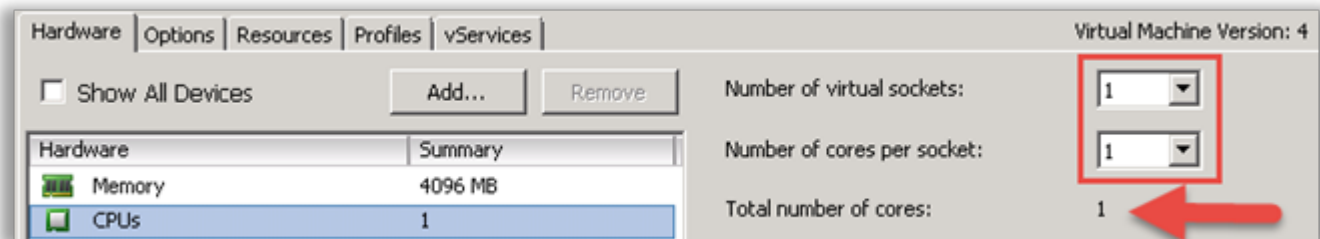
12. Click OK to complete the deployment.



13. To adjust the virtual machine CPU and Memory, locate the newly deployed virtual machine in vCenter, right click on the virtual machine and select Edit Settings.



14. On the Hardware tab, select CPU and adjust the setting to provide the required number of cores for your environment.



15. After adjusting the CPU, click on Memory and adjust the settings to provide the required resources for your environment. When completed, click OK to commit the changes.
16. Power on the virtual machine and proceed.
17. Locate the virtual machine in vSphere and open a console.
18. When the server boot process is complete, the system will arrive at a login prompt. Login using:

Username	akkadianuser
Password	akkadianpassword

```
login as: █
```

19. You Will be presented with the Akkadian Appliance Manager Main Menu

```
#
# Welcome to Akkadian Appliance Manager #
#
#####
Main Menu:
 1: Configure Network
 2: Configure Time
 3: Update Akkadian Products
 4: Product Settings Menu
 5: Update Appliance Manager
 6: High Availability
 r: Reboot Server
 s: Shutdown Server
 q: Quit Akkadian Appliance Manager
You can press 'CTRL+C' at any time to exit from an action
and return to the previous menu.

Use the following url to manage the application http://

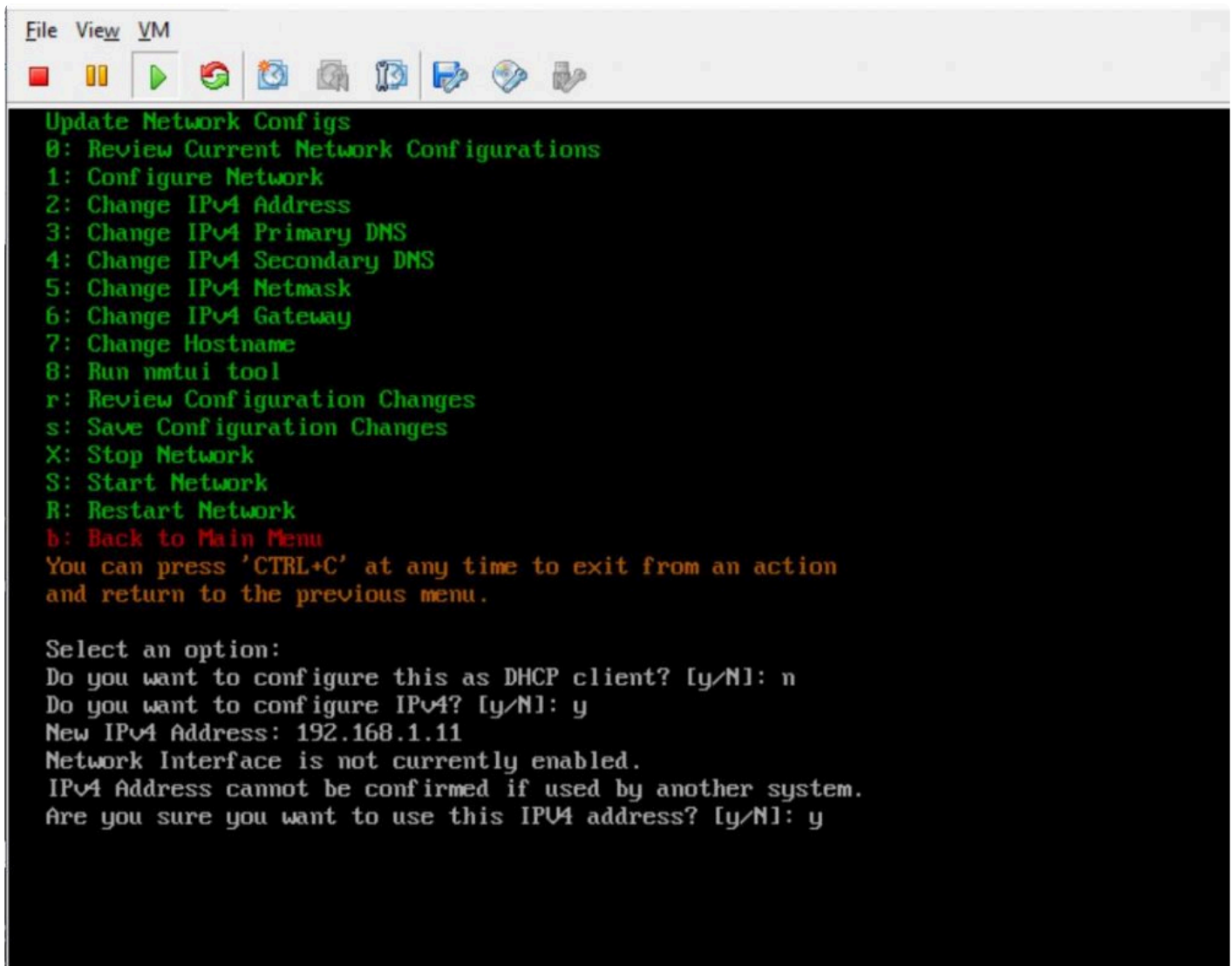
With https://

Select an option: █
```

20. Select option 1 to configure the network setting.

```
#####  
#                               #  
# Welcome to Akkadian Appliance Manager #  
#                               #  
#####  
Main Menu:  
  1: Configure Network  
  2: Configure Time  
  3: Update Akkadian Products  
  4: Product Settings Menu  
  5: Update Appliance Manager  
  6: High Availability  
  r: Reboot Server  
  s: Shutdown Server  
  q: Quit Akkadian Appliance Manager  
  You can press 'CTRL+C' at any time to exit from an action  
  and return to the previous menu.  
  
Use the following url to manage the application http://  
  
With https://  
  
Select an option:  
0.ensl60  
b. Back to Main Menu  
Please select a network interface to configure: █
```

21. Follow the prompt to configure the network settings for your environment.



```

File View VM
[Icons]

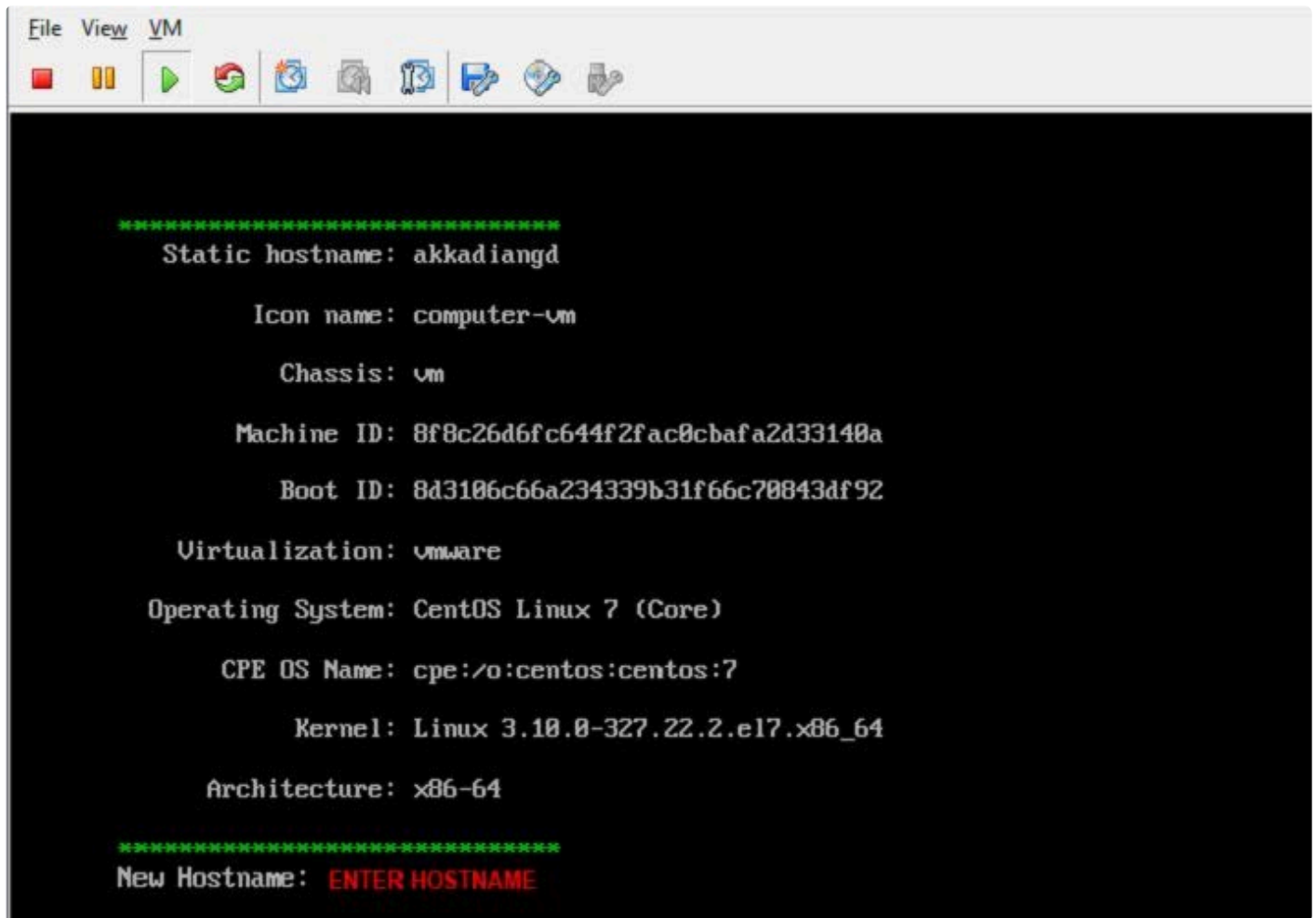
Update Network Configs
0: Review Current Network Configurations
1: Configure Network
2: Change IPv4 Address
3: Change IPv4 Primary DNS
4: Change IPv4 Secondary DNS
5: Change IPv4 Netmask
6: Change IPv4 Gateway
7: Change Hostname
8: Run nmtui tool
r: Review Configuration Changes
s: Save Configuration Changes
X: Stop Network
S: Start Network
R: Restart Network
b: Back to Main Menu
You can press 'CTRL+C' at any time to exit from an action
and return to the previous menu.

Select an option:
Do you want to configure this as DHCP client? [y/N]: n
Do you want to configure IPv4? [y/N]: y
New IPv4 Address: 192.168.1.11
Network Interface is not currently enabled.
IPv4 Address cannot be confirmed if used by another system.
Are you sure you want to use this IPv4 address? [y/N]: y

```

22. Select option 7 from the network configuration menu to configure the hostname. It is recommended the hostname is entered using the fully qualified domain name.

Example – Contact Manager.yourdomain.com



23. Optionally you may configure the server time by selecting option 2 from the configure network menu.
24. It is recommended you change the default Akkadian Appliance Manager password by selecting option 5 (Update Appliance Manager) from the main menu and then selecting "3" (Change Appliance Manager user Password).

```
Update Akkadian Appliance Manager
0: Current Appliance Manager Version
1: Update Appliance Manager Using URL/Local Media
2: Restart Appliance Manager
3: Change Appliance Manager user Password
4: Change folder owner
b: Back to Main Menu
You can press 'CTRL+C' at any time to exit from an action
and return to the previous menu.

Select an option: 
```

25. When all configurations are complete, select “s” from the network configuration menu to save the configuration and restart the network.
26. From the main menu, select Reboot Server to finalize the configuration.
27. When the system returns to the login prompt, the Akkadian Contact Manager virtual appliance deployment is complete and can be accessed by going to <https://{Server IP or Name}/acm>.

2.1 High Availability

Akkadian Contact Manager supports **High Availability**.

High Availability (HA) aims to ensure an agreed level of operational performance, usually uptime, for higher than normal periods

Pre-requisites for High Availability:

- All nodes have been assigned with a correct IP address
- All nodes have a FQDN (name.domain.com)
- All nodes should be accessible via DNS

HA Requirement for Contact Manager

- At least 2 Contact Manager Servers
- 1 Virtual IP Address and Mask

HA Overview:

- HA can be enabled through the CLI.
- Minimum of 2 nodes to a HA cluster
- Maximum of 9 nodes to a cluster.
- End users access application and services via Virtual IP

2.1.1 Enable High Availability

To enable High Availability in Contact Manager:

1. Login to the Akkadian Appliance Manager using:

Username	akkadianuser
Password	akkadianpassword

```
#
# Welcome to Akkadian Appliance Manager #
#
#####
Main Menu:
 1: Configure Network
 2: Configure Time
 3: Update Akkadian Products
 4: Product Settings Menu
 5: Update Appliance Manager
 6: High Availability
 r: Reboot Server
 s: Shutdown Server
 q: Quit Akkadian Appliance Manager
You can press 'CTRL+C' at any time to exit from an action
and return to the previous menu.

Use the following url to manage the application http://

With https://

Select an option: █
```

2. Select Option 6 **High Availability**
3. Select Option 1 – **Enable High Availability**

```

Please follow the steps to configure High Availability
Node 1: acmnode1

Please enter the second Hostname (maximum 15 characters).
Node 2: acmnode2
Do you want to add another Node? [y/N]: n
Virtual IP: 
Virtual IP Mask: 
Cluster Password:
Repeat for confirmation:

Changes to be saved:
Master node: acmnode1
Secondary node 0: acmnode2
Virtual IP: 
Virtual IP Mask: 
Do you want to save changes and enable High Availability? [y/N]: y
Please wait while High Availability is configured and enabled...

```

4. Enter the Secondary Hostname, Virtual IP, and Virtual IP Mask
5. Enter a **Cluster Password** and Repeat for confirmation
6. Enter “y” to save changes and Enable High Availability

When you go back to the main Appliance Manager menu, you will see High Availability is Enabled

```
#####  
#                               #  
# Welcome to Akkadian Appliance Manager #  
#                               #  
#####  
#####  
High Availability is Enabled  
Master Node: acmnode1  
  
Online:  
acmnode1  
acmnode2  
  
#####  
Main Menu:  
  1: Configure Network  
  2: Configure Time  
  3: Update Akkadian Products  
  4: Product Settings Menu  
  5: Appliance Manager Settings  
  6: High Availability  
  r: Reboot Server  
  s: Shutdown Server  
  q: Quit Akkadian Appliance Manager  
  You can press 'CTRL+C' at any time to exit from an action  
and return to the previous menu.
```

3. Initial System Configuration

3.1. Logging into Akkadian Contact Manager

1. Akkadian Contact Manager can be accessed using the following URL:

https://{Server IP or NAME}/acm

2. Log in using the default credentials:

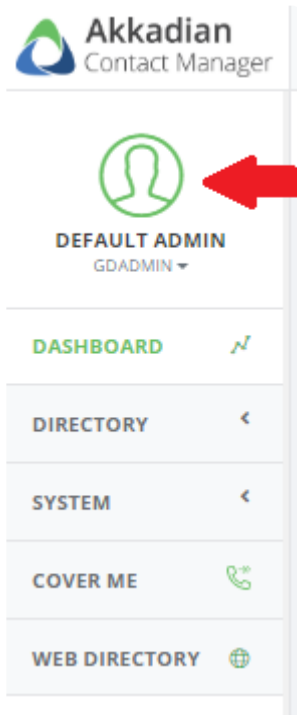
Username	gdadmin
Password	admin (Case sensitive)

The screenshot shows the 'User Login' interface of Akkadian Contact Manager. The page layout includes a top navigation bar with the Akkadian logo and a search directory field. A left sidebar contains a 'Login' button. The main content area is titled 'User Login' and 'Login to Akkadian Contact Manager'. It contains two input fields for 'Username' and 'Password', a 'Remember me' checkbox, a 'Forgot Password' link, and a 'Login' button. The breadcrumb 'Contact Manager / Login' is visible in the top right corner.

3. After logging in, you will be presented with the following menu items to access other features:
 - Dashboard
 - Directory
 - System
 - Cover Me
 - Web Directory

3.1.2 User Profile

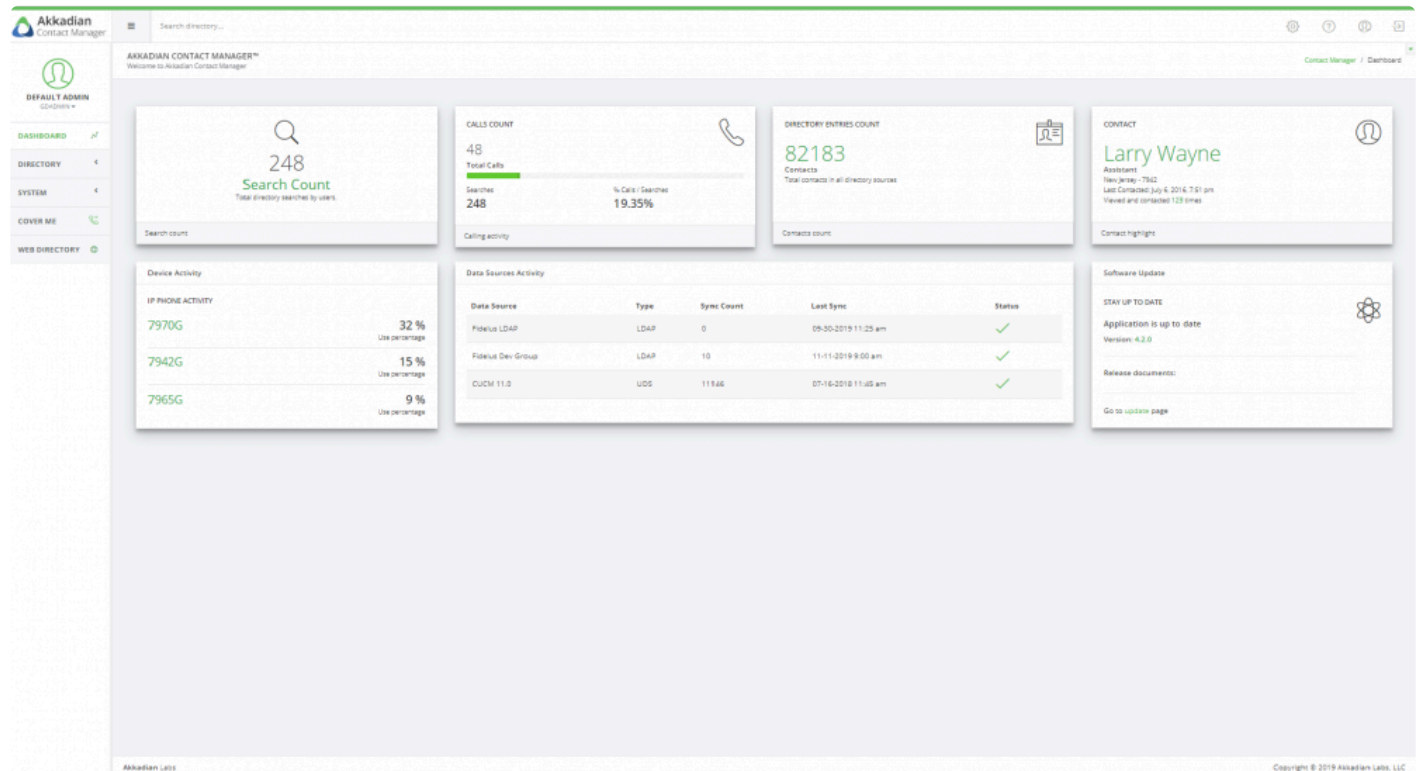
1. After logging in to Akkadian Contact Manager click on user profile image



2. Update the Default Admin's Name and email address and click save **Save**.
3. Click **Password** to update the Default Admin password
4. Enter the **Current Password**, **New Password** and Click **Save**

3.2 Dashboard

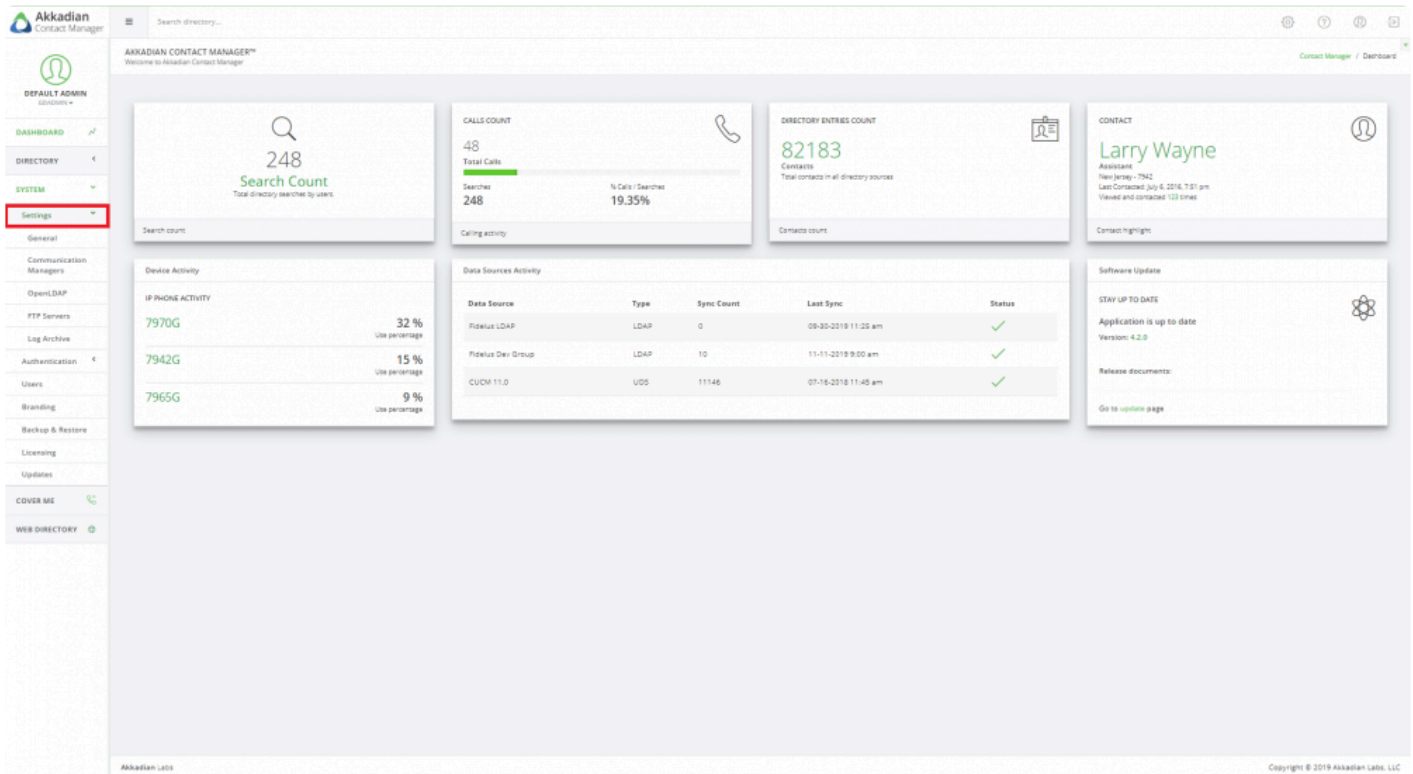
When logging into Contact Manager, you are presented with the user Dashboard



Field	Description
Search Count	Total directory searches by users
Calls Count	Total Calls by users
Directory Entries Count	Displays the total number of contacts from all directory sources
Contact	Displays your most frequent contact
Device Activity	IP phone activity percentage
Data Source Activity	Name, type, entry count, last sync log and status of Data Source
Software Update	Checks with the licensing server to make sure your software is up to date

3.3 Settings

1. Expand **System** menu from the navigation bar and select **Settings** as shown below.



2. Modify the information in the **Company**, **Directory**, **Cover Me**, **CUCM Phone Authentication**, **Admin User Authentication** and **Email Settings** sections as needed.

Field	Description
Company	
Company Name	Company name to display on directories
Directory Title	Directory title to display on directories
Hostname	URL hostname to be used when publishing directories. Hostname must be resolvable. Default setting of localhost will use IP address.
Enable Clustering	Check this box enable high availability
Set as Publisher	Check this box to set this server as the Publisher
Publisher Address	Enter the Publisher IP address or hostname

Field	Description
Public Key	Enter the public key for the publisher server

Directory	
Enable Mobile Directory	Check this box to enable Mobile Directory services. This will allow mobile devices to access Contact Manager services.
Default Directory	Specify the directory service for mobile devices
Default View	Specify the preferred view for the Mobile Directory listing
Use Jabber	Check this box to enable the directory in Jabber.

Cover Me	
Cover Me	Check this box to enable Cover Me. This will allow users to request another user to cover their phone calls for an allotment of time.
Communications Managers	Specify which CUCM you are using for Cover Me Requests

CUCM Phone Authentication	
Authentication Required	Check this box to require Cisco phones to authenticate to access directory
Authentication URL	Provide CUCM authentication URL used for phones to authenticate

Admin User Authentication	
Type	Enter a name to identify this specific LDAP configuration
Base	Enter the LDAP search base
Server	The LDAP server IP address or DNS name
Port	Enter the LDAP server port number
Username	Enter the LDAP Username used to authenticate to the LDAP server
Password	Enter the LDAP Password used to authenticate to the LDAP server
LDAP Username Bind Attribute	Enter LDAP Attribute to bind to Username during authentication
LDAP Version	Enter the LDAP version
Enable LDAPS	Enable secure LDAP. Port will be updated to 636

3. In the **Email Configuration** section, email is required in order to send initial access information to users and enable notifications. Enter the information for your SMTP server. Ensure Contact Manager

is authorized to send mail via your SMTP server.

Email Settings	
Host	Enter the IP address or hostname of the SMTP server
Port	Enter the SMTP server port
Domain	Enter the Company Domain
Username	Enter the username for SMTP authentication
Password	Enter the password for SMTP authentication
Encryption	Select the Encryption type
From Address	Enter the email address that will be displayed in the “From” field
Notifications email	Enter the email address for SMTP notifications

3.3.1 SSL Configuration

The default SSL certificate included with Akkadian Contact Manager will not be trusted by most Web Browsers. Optionally, you can upload a self-signed or public certificate trusted by your organization. Uploading a certificate in Contact Manager, requires three steps:

1. Generate a Certificate Signing Request (CSR)
2. Use the CSR to generate a certificate with a Certificate Authority
3. Upload the certificate to Contact Manager and restart the server

See Sections [3.3.1.1 Generate a Certificate Signing Request](#), [3.3.1.2 Generating a Certificate](#), [3.2.1.3. Uploading Certificates](#) for more detail

3.3.1.1 Generate a Certificate Signing Request

A CSR is an encoded file that provides you with a standardized way to submit your public key along with some information that identifies your company and domain name.

1. Log in as gadmin
2. Select **Settings** from the **System** menu
3. Click the **Generate CSR** Tab
4. Enter the information for the certificate request as demonstrated in the table below
5. When complete, click **Generate** and choose a location to save the CSR file.

Field	Description
Common Name	This is fully qualified domain name that you wish to secure e.g. 'www.example.com' or 'provisioning.example.com'.
Country	The two-letter ISO code for the country where your organization is located e.g. GB, FR or US etc..
State	This should not be abbreviated e.g. Sussex, Normandy, New Jersey
City	e.g. London, Waterford, Paris, New York, Dhaka, Kochi
Organization	Usually the legal incorporated name of a company and should include any suffixes such as Ltd., Inc., or Corp.
Organizational Unit	e.g. HR, Finance, IT
Email	An email address to contact the organization. Usually the email address of the certificate administrator or IT department
Subject Alternative Name	An extension to X.509 that allows various values to be associated with a security certificate using a subjectAltName field.

General

Manage application general system settings

Contact Manager / General

General Settings

Upload SSL CERT

Generate CSR

Common Name

ex. acm.company.com

Country

ex. US

State

ex. NY

City

ex. New York City

Organization

ex. Company LLC

Organization Unit

ex. IT

Email

ex. security@company.com

Subject Alternative Names

☐

⚠ CREATING A CSR WILL GENERATE A NEW PRIVATE KEY AND A NEW SELF-SIGNED SSL CERTIFICATE.
THE CSR IS GENERATED USING THE NEW PRIVATE KEY.

Generate CSR

3.3.1.2 Generating a Certificate

With the CSR generated, the next step is to generate a certificate using your designated Certificate Authority. Contact Manager supports certificates from any valid public certificate authority such as DigiCert or Verisign as well as self-signed certificates authorities.

Using the CSR generated from Contact Manager, follow the instructions provided by your certificate authority to generate a certificate. Download the certificate bundle most appropriate for Apache Web Server, which is typically a ZIP file containing the individual certificate files. The Certificate should have a .crt extension and will need to be renamed to server.crt before being uploaded to Contact Manager.

3.2.1.3 Uploading Certificate

With the certificate generated, the next step is to upload the certificate into Contact Manager. Please ensure the certificate is renamed to **server.crt** before proceeding.

1. Log in as gadmin
2. Select **Settings** from the **System** menu
3. Click the **Upload Cert** Tab
4. Select **Choose File** and locate the server.crt file, and click **Upload Certificate**
5. Restart Contact Manager server for the change to take affect

3.3.2 Communications Managers

Add/Edit Communication Manager

Manage communication managers

Communication Manager Details

* Name:

* Server:

Port:

* Username:

Password:

Validate CM

* Route Partition

* Calling Search Space

Save

3.3.3 OpenLDAP

Contact Manager can be used as an LDAP Service. A service account is needed when creating an OpenLDAP [Service](#).

The Distinguished name can also be changed via the CLI. This should be done prior to any OpenLDAP Configuration

To Update the Distinguished Name via the CLI:

1. Login to the **Akkadian Appliance Manager (CLI)**
2. Enter option 4: **Product Settings Menu**
3. Enter option 3: **Akkadian Contact Manager Services**
4. Enter option 3: **OpenLDAP Settings**
5. Enter option 2: **Change Base DN**
6. Enter new Base DN

```
Change Base DN
Enter new Base DN ex. dc=company,dc=com: dc=akkadian,dc=com
```

To Create a Service account for OpenLDAP in Contact Manager

1. Select **OpenLDAP** from the System menu
2. Enter the information for the service account to be used to authenticate with OpenLDAP
 - a. Optionally, select [Enable Passthrough Authentication](#) to Authenticate end users on Active Directory through OpenLDAP

Edit OpenLDAP Settings

Manage OpenLDAP settings managers

OpenLDAP Settings Details

Distinguished Name: cn=contact manager1,ou=Users,dc=contact-manager,dc=local

Readonly User

* Given Name:	contact	← Service
* Surname:	manager1	← Account
* Username:	contactmanager1	← ldap serviceaccount
* Password:	*****	

End User Authentication

Enable Passthrough Authentication: ☐ Authenticate end users on Active Directory through OpenLDAP.

Save

3. When complete, click **Save**

3.3.3.1 Passthrough Authentication

To authenticate end-users from Active Directory through OpenLDAP

- Check the Enable Passthrough Authentication checkbox in the OpenLDAP Settings section
- Select the [LDAP Data Sources](#)

End User Authentication

Enable Passthrough
Authentication:

☒ Authenticate end users on Active Directory through OpenLDAP.

LDAP Sources:

× Akkadian LDAP Prod

Save

3.3.4 FTP Servers

Configuring an FTP server is optional, but is highly recommended and required to support scheduled backups.

1. Select **FTP Servers** from the System menu
2. Click **Add New** to create a new FTP connection
3. Enter the information for your FTP server
 - a. Optionally, select **Secure FTP** if using a Secure FTP

FTP Server Information

* Name:	<input type="text"/>
* Hostname:	<input type="text"/>
* Username:	<input type="text"/>
* Password:	<input type="password"/>
Path:	<input type="text"/>
Secure FTP:	<input type="checkbox"/>
<input type="button" value="Save"/>	

4. When complete, click **Save**

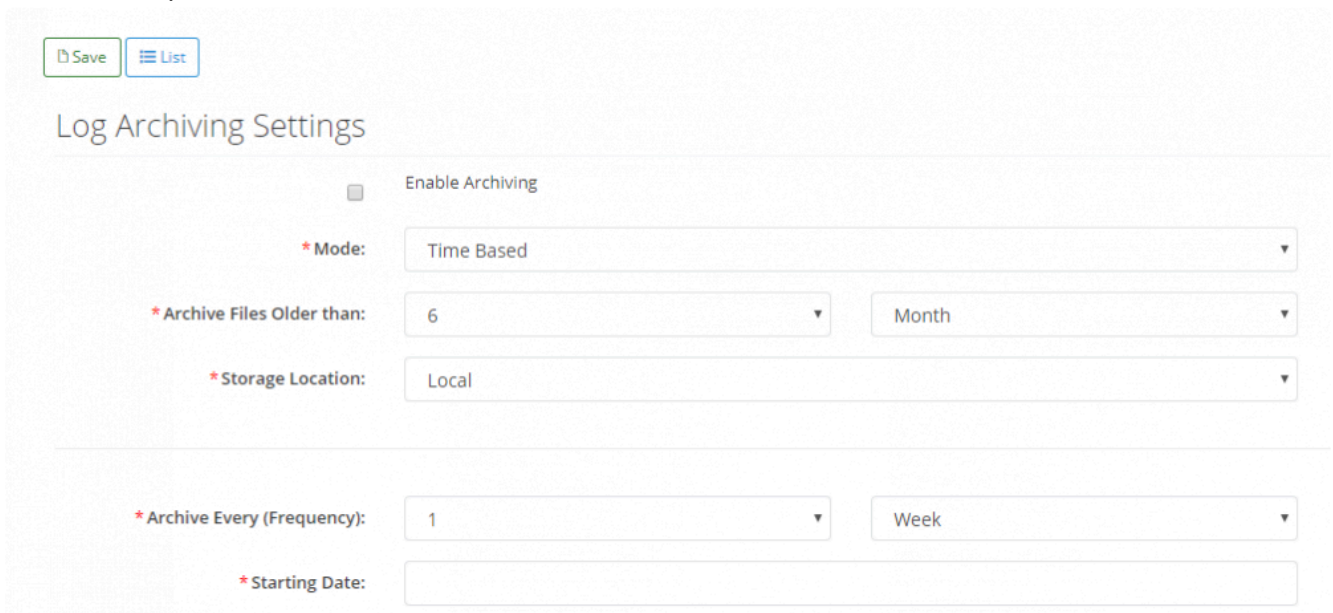
3.3.5 Log Archive

The **Log Archive** is used to enable archiving of audit logs. It is recommended that you enable log archiving to reduce disk space consumption.

Note: Remote Archiving cannot be enabled until an FTP server has been configured and selected.

To enable Log Archiving in Contact Manager:

1. Select **Log Archive** from the **System** menu
2. Click **Enable Archiving**
3. Enter the required fields



The screenshot shows the 'Log Archiving Settings' form. At the top left are 'Save' and 'List' buttons. The form title is 'Log Archiving Settings'. Below the title is a checkbox labeled 'Enable Archiving'. Underneath are several fields: '* Mode:' with a dropdown menu set to 'Time Based'; '* Archive Files Older than:' with a dropdown set to '6' and a unit dropdown set to 'Month'; '* Storage Location:' with a dropdown set to 'Local'; '* Archive Every (Frequency):' with a dropdown set to '1' and a unit dropdown set to 'Week'; and '* Starting Date:' with an empty date input field.

4. Click **Save**

3.4 Authentication

Akkadian Contact Manager is accessible via Web Browsers and Mobile Devices (Android and IOS) using the mobile apps available in the Play Store and Apple App Store.

Web and Mobile Users can be authenticated using LDAP and/or Cisco UDS.

Add **Web Directory/API Authentication** sources to enable users to access the Contact Manager via the web browser and mobile devices.

3.5.1 Web Directory/API Authentication

To Authorize Web Directory/API Authentication in Contact Manager:

1. Log in as gadmin
2. Select **Authentication** from the **System** menu
3. Select **Web Directory/API Authentication**
4. Click the **Add New** button
5. Select **Authentication Type** (Active Directory LDAP or Cisco UDS), fill in the information related to your environment and click **Save**.

Add/Edit End Users Auth

Manage Mobile Users Authentication Sources

Authentication Information

* Authentication Type:	LDAP ▼
* Name:	<input type="text"/>
* Host URL:	ldap:// ▼ ex. 192.168.0.1
* Port:	389
* Base DN:	dc=company,dc=com
* Username (FQDN):	<input type="text"/>
* Password:	<input type="password"/>
* LDAP Username Bind Attribute:	sAMAccountName
<input type="button" value="Save"/>	

3.5 Users

Akkadian Contact Manager **Users** provide additional users administrative access to the system. Based on the initial Admin User Authentication Type selected in the Settings, you may add Local or LDAP users to Akkadian Contact Manager as admins. This section provides details on adding and removing Users from the system.

3.4.1 Create an Admin User

To create a Local or LDAP User in Contact Manager:

1. Log in as gdadmin
2. Select **Users** from the **System** menu
3. Click the **Add New** button
4. Select **User Type** (Local or LDAP), fill in user information and click **Save**

User Information

* User Type:	<input type="text" value="Please select item."/>
* First Name:	<input type="text"/>
* Last Name:	<input type="text"/>
* Username:	<input type="text"/>
* Email:	<input type="text"/>
Role:	<input type="text" value="admin"/>
<input type="button" value="Save"/>	

3.4.2 Delete Admin User

To delete an Admin user in Contact Manager:

1. Log in as gadmin
2. Select **Users** from the **System** menu
3. Click the checkbox(es) next to user to be deleted
4. Click **User Type**, fill in user information and click **Save**

Show entries

<input type="checkbox"/>	Name	Username	Status
<input checked="" type="checkbox"/>	John Brown	jbrown	Enabled

Showing 1 to 1 of 1 entries

3.6 Branding

Optionally, Contact Manager can be branded with your organization's name, logo, and colors. This will be displayed in the [Web Directory](#)

To enable Branding in Contact Manager:

- Select **Branding** from the **System** menu
- Set desired customer branding attributes
- Optionally you may specify a custom Help URL for the system, which will replace the standard administration guide
- When complete, click **Apply**

Branding

Manage branding options for web directory

Success

Branding successfully updated

* Company Name:

SSSS

Company Help URL:

Enter company help URL

Company Logo:

Upload Logo

* Recommendations: Image (PNG, JPEG or GIF), must be less than 200KB and have dimensions with an aspect ratio of 9:5 ex. 450px by 300px.

* Color Theme:

Save

Reset to Default

3.7 Backup and Restore

Contact Manager administrators may create and download a database backup of their server.

The **Backup** section provides the ability to:

- Generate manual backups
- Schedule backups
- Restore backups
- Manage scheduled backups

3.7.1 Generate a Backup

To generate a Backup in Contact Manager:

1. Log in as gadmin
2. Select **Backup** from the **System** menu
3. Click **Generate and download backup**, save the download file to a secured location

Generate Backup

Restore from backup

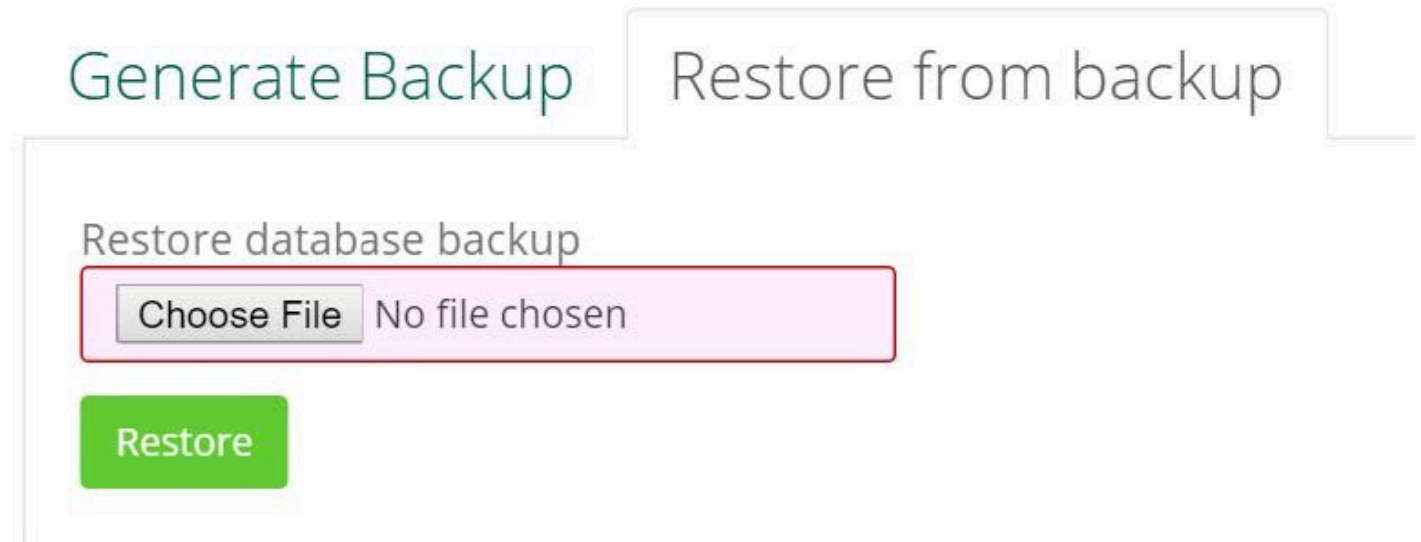
Generate and download backup

Generate and download backup

3.7.2 Restore Database from Backup

Database restore backup is recommended for the following:

- When moving to a new Akkadian Contact Manager instance
 - Restoring Akkadian Contact Manager to a previous working state
1. Log in as gdadmin
 2. Select **Backup** from the **System** menu
 3. Click on **Restore from backup** tab
 4. Click **Choose file** button to select the backup file and click **Restore** button.



Generate Backup

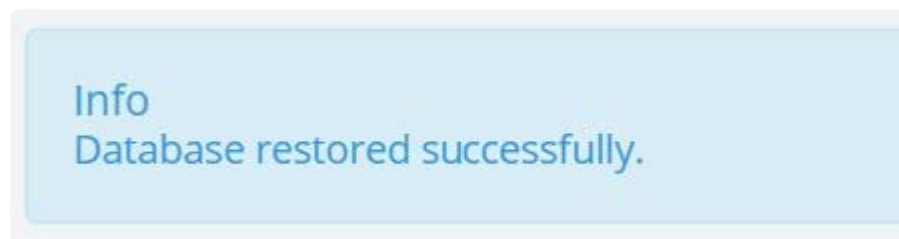
Restore from backup

Restore database backup

Choose File No file chosen

Restore

5. Confirm database was successfully restored.



Info

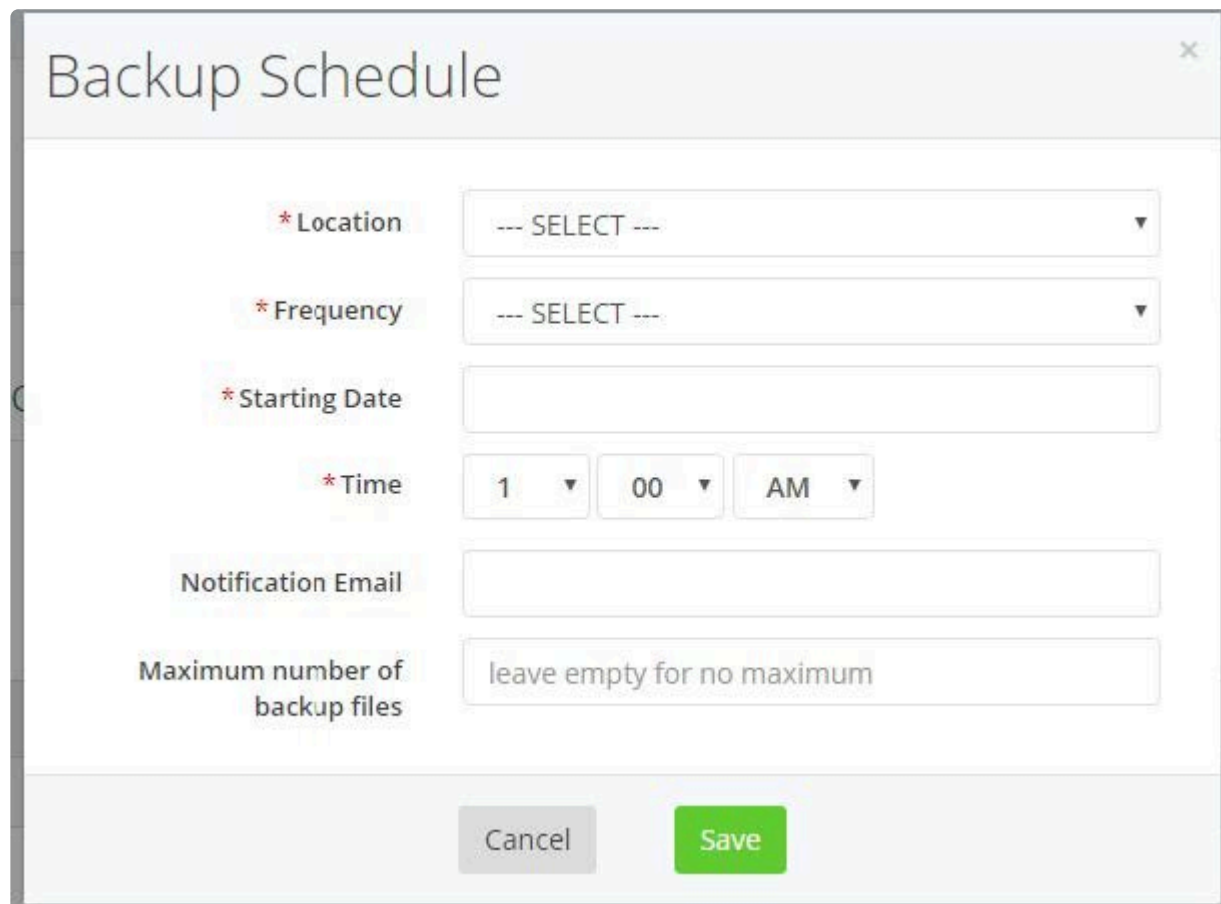
Database restored successfully.

3.7.3 Schedule a Backup

Scheduling a backup is recommended for the following:

- Before running a system update
- Before making configuration changes to Contact Manager

1. Log in as gdadmin
2. Select **Schedule Backup** from the *System *menu
3. Click **Add New** backup, choose location, frequency, start date, time, notification email and maximum number of backup files



Backup Schedule

* Location: --- SELECT ---

* Frequency: --- SELECT ---

* Starting Date:

* Time: 1 00 AM

Notification Email:

Maximum number of backup files: leave empty for no maximum

Cancel Save

3.8 Licensing

You can obtain a 30-day trial license for Akkadian Contact Manager after which it requires a license file to be installed. In order to obtain a license key or file, if you are already a client with access to the Akkadian Customer Portal, your license information will be accessible via the portal. If you are not yet a customer contact Akkadian Sales by email at sales@Akkadianlabs.com

3.8.1 Activate a License

1. Once the license file has been obtained, log in as gadmin
2. Select **Licensing** from the **System** menu
3. If Contact Manager has internet connectivity enter **License Key** and other required fields and click **Submit**.
4. If Contact Manager does not have internet connectivity, upload a **License File**.

License

Product License Information

Contact Manager / License

User Information

License Status: FULL
Licensed To: Akkadian Labs
Contact E-mail:

License Details

Issued: 2018-12-19 22:21:37
ACM Version: 4.0.0
Allowed Directory Entries: 100000
Current Directory Entries: 29861
Server MAC Address:

Update License

Enter License Key:

Company Name:

Contact Name:

Contact Email:

[Upload License File](#)

3.9 Updates

A **System Update** provides the ability for Contact Manager to be updated through the Web interface.

To Perform a System Update:

1. Log in as gadmin
2. Select **Updates** from the **System** menu
3. If an update is available, click the **Update Available!** link to download the file
4. After downloading the update click **Choose File** and select the file from the download location
5. Select **Run Update**, once the update is complete, select **OK**

Note: Occasionally, an update will be released as an OVA rather than a zip file. In these cases, special instructions may apply. Please be sure to read any associated instructions as part of that update.

- It is always recommended to perform a [backup](#) prior to running any updates.
- If your server does not have access to the internet, you can also access the latest updates using the following link <http://portal.akkadianlabs.com> and selecting **Contact Manager** from the **Products** menu

4. Directory Configuration

Directory Configuration consists of the following components:

1. **Attribute Labels:** Create up to 20 custom Local and Sync-Enabled Contact Attributes to update values in data sources.
2. **Number Formats:** Create rules that will be applied during a sync.
3. **Data Source:** Allows LDAP, CSV, Microsoft SQL, MySQL and Cisco Communications Manager (Cisco UDS) to be used as a source for contacts.
4. **Contacts:** Searchable contacts listing of all available data sources.
5. **Dial Rules:** Create dial rules to manipulate numbers to desired dial patterns
6. **Interface:** Ability to set the order and names of fields as presented on IP Phones
7. **Clients:** Ability to associate Client to Service URL
8. **Service URLs:** Create Cisco Communications Manager format service URLs
9. **Directory Groups:** Ability to add multiple Service URLs into a single directory or a single Service URL across many directories.

4.1 Attribute Labels

Attribute Labels in Contact Manager allows admins to create up to 10 custom Local and 10 Sync-Enabled Contact Attributes to update values in data sources.

Attribute Labels give the flexibility to assign meaningful names to fields that will be displayed when a value is presented in the [Interface](#) and [Web Directory](#) listing.

Edit Attribute Labels

Edit Attribute Labels for Sync-Enabled Contact Attributes and Local Contact Attributes

Contact Manager / Data-Source Listing / Edit Attribute Labels

Sync-Enabled Contact Attributes

Field:	Custom Attribute 1	Label:	Address	Field:	Custom Attribute 2	Label:	City
Field:	Custom Attribute 3	Label:	State	Field:	Custom Attribute 4	Label:	Zip Code
Field:	Custom Attribute 5	Label:		Field:	Custom Attribute 6	Label:	
Field:	Custom Attribute 7	Label:		Field:	Custom Attribute 8	Label:	
Field:	Custom Attribute 9	Label:		Field:	Custom Attribute 10	Label:	

Local Contact Attributes

Field:	Local Data 1	Label:	Notes	Field:	Local Data 2	Label:	
Field:	Local Data 3	Label:	Skills	Field:	Local Data 4	Label:	
Field:	Local Data 5	Label:		Field:	Local Data 6	Label:	
Field:	Local Data 7	Label:		Field:	Local Data 8	Label:	
Field:	Local Data 9	Label:		Field:	Local Data 10	Label:	

Save

4.2 Number Formats

Number Formats allow an Administrator to create a rule that will be applied during sync. These rules allow for a directory number to have a prefix appended to it, have a portion of a directory number extracted, or both.

Once a Number Format has been applied, all directory numbers matching the rule will be displayed with the rule applied.

Note: Administrators can select the type of formatting that would be used, and whether or not regex is to be used.

4.2.1 Adding a Number Format

To add a Number Format in Contact Manager:

1. Select **Number Format** from the **Directory** menu
2. Click **Add New** to add a new Number Format (Test rule for European Numbers shown)

Number Format Details

* Name:

European Numbers

* Type:

☐ Prefix ☒ Extract ☐ Extract & Prefix

* Use regex:

☒ Yes ☐ No

Filter regex:

\d+x\d

Extract regex:

x[0-9]+

Extract replacement:

Enter extracted pattern replacement

Notes:

Save

3. Fill out the required fields and click **Save**

4.2.1.1 Prefix

Prefix allows Administrators to append an existing directory number.

Field	Description
Number begins with	Allows Administrators to set a series of numbers, which must be matched in order for a Number Format to apply
Number length	Allows Administrators to set the number of digits that a directory number must contain in order for a Number format to apply
Number Prefix	Allows Administrators to select the prefix to be appended to a directory number that matches the Number Format

Note: Number Formatting matches **Number begins with** or **Number length**. If both fields are in use, Number Format will be applied to any directory number that matches either field.

Number Format Details

* Name:

* Type:

☒ Prefix ☐ Extract ☐ Extract & Prefix

* Use regex:

☐ Yes ☒ No

Number begins with:

Number length:

Number Prefix:

Notes:

Save

4.2.1.2 Extract

Extract allows Administrators to extract ending sections of a directory number.

Field	Description
Number begins with	Allows Administrators to set a series of numbers, which must be matched in order for a Number Format to apply
Number length	Allows Administrators to set the number of digits that a directory number must contain in order for a Number format to apply
Extract number length	Allows Administrators to select the prefix to be appended to a directory number that matches the Number Format

Note: Number Formatting matches **Number begins with:** or **Number length**. If both fields are in use, Number Format will be applied to any directory number that matches either field.

Number Format Details

* Name:

Enter # format name



* Type:

☐

Prefix

☒

Extract

☐

Extract & Prefix

* Use regex:

☐

Yes

☒

No

Number begins with:

Number begins with ex. 212

Number length:

Enter # length to filter

Extract number
length:

Enter # length to extract starting from the end

Notes:

Save

4.2.1.3 Extract & Prefix

Extract & Prefix allows Administrators to combine Prefix Number Formats and Extract Number Formats simultaneously.

Field	Description
Number begins with	Allows Administrators to set a series of numbers, which must be matched in order for a Number Format to apply
Number length	Allows Administrators to set the number of digits that a directory number must contain in order for a Number format to apply
Extract number length	The number of digits from a directory number that would be extracted for use starting from the last digit and going towards the first number.
Number Prefix	Allows Administrators to select the prefix to be appended to a directory number that matches the Number Format.

Note: Number Formatting matches **Number begins with:** or **Number length**. If both fields are in use, Number Format will be applied to any directory number that matches either field.

Number Format Details

* Name:

Enter # format name



* Type:

☐

Prefix

☐

Extract

☒

Extract & Prefix

* Use regex:

☐

Yes

☒

No

Number begins with:

Number begins with ex. 212

Number length:

Enter # length to filter

Extract number
length:

Enter # length to extract starting from the end

Number Prefix:

Enter # prefix

Notes:

Save

4.2.1.4 Using Regex

Number Formats allows the use of regex to set rules to match after they are configured.

Note: The **Number begins with:** and **Number Length:** fields are replaced with a **Regex:** field.

Number Format Details

* Name:

Enter # format name



* Type:



Prefix



Extract



Extract & Prefix

* Use regex:



Yes



No

Regex:

Enter regex to filter #

Number Prefix:

Enter # prefix

Notes:

Save

4.3 Data Source

An LDAP, CSV, SQL Server, MySQL and/or Cisco UDS **Data Source** can be configured in Contact Manager.

- Contact Manager synchronizes with Data Source entries and displays them in the [Contacts](#).
- Data Sources are also needed when configuring [Service URLs](#).

4.3.1 Adding a Data Source

To add a new **Data Source** in Contact Manager:

1. Select **Data Source** from the **Directory** menu
2. Click **Add New**

3. Select Data Source **Type** and enter desired **Name**

Field	Description
Type	Select Data Source Type: LDAP, CSV File, SQL Server, MySQL or Cisco UDS
Name	Enter the data source name

4. Fill out the required fields and click **Save**

4.3.1.1 LDAP Data Source

Enter the LDAP Data Source information as shown in the table below

Field	Description
LDAP Type	Select the appropriate LDAP source: Microsoft Active Directory, Oracle Directory or OpenLDAP
Use For Auth	Check if you are allowing users to authenticate against this AD source
Username (FQDN)	Enter the username (or FQDN) for passthrough authentication , User should have a minimum of read access to the LDAP server directory
Password	Enter the password for the LDAP username
Host	Enter the hostname or IP address of the server where the data for LDAP directory resides.
Port	Enter the hostname or IP address of the server where the data for LDAP directory resides.
Domain	Enter LDAP domain. Ex. company.com
Base DN	Enter the location of the top-level container. This will vary based on how the LDAP environment is setup. E.x. dc=company,dc=com
Filter	<p>Must contain (sn=*) to ensure data integrity. LDAP entries that match the filter will be imported into the Akkadian Contact Manager database, but LDAP users</p> <p>These are example LDAP filters:</p> <ul style="list-style-type: none"> • Microsoft Active Directory (AD): (&(sn=*)(givenName=*)(ipPhone=*)) • OpenLDAP: (&(sn=*)(objectclass=inetOrgPerson))
Properties Last Name	Enter the LDAP last name bind attribute. Example – “surname”
Properties First Name	Enter the LDAP first name bind attribute. Example – “givenName”
Properties Main Number	<p>Enter the LDAP attribute to map to Main Number. Example – “ipPhone”</p> <p>Note: Number Formats can be applied to this field</p>
Properties Mobile Number	<p>Enter the LDAP attribute to map to Mobile Number. Example – “mobile”</p> <p>Note: Number Formats can be applied to this field</p>
Properties Other Number	Enter the LDAP attribute to map to Other Number. Example – “homephone”
Properties Location	Enter the LDAP attribute to map to Location example – “l”
Properties Title	Enter the LDAP attribute to map to Title. Example – “title”

Properties Username	Enter the LDAP attribute to map to Username. Example – “sAMAccountName” Note: <i>If no username is present local contact attributes will be disabled</i>
Properties Email	Enter the LDAP attribute to map to Email. Example – “mail”
Properties Department	Enter the LDAP attribute to map to Department. Example – “department”
Properties Directory URI	Enter the LDAP attribute to map to Title. Example – “title”
Additional Properties	Enter any additional corresponding attribute ex “mail” to pull the email address Note: <i>Some of properties terms may change depending on the configuration</i>

Click **Save** to add and proceed to the [Syncing a Data Source](#) section.

4.3.1.2 CSV Data Source

Enter CSV Data Source information as shown below:

1. Select the **CSV Source** from the drop-down menu
2. Click **Download CSV template** if you do not have a properly formatted pre-existing CSV file. Populate the CSV template with data corresponding to the fields and save
3. For local CSV file, click **Choose File**, browse and select desired CSV file
4. For External CSV file, specify the external file source URL

Field	Description
CSV Source	Upload CSV File or External File – CSV file can be hosted at an external location and synced with Contact Manager periodically based on the sync schedule
Sync Filter	Build a custom filter to match your filtering preferences to only sync wanted contacts
Last Name Column	Enter the csv header name which corresponds to Last Name Example – “Last Name”
First Name Column	Enter the csv header name which corresponds to First Name Example – “First Name”
Main Number Column	Enter the csv header name which corresponds to Main Number Example – “Office Number” Note: <i>Number Formats can be applied to this field</i>
Mobile Number Column	Enter the csv header name which corresponds to Mobile Number Example – “Cell Phone” Note: <i>Number Formats can be applied to this field</i>
Other Number Column	Enter the csv header name which corresponds to Other Number Example – “Home Number” Note: <i>Number Formats can be applied to this field</i>
Location Column	Enter the csv header name which corresponds to Location Example – “City”
Title Column	Enter the csv header name which corresponds to Title Example – “Title”
Additional Column	Enter any additional corresponding name ex “mail” to pull email address Note: <i>Some of properties terms may change depending on the configuration</i>
Username Column	Enter the csv header name which corresponds to Username Example – “username”. Note: <i>If no username is present local contact attributes will be disabled for contact</i>
Additional Columns	Associate any other additional attributes to be synced from data source

5. Click **Save**.

4.3.1.3 SQL Server Data Source

To obtain the information required for configuring a SQL Server Data Source, consult a SQL Server administrator.

Configure the information required for a SQL Server as shown in the table below

Field	Description
Database Server Name	Enter Database Server Name or IP Address
Database Username	Enter Database Username
Database Password	Enter Database Password
Database Name	Enter Database Name
Database Table Name	Enter Database Table Name
Sync Filter	Enter a valid SQL WHERE clause condition to match filter preferences and sync desired contacts
Last Name Column	Enter Database Table Column containing Last Name
First Name Column	Enter Database Table Column containing First Name
Main Number Column	Enter Database Table Column containing Main Number Note: Number Formats can be applied to this field
Mobile Number Column	Enter Database Table Column containing Mobile Number Note: Number Formats can be applied to this field
Other Number Column	Enter Database Table Column containing Other Number Note: Number Formats can be applied to this field
Location Column	Enter Database Table Column containing Location Number
Title Column	Enter Database Table Column containing Title
Additional Column	Enter any additional corresponding name ex “mail” to pull email address Note: Some of properties terms may change depending on the configuration
Username Column	Enter the csv header name which corresponds to Username Example – “username”. Note: If no username is present local contact attributes will be disabled for contact
Additional Columns	Associate any other additional attributes to be synced from data source

Click **Save** to add and proceed to the [Syncing a Data Source](#) section.

4.3.1.4 MySQL Server Data Source

To obtain the information required for configuring a MySQL Server Data Source, consult an administrator.

Configure the MySQL Data Source information as shown in the table below

Field	Description
Database Host Name	FQDN or IP Address of MySQL server, host should be reachable by the GD server
Database Name	Name of designated database in MySQL server containing tables with information to be used to populate directory
Database Username	MySQL user with at least read access to the database and tables to be used for directory
Database Password	Password for MySQL User
Table Name	Name of table in MySQL database containing information to be used to populate directory
Database Charset (optional)	Database character set i.e. UTF8 – Last Name Column
Sync Filter	Enter a valid SQL WHERE clause condition to match filter preferences and sync desired contacts
Last Name Column	Name of column containing last names data
First Name Column	Name of column containing first names data
Main Number Column	Name of column containing main telephone numbers data Note: <i>Number Formats can be applied to this field</i>
Mobile Number Column	Name of column containing mobile telephone numbers data Note: <i>Number Formats can be applied to this field</i>
Other Number Column	Name of column containing any other telephone numbers data Note: <i>Number Formats can be applied to this field</i>
Location Column	Name of column containing location data
Title Column	Name of column containing title data
Additional Column	Enter any additional corresponding name ex “mail” to pull email address Note: <i>Some of properties terms may change depending on the configuration</i>
Username Column	Enter the csv header name which corresponds to Username Example – “username”. Note: <i>If no username is present local contact attributes will be disabled for contact</i>

Additional Columns	Name of column containing any other data which you would like to be present in the directory.
--------------------	---

Click **Save** to add and proceed to the [Syncing a Data Source](#) section.

4.3.1.5 Cisco UDS Data Source

A Communications Manager UDS can be used as a data source for Contact Manager

Note: Versions 10.x – 12.x of Communications Manager are supported

Enter the Cisco UDS information as shown in the table below

Field	Description
UDS Host Name	FQDN or IP Address of Communications Manager publisher, host should be reachable by the Akkadian Contact Manager server
Username (Optional)	Application user, not required
Password (Optional)	Application user password, not required
Sync Filter	Build a custom filter to match your filtering preferences to sync wanted contacts
Last Name Column	Name of column containing last names data
First Name Column	Name of column containing first names data
Main Number Column	Name of column containing main telephone numbers data Note: <i>Number Formats can be applied to this field</i>
Mobile Number Column	Name of column containing mobile telephone numbers data Note: <i>Number Formats can be applied to this field</i>
Other Number Column	Name of column containing any other telephone numbers data Note: <i>Number Formats can be applied to this field</i>
Location Column	Name of column containing location data
Title Column	Name of column containing title data
Additional Column	Enter any additional corresponding name ex “mail” to pull email address Note: <i>Some of properties terms may change depending on the configuration</i>
Username Column	Enter the csv header name which corresponds to Username. Example – “userName”.
Email Column	Enter the UDS attribute to map to Email. Example – “email”
Department Column	Enter the UDS attribute to map to Department. Example – “department”

Directory URI	Enter the UDS attribute to map to Directory URI. Example – “directoryUri”
Middle Name	Enter the UDS attribute to map to Middle Name. Example – “middleName”
Nick Name	Enter the UDS attribute to map to Nick Name. Example – “nickName”
Display Name	Enter the UDS attribute to map to Display Name Example – “displayName”.
MS URI	Enter the UDS attribute to map to MS URI. Example – “msUri”.
Manager	Enter the UDS attribute to map to Manager. Example – “directoryUri”.
Additional Properties	Associate any other additional attributes to be synced from data source.

Click **Save** to add and proceed to the [Syncing a Data Source](#) section.

4.3.2 Syncing a Data Source

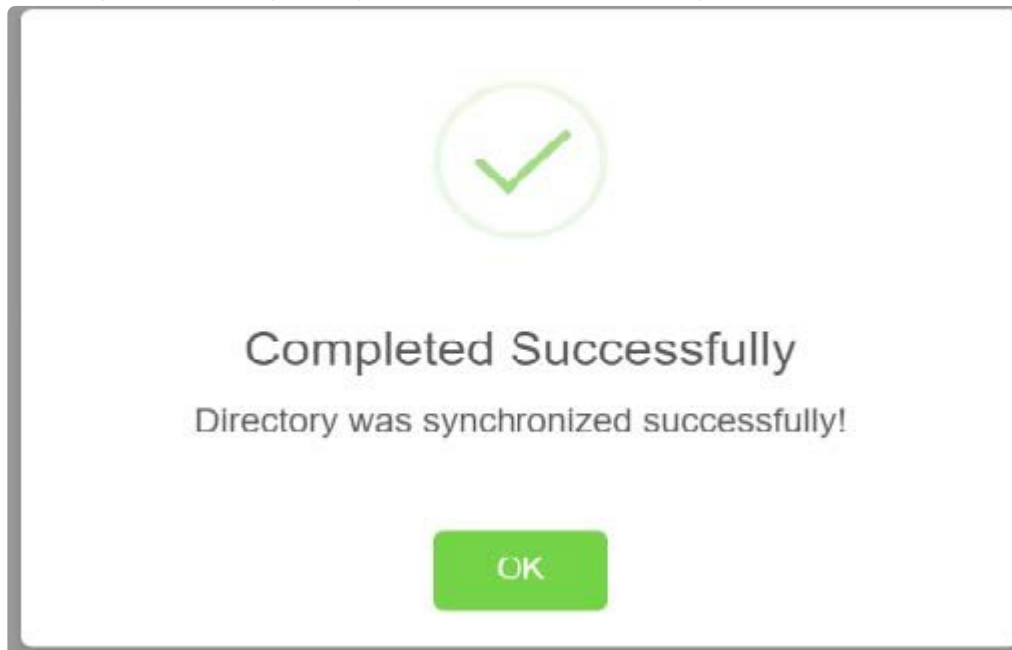
To sync a Data Source in Contact Manager:

1. Select **Data Source** from the **Directory** menu
2. **Click** the checkbox(es) next to the Data Source you want to sync with Contact Manager

Show entries

<input type="checkbox"/>	Name
<input checked="" type="checkbox"/>	Acme Company LDAP
<input type="checkbox"/>	Akkadian LDAP

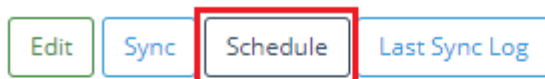
3. Click **Sync** and verify the sync completed successfully



4.3.3 Scheduling a Data Source Sync

To schedule a Data Source sync in Contact Manager:

1. Select **Data Source** from the **Directory** menu
2. Click on the Name of Data Source to be synced
3. Click **Schedule**



4. Configure the **Scheduled Details** by selecting the sync increment, starting date, and time.

Note: Time zone is set to Coordinated Universal Time (UTC) by default and can be changed to any time zone via the [Virtual Appliance Manager](#).

Scheduled Details

* Run Every:

* Starting:

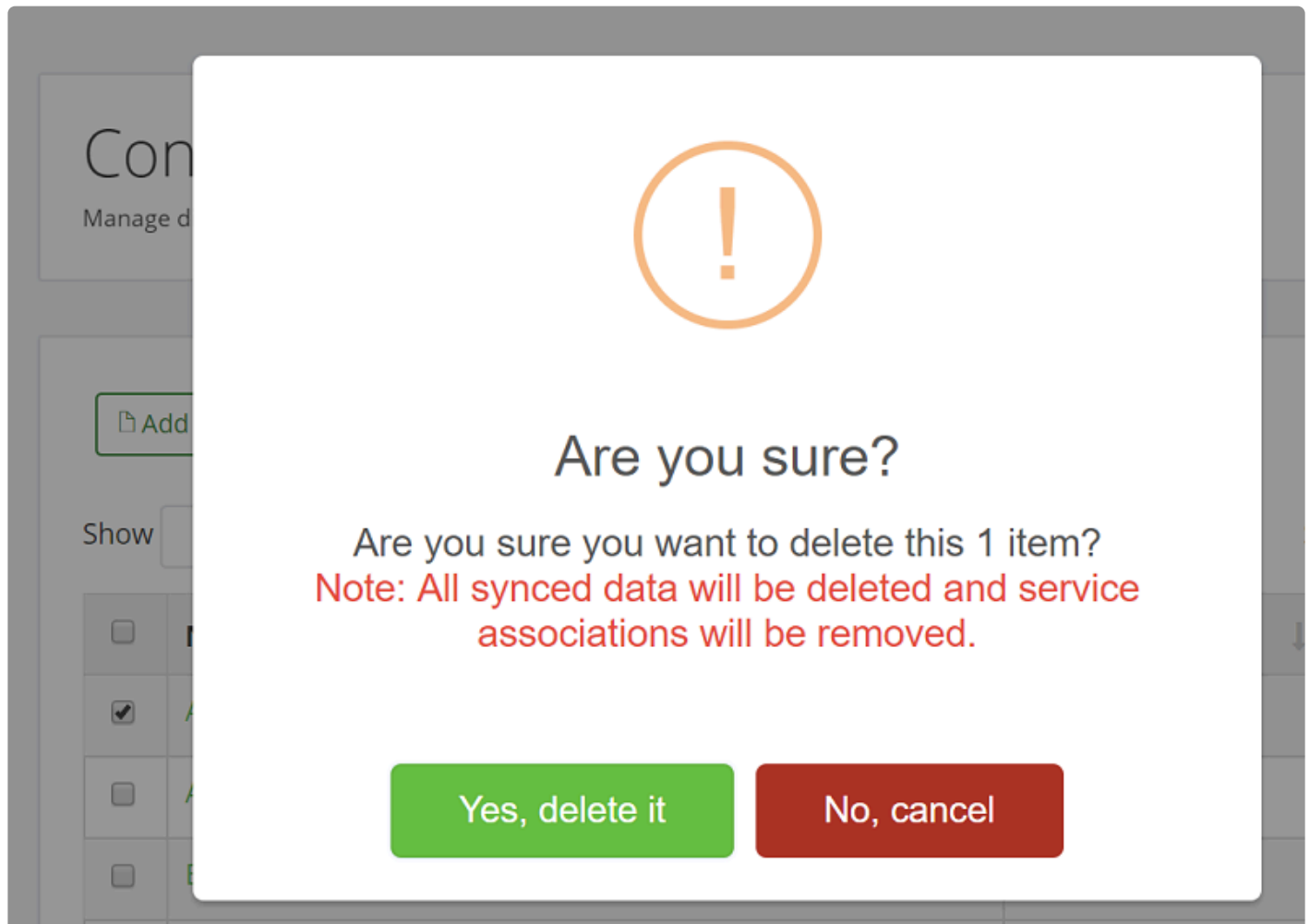
Send Email Notifications: ☐

5. Click **Save**

4.3.4 Deleting a Data Source

To delete a **Data Source** in Contact Manager

1. Select **Data Source** from the **Directory** menu
2. Check the checkbox(s) to the right of the **Name** of **Data Source** to be deleted



3. Click **Delete** and select **Yes, delete it** it to confirm data source deletion

4.4 Contacts

The **Contacts** allow administrators to search for contacts added from the [Data Source](#).

Note: If the **Contacts** have no data, verify a **Data Source** is [configured](#) and [synced](#).

4.4.1 Contacts Search

To search for **Contacts** in Contact Manager:

1. Select **Contacts** from the **Directory** menu
2. Use the **Global Search** to search for contact by name
3. Use Data Source filter to filter contacts by **Data Source**

The screenshot displays the 'Contacts' page in the Akkadian Contact Manager. At the top, there's a header with 'Contacts' and a sub-header 'Search All Contacts Contained in Data Sources'. On the right, there's a breadcrumb 'Contact Manager / Contacts Search'. Below the header, there's a 'Data Source' dropdown set to 'Acme Inc' and a 'Global Search' input field. The main area shows a grid of 16 contact cards, each with a profile picture, name, title, location, and three phone numbers (Main, Mobile, Other). The contacts listed are:

- Angelita Parris: ACCOUNT EXECUTIVE - SOFTWARE SALES, New York
- Annie Lopez: ACCOUNT EXECUTIVE - SOFTWARE SALES, New York
- Arlena Conlee: ACCOUNT EXECUTIVE - SOFTWARE SALES, London
- Breann Kea: ACCOUNT EXECUTIVE - SOFTWARE SALES, London
- Breann Smith: SOFTWARE ENGINEER, San Francisco
- Brian Mason: VP OF SOFTWARE DEVELOPMENT AND INFORMATION TECHNOLOGY, San Francisco
- Chad Klein: RECEIVING ANALYST, New York
- Claude MacIntyre: SOFTWARE SUPPORT SPECIALIST, San Francisco
- Coleman Hollowell: ACCOUNT EXECUTIVE - SOFTWARE SALES, New York
- Danae Stimpson: VP OF FINANCE, London
- Dawne Drennan: PROCUREMENT SPECIALIST, London
- Dawne Martins: SOFTWARE ENGINEER, San Francisco
- Dede Beatty: DIRECTOR OF SALES, London
- Dede Coleman: SOFTWARE ENGINEER, San Francisco
- Dora Cavender: OFFICE ADMINISTRATOR, London
- Edward Ramsey: PRODUCT MANAGER, London

At the bottom of the grid, there is a 'Load More' button with a circular arrow icon.

4. Click on the contact's name to view **Directory Entry Details**

Directory Entry Details

Last Name:	Abrego
First Name:	Aaron
Title:	Merchant marine officer
Main Number:	9184847143
Username:	AAbrego

OK

4.4.2 Contact Local Data

Local Attributes can be added to contacts with usernames specified.

Contact Local Attributes can be edited in bulk or per contact

To add or edit Local Contact Attributes via the [Contacts](#):

1. Click the **Local Data** to the right of the contact to Add/Edit **Local Contact Attributes**

Add/Edit Contact Entry - Local Data
Manage directory local data

Local Contact Attributes

*DataSource Acme LDAP

*Username kdevivo

Local Data 1:

Local Data 2:

Local Data 3:

Local Data 4:

Local Data 5:

Local Data 6:

Local Data 7:

Local Data 8:

Local Data 9:

Local Data 10:

Save

Upload Delete

Last Name	Devivo
First Name	Kenna
Title	Account Executive
Main Number	7183541030
Mobile Number	2125980050
Username	kdevivo
Email	kdevivo@acme.com
Directory URI	kdevivo@acme.com
Department	Sales
City	New York

2. Click **Save** after adding or editing the Local Data

To Bulk add or edit Local Contact Attributes:

1. Select **Data Source** from the **Directory** menu
2. Click on the **Name** of **Data Source** to add or edit
3. Click on **Export Contacts** from the selected Data Source. A .csv file of your Data Source listing will download
4. Click on **Import Local Data** from the selected Data Source to import the edited .csv file

EditSyncScheduleLast Sync Log

Import Local DataExport Contacts

Data Source

Type:ldap

Name:Acme Company LDAP

Details

LDAP Type:AD

4.4.3 Contact Photos

Contact Manager can be used as a photo server by importing photos from LDAP or through CSV file using the **Photo URL** attribute.

Note: If there is no username associated with a user, the user photo cannot be changed or edited.

The screenshot shows the 'Contacts' page in Akkadian Contact Manager. The interface includes a search bar, a data source dropdown set to 'Acme Inc', and a grid of 16 contact cards. Each card features a circular profile picture, the contact's name, title, location, and a list of phone numbers (Main, Mobile, and Other). The contacts are arranged in a 4x4 grid. A 'Load More' button is located at the bottom center of the grid.

Name	Title	Location	Main Number	Mobile Number	Other Number
Angelita Parris	ACCOUNT EXECUTIVE - SOFTWARE SALES	New York	7185541022	2125980022	6468542332
Annie Lopez	ACCOUNT EXECUTIVE - SOFTWARE SALES	New York	7185541014	2125980014	6468542314
Arlena Conlee	ACCOUNT EXECUTIVE - SOFTWARE SALES	London	7185541047	2125980047	6468542347
Breann Kea	ACCOUNT EXECUTIVE - SOFTWARE SALES	London	7185541052	2125980052	6468542352
Breann Smith	SOFTWARE ENGINEER	San Francisco	7185541032	2125980032	6468542332
Brian Mason	VP OF SOFTWARE DEVELOPMENT AND INFORMATION TECHNOLOGY	San Francisco	7185541015	2125980015	6468542315
Chad Klein	RECEIVING ANALYST	New York	7185541011	2125980011	6468542311
Claude Macintyre	SOFTWARE SUPPORT SPECIALIST	San Francisco	7185541046	2125980046	6468542346
Coleman Hollowell	ACCOUNT EXECUTIVE - SOFTWARE SALES	New York	7185541020	2125980020	6468542320
Danae Stimpson	VP OF FINANCE	London	7185541025	2125980025	6468542325
Dawne Drennan	PROCUREMENT SPECIALIST	London	7185541057	2125980057	6468542357
Dawne Martins	SOFTWARE ENGINEER	San Francisco	7185541037	2125980037	6468542337
Dede Beatty	DIRECTOR OF SALES	London	7185541054	2125980054	6468542354
Dede Coleman	SOFTWARE ENGINEER	San Francisco	7185541034	2125980034	6468542334
Dora Cavender	OFFICE ADMINISTRATOR	London	7185541058	2125980058	6468542358
Edward Ramsey	PRODUCT MANAGER	London	7185541026	2125980026	6468542326

4.4.3.1 Import Contact Photo via CSV

To Import a **Contact Photo** via CSV:

1. Follow the instructions for [importing a CSV Data Source](#)
2. Enter the **Photo URL** in the CSV file

4.4.3.2 Update Contact Photo


Users have the ability to Edit or Update Contact Photos via Contact Manager


Note: If there is no username associated to a user, they will not be able to import a photo.

To Import a **Contact Photo**:

1. Select **Contacts** from the **Directory** menu
2. Use the **Global Search** and/or **Data Source** to filter contacts
3. Click **Edit** to display the [Contact Local Data](#)
4. Click **Upload** or **Delete**



 Upload

 Delete

Last Name	Devivo
First Name	Kenna
Title	Account Executive
Main Number	7185541050
Mobile Number	2125980050
Username	kdevivo
Email	kdevivo@acme.com
Directory URI	kdevivo@acme.com
Department	Sales
City	New York

4.5 Dial Rules

Dial Rules can be enabled to enforce call routing rules.

Creating dial rules in Contact Manager will enable more efficient enforcement of call routing using a customer's WAN.

This may in many cases, prevent calls from being routed out through the PSTN.

4.5.1 Add New Directory Dial Rules

1. Select **Dial Rules** from the **Directory** menu
2. Click **Add New**
3. Fill out the **New Dial Rule** form and click **Submit** When Complete

New Dial Rule

* Cluster :

Enabled Regex Filter : ☐

* Number Begins With :

Phone Number Length :

Extension Length :

Prefix :

Notes :

4.5.2 Edit Directory Dial Rules

To Edit Directory Dials in Contact Manager:

1. Select **Dial Rules** from the **Directory** menu
2. Click the **Dial Rule Cluster** to be edited
3. Edit dial rule and click **Submit**

Edit Dial Rule

* Cluster :

Enabled Regex Filter : ☐

* Number Begins With :

Phone Number Length :

Extension Length :

Prefix :

Notes :

4.5.3 Delete Directory Dial Rules

1. Select **Dial Rules** from the **Directory** menu
2. Check the checkbox next to dial rule to be deleted and click **Delete**



The screenshot shows the 'Delete' button highlighted with a red arrow. Below the buttons, there is a 'Show' dropdown menu set to '10' and a 'Phone Number' input field. A table with 4 columns is displayed below the dropdown menu. The table has 2 rows of data. The first row has a checkbox, 'Default', '0', and an empty cell. The second row has a checked checkbox, 'default', an empty cell, and '4'.

<input type="checkbox"/>	Cluster	Number Begins With	Phone N
<input type="checkbox"/>	Default	0	
<input checked="" type="checkbox"/>	default		4

Showing 1 to 2 of 2 entries

3. Confirm by clicking **Yes, delete it**

4.5.4 Find Matching Dial Rules

Administrators can **Find Matching Dial Rules** by **Phone Number**

Dial Rules can also be found via the **Global Search**

To Find Matching Dial Rules by Phone Number:

1. Enter the Phone Number

Dial Rules
Manage number dial rules

Add New Delete

Phone Number: +44 20 7123 1234 Find Matching Rules

Show 10 entries Global Search: Global Search

	Cluster	Number Begins With	Phone Number Length	Extension Length	Prefix	Regex Enabled	Regex Match	Notes
<input type="checkbox"/>	Boston	617	10	4	91	0		Dialing Boston
<input type="checkbox"/>	Default	0	0	0		0		
<input type="checkbox"/>	London	+44	16	0	91011	0		

Showing 1 to 3 of 3 entries

First Previous 1 Last Next

2. Select Find Matching Rules

Dial Rules
Manage number dial rules

Add New Delete

Phone Number: +44 20 7123 1234 Find Matching Rules

Show 10 entries Global Search: Global Search

	Cluster	Number Begins With	Phone Number Length	Extension Length	Prefix	Regex Enabled	Regex Match	Notes
<input type="checkbox"/>	London	+44	16	0	91011	0		

Showing 1 to 1 of 1 entries

First Previous 1 Last Next

4.6 Interface

Administrators have the ability to set the order and names of fields as presented on IP Phones using the **Interface** customization feature.

4.6.1 Edit Directory Interface

To edit an Interface in Contact Manager:

1. Select **Interface** from the **Directory** menu.
2. Click on the **Name** of the Interface to be edited ex. **Default**.

 Add New

 Delete

Show

10 ▼

 entries

	Name
	Default

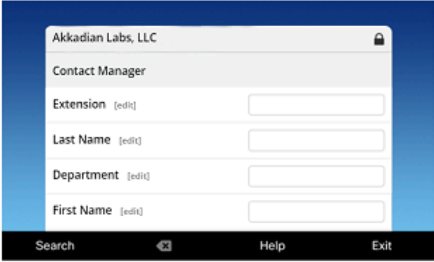
Showing 1 to 1 of 1 entries

3. Drag and drop field names and edit as needed.

Phone Interface
Manage phone user interface
Contact Manager / Interface

Phone Directory Display

* Interface Name: Default Save



Minimum 1 field, maximum 4 fields

Additional fields for web directory table display.
Fields dropped here will only appear on the table and not on phone.

Add/remove field:
Drag field from the list of available fields to the phone interface to be a used in your directory.
To remove field from interface drag field from the interface and drop in available fields list.

Customize field label:
Clicking on [edit] next to the field label will give you ability to customize.
The original label will appear when you mouse over the field.

Available Fields

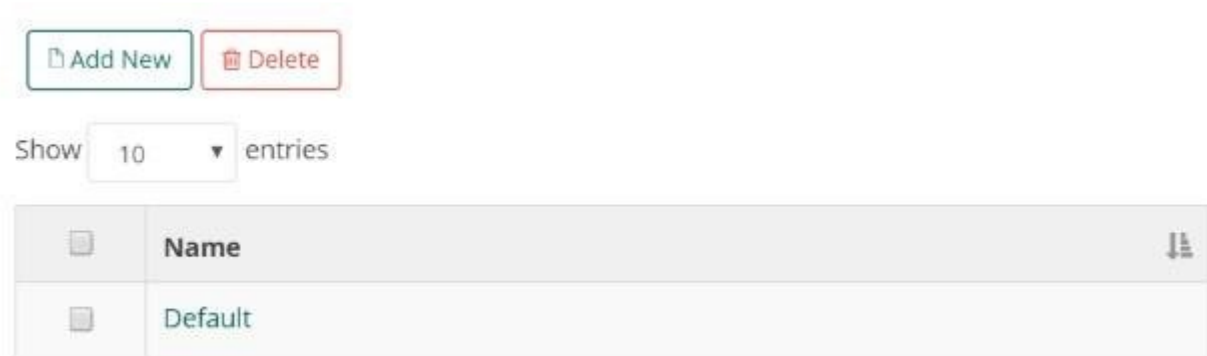
Mobile Number [edit]	Other Number [edit]
Location [edit]	Title [edit]
Additional [edit]	Username [edit]
Email [edit]	Directory URI [edit]
Display Name [edit]	MS URI [edit]
Manager [edit]	Photo URL [edit]
Address [edit]	Notes [edit]
City [edit]	State [edit]
Zip Code [edit]	Skills [edit]

4. Click **Save** after completing changes

4.6.2 Add New Directory Interface

To add a new Interface in Contact Manager:

1. Select **Interface** from the **Directory** menu
2. Click **Add New**



The screenshot shows a user interface for managing directories. At the top, there are two buttons: 'Add New' (green) and 'Delete' (red). Below these buttons is a 'Show' dropdown menu set to '10' with a downward arrow, followed by the text 'entries'. Below this is a table with a light gray header and one data row. The header row has a checkbox icon, the text 'Name', and a sort icon. The data row has a checkbox icon and the text 'Default'.

<input type="checkbox"/>	Name	Sort
<input type="checkbox"/>	Default	

3. Drag and drop field names and edit as needed
4. Click **Save**

4.6.3 Delete Interface

To delete an Interface in Contact Manager:

1. Select **Interface** from the **Directory** menu
2. Check the **checkbox** next to the interface(s) to be deleted and click **Delete**

Show entries

<input type="checkbox"/>	Name	
<input checked="" type="checkbox"/>	Default	

3. Confirm deletion

4.7 Clients

Clients enable [Directory Groups](#) and produce a predictable service URL.

4.7.1 Add a Client

To add a Client to Contact Manager:

1. Select **Clients** from the **Directory** menu
2. Click **Add New** button



3. Enter client name, company code, status, and optional notes

Note Make sure client status is set to *Enabled* for the client to be available to be associated to a Directory Service URL.

Client Information ✕

* Company	<input type="text" value="Akkadian Labs"/>
* Company Code	<input type="text" value="AL001"/>
Status	<input type="text" value="Enabled"/>
Notes	<div></div>

- Click **Save** to add client

4.7.2 Edit a Client

To Edit a Client in Contact Manager:

1. Select **Clients** from the **Directory** menu
2. Click on the Name of Company to be edited
3. Make desired changes and click **Save**

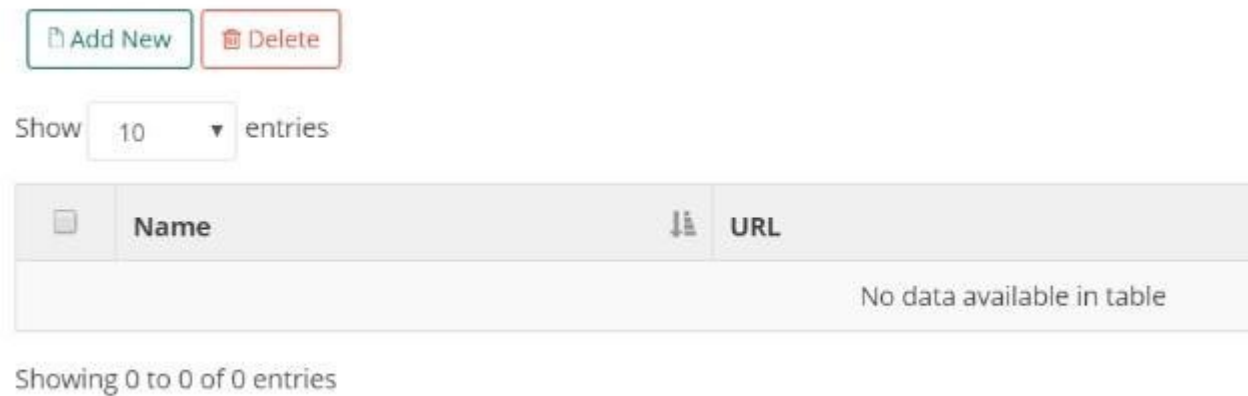
4.8 Services

A **Service URL** is required to provision a directory service in Communications Manager. Each directory will have its own unique Service URL. This will translate to an individual directory on the end user's phone.

4.8.1 Add a New Phone Service URL

To add a new Service URL in Contact Manager

1. Select **Services URLs** from the **Directory** menu
2. Click **Add New**



The screenshot shows a user interface for adding a new service URL. At the top, there are two buttons: 'Add New' (green) and 'Delete' (red). Below these buttons is a 'Show' dropdown menu set to '10' entries. Below the dropdown is a table with two columns: 'Name' and 'URL'. The table is currently empty, displaying the message 'No data available in table'. Below the table, it says 'Showing 0 to 0 of 0 entries'.

	Name	URL
No data available in table		

Showing 0 to 0 of 0 entries

3. Fill out the **Directory Service Options** information.

Select each **Data Source** to be included in the directory from the drop-down list. To remove a selected data source, click on the X next to the name of the data source.

Choosing **Edit Dial** will enable the users to edit any telephone number through their Cisco IP Phone.

4. Click **Save**

Services

Manage services

Directory Service Options

* Service Name:	<input type="text" value="Sweet LDAP"/>
Service Prompt:	<input type="text"/>
Cluster:	<input type="text" value="US Cluster"/>
Directory Groups:	<input type="text" value="x Full Group"/>
Client:	<input type="text" value="Human Resources - hr"/>
Service Type:	<input type="text" value="OpenLDAP Service"/>
* OpenLDAP OU:	<input type="text" value="SWEET"/>
* Interface Name:	<input type="text" value="Default"/>
* Data Source:	<input type="text" value="x Akkadian LDAP Prod"/> <input type="text" value="x ACME_company"/>
Edit Dial:	<input type="checkbox"/>
Display all numbers:	<input type="checkbox"/> Require list of available numbers to display in order for the end user to select a number to dial.
<input type="button" value="Save"/>	

OpenLDAP Service Information

Service Name:	Sweet LDAP
Service Host:	<input type="text"/>
Service Port:	389
Secure-Service Port:	636
Service Base DN:	ou=SWEET,dc=akkadian,dc=com
Service Type:	OpenLDAP Service
Service Vendor:	Akkadian Labs, LLC

Web Directory Information

Browser Directory URL	<a href="https://<input type=" text"=""> /acm/web/directories/13">https:// <input type="text"/> /acm/web/directories/13
Authentication Required	<input checked="" type="checkbox"/>
Hidden	<input type="checkbox"/>

4.8.2 Edit Phone Service URL

To Edit a Service URL in Contact Manager

1. Select **Services URLs** from the **Directory** menu
2. Click on the name of **Services URL** to be edited
3. Make changes to Service URL and **Save**

4.8.3 Delete Phone Service URL

To Delete a Service URL in Contact Manager

1. Select **Service URLs** from the **Directory** menu
2. Check the **checkbox** next to the service url to be deleted and click **Delete**
3. Confirm deletion

4.8.4 Generated Directory Service URL

Based on the selections made when creating a **Service URL**, the URL structure will reflect the options selected.

Associating [Clients](#) to directory services allows you can effectively determine the URL structure and allocate directories to specific clients.

When **Clients** are associated with a directory URL, the client's company code is used as the identifier in the URL.

4.8.4.1 Directory Service URL without Client

Below is the format of a Directory Service URL without a Client configured:

Phone Services URLs
Manage phone services urls

Directory Service Options

* Phone Service Name: Acme company

Phone Service Prompt:

Cluster: Default

Directory Groups: Please select directory group

Client: Please Select Item

Service Type: Standard IP Phone Service

* Interface Name: Default

* Data Source: Acme Company LDAP

Edit Dial: ☐

Display all numbers: ☐ Require list of available numbers to display in order for the end user to select a number to dial.

Save

CUCM Service Provisioning Information

Service Name: Acme company

ASCII Service Name: Acme company

Service Description: Akkadian Labs, LLC Contact Manager

Service URL: http://.../acm/directory?service=9

Secure-Service URL: https://.../acm/directory?service=9

Service Category: XML Service

Service Type: Standard IP Phone Service

Service Vendor: Akkadian Labs, LLC

Service Version: 4.0.0

Web Directory Information

Browser Directory URL: https://.../acm/web/directories/9

Authentication Required: ☐

Format: **http://{ HOSTNAME }/acm/directory?service=1**

4.8.4.2 Directory Service URL with Client

Below is the format of a Directory Service URL with a Client configured

Phone Services URLs
Manage phone services urls

Contact Manager / Service URLs / Edit

Directory Service Options

* Phone Service Name: Acme company

Phone Service Prompt:

Cluster: Default

Directory Groups: Please select directory group

Client: Human Resources - hr

Service Type: Standard IP Phone Service

* Interface Name: Default

* Data Source: Acme Company LDAP

Edit Dial: ☐

Display all numbers: ☐ Require list of available numbers to display in order for the end user to select a number to dial.

Save

CUCM Service Provisioning Information

Service Name: Acme company

ASCII Service Name: Acme company

Service Description: Akkadian Labs, LLC Contact Manager

Service URL: [http://\[redacted\]/acm/directory?clientid=hr&type=service](http://[redacted]/acm/directory?clientid=hr&type=service)

Secure-Service URL: [https://\[redacted\]/acm/directory?clientid=hr&type=service](https://[redacted]/acm/directory?clientid=hr&type=service)

Service Category: XML Service

Service Type: Standard IP Phone Service

Service Vendor: Akkadian Labs, LLC

Service Version: 4.0.0

Web Directory Information

Browser Directory URL: [https://\[redacted\]/acm/web/directories/9](https://[redacted]/acm/web/directories/9)

Authentication Required: ☐

UDS Format: **http://{ HOSTNAME }/agd/index.php/directory?clientid=hr&type=service**

IP Phone Service Format: **(http://{ HOSTNAME }/agd/index.php/directory?clientid=hr&type=service &type=service&type=service&type=service &type=service&type=service &type=service**

IP Phone Directory Format: **http://{ HOSTNAME }/agd/index.php/directory?clientid=hr&type=service&type= &type=&type= &type=dir**

4.9 Directory Groups

Directory Groups allow admins to add multiple [Service URLs](#) into a single directory or a single Service URL across many directories.

Note: Directory Groups can only be used on IP phones.

4.9.1 Add Directory Groups

To Add Directory Groups in Contact Manager:

1. Select **Directory Groups** from the **Directory** menu
2. Click **Add New**
3. Fill out Directory Group Details and click **Save**

The screenshot shows the 'Add/Edit Directory Group' interface. At the top, the title 'Add/Edit Directory Group' is displayed, with a breadcrumb trail 'Contact Manager / Directory groups / Edit' on the right. Below the title, the form is divided into two main sections: 'Directory Group Details' and 'CUCM Directory Group Information'. In the 'Directory Group Details' section, there are three fields: 'Name' (required, with a red asterisk) containing 'Presidents', 'Description' containing 'The Presidents Directory', and 'Directory Services' containing 'x The Presidents'. A green 'Save' button is located below these fields. The 'CUCM Directory Group Information' section contains two fields: 'Group Name' containing 'Presidents' and 'Group URL' containing 'http://[redacted]/acm/directory?group=1'.

Add/Edit Directory Group
Manage directory groups Contact Manager / Directory groups / Edit

Directory Group Details

* Name: Presidents

Description: The Presidents Directory

Directory Services: x The Presidents

Save

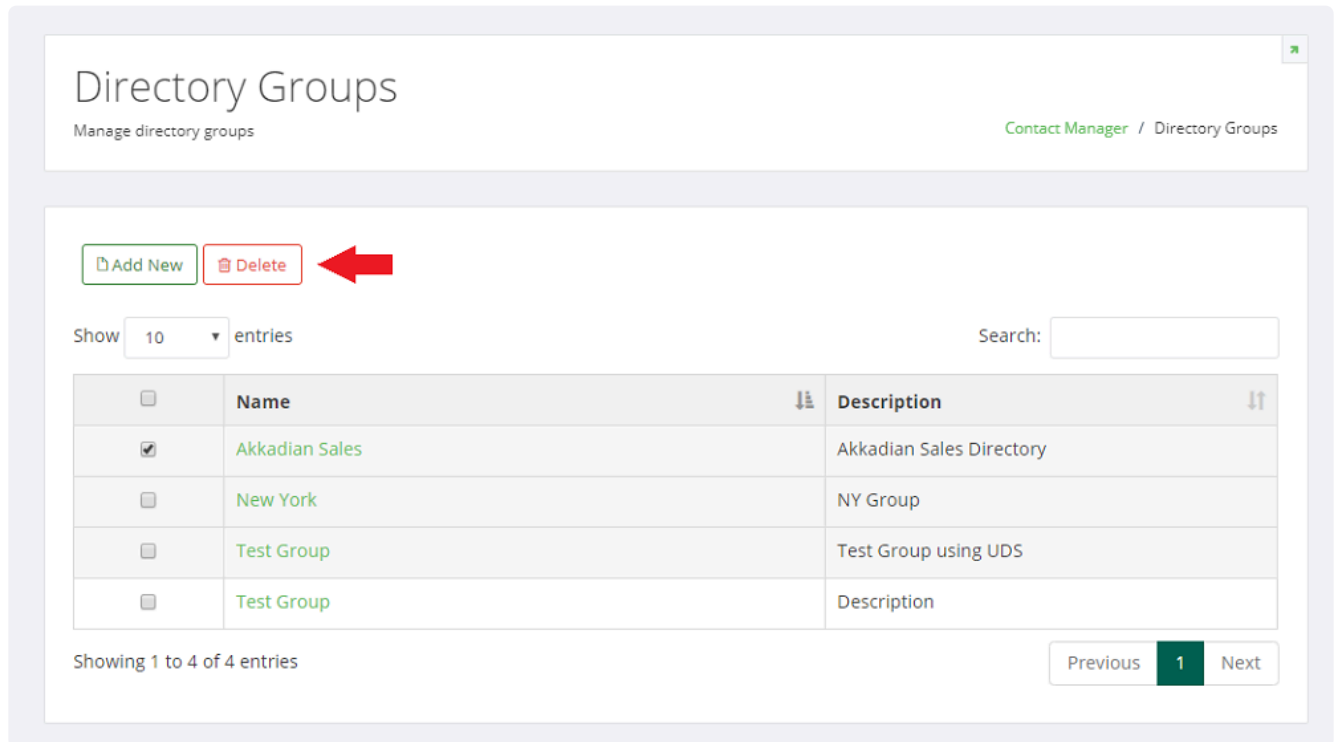
CUCM Directory Group Information

Group Name: Presidents

Group URL: http://[redacted]/acm/directory?group=1

4.9.2 Delete Directory Group

1. Select **Directory Groups** from the **Directory** menu
2. Check the checkbox(es) next to directory group to be deleted



Directory Groups

Manage directory groups

Contact Manager / Directory Groups

[Add New](#) [Delete](#)

Show 10 entries

Search:

<input type="checkbox"/>	Name	Description
<input checked="" type="checkbox"/>	Akkadian Sales	Akkadian Sales Directory
<input type="checkbox"/>	New York	NY Group
<input type="checkbox"/>	Test Group	Test Group using UDS
<input type="checkbox"/>	Test Group	Description

Showing 1 to 4 of 4 entries

Previous 1 Next

3. Click **Delete** and confirm by clicking **Yes, delete it**

4.10 Deploying Directory Services

Directory Services can be deployed in the following methods:

1. IP Phone Services
2. User Data Service for Jabber, Akkadian Console
3. Web Directory
4. Mobile App (Android and iOS)

4.10.1 Deploying an IP Phone Service

The generated service information in Akkadian Contact Manager corresponds to a CUCM required information to create a service.

Phone Services URLs
Manage phone services urls

Contact Manager / Service URLs / Edit

Directory Service Options

* Phone Service Name: Acme company

Phone Service Prompt:

Cluster: Default

Directory Groups: Full Group

Client: Please Select Item

Service Type: Standard IP Phone Service

* Interface Name: Default

* Data Source: Acme Company LDAP

Edit Dial: ☐

Display all numbers: ☐ Require list of available numbers to display in order for the end user to select a number to dial.

Save

CUCM Service Provisioning Information

Service Name: Acme company

ASCII Service Name: Acme company

Service Description: Akkadian Labs, LLC Contact Manager

Service URL: http://[redacted]/acm/directory/service=9

Secure-Service URL: https://[redacted]/acm/directory/service=9

Service Category: XML Service

Service Type: Standard IP Phone Service

Service Vendor: Akkadian Labs, LLC

Service Version: 4.0.0

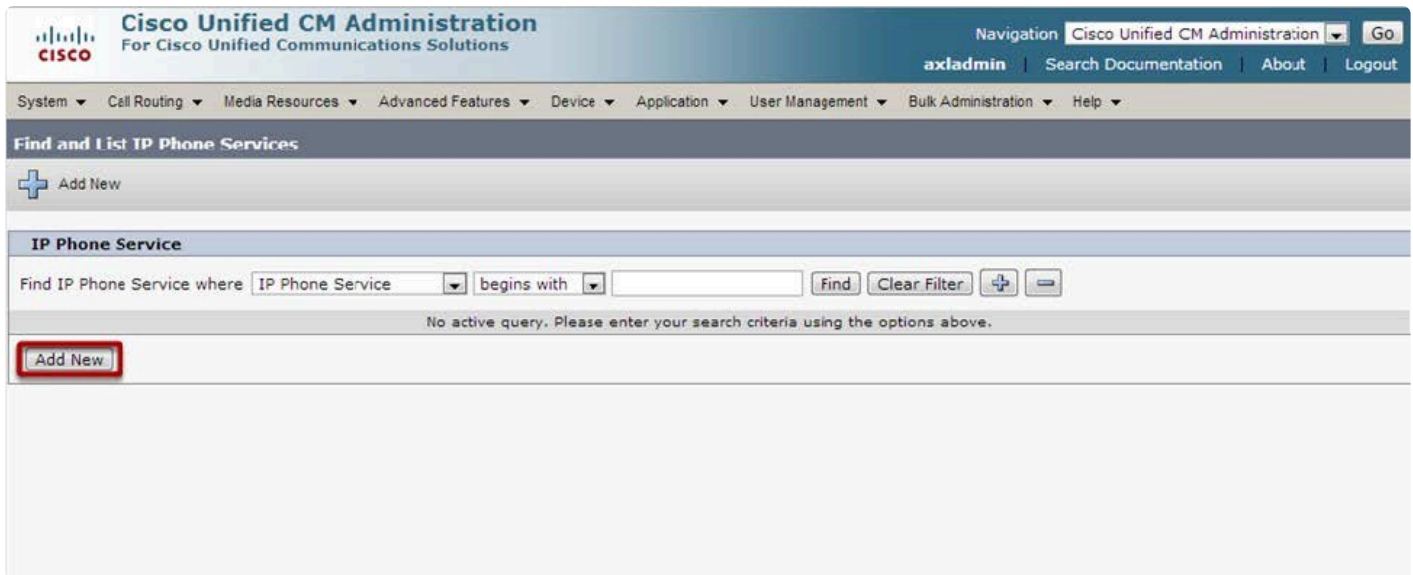
Web Directory Information

Browser Directory URL: https://[redacted]/acm/web/directories/9

Authentication Required: ☐

Create Service In CUCM

1. Log in to CUCM as with an account with administrative access.
2. Browse to IP Phone Services page: Device > Device Settings > Phone Services
3. Click **Add New**



Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration **axladmin** | Search Documentation | About | Logout

System ▾ Cell Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Find and List IP Phone Services

+ Add New

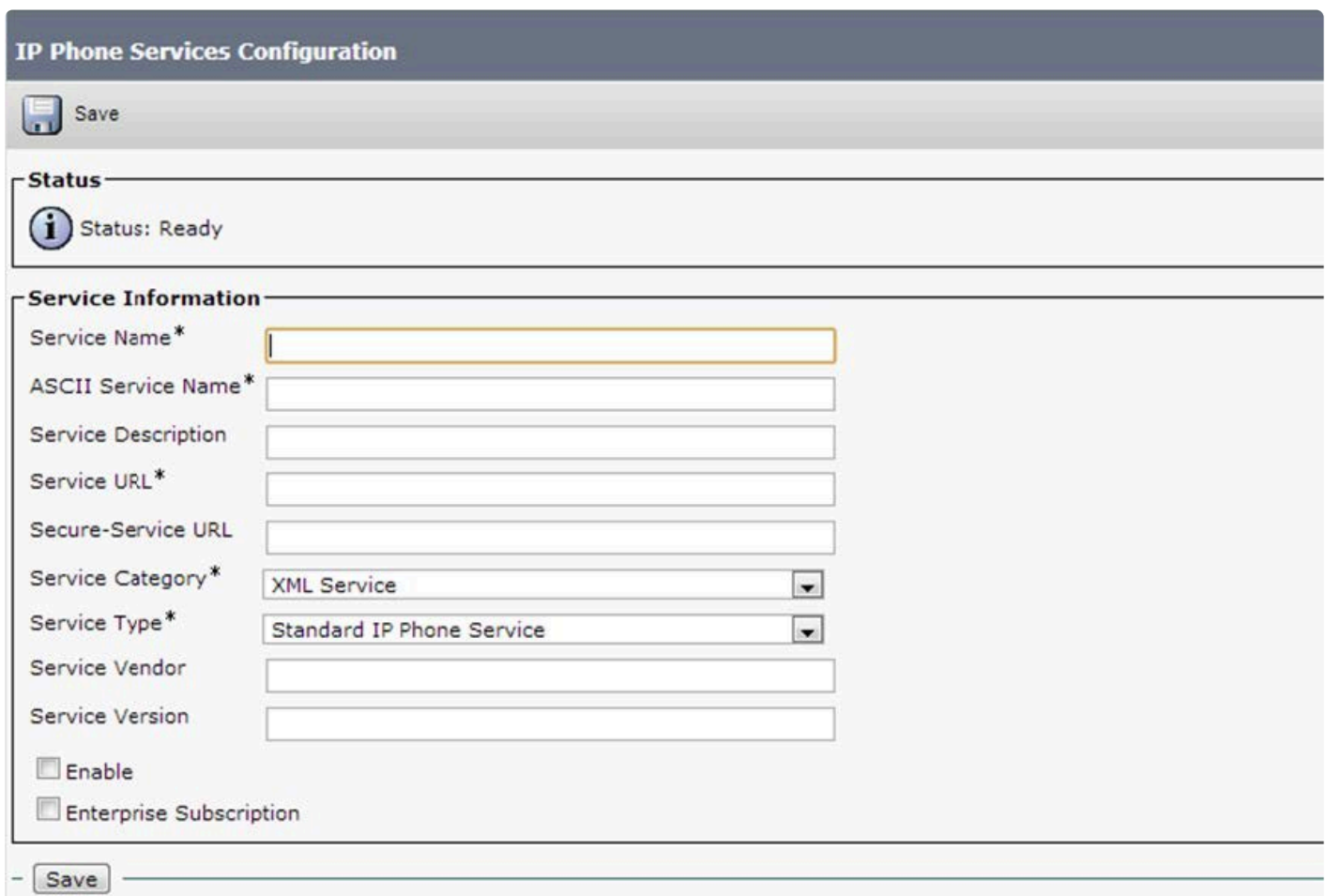
IP Phone Service

Find IP Phone Service where: IP Phone Service ▾ begins with ▾ Find Clear Filter + -

No active query. Please enter your search criteria using the options above.

Add New

- Fill in the service information using the Akkadian Contact Manager provided **CUCM Service Provisioning Information**.



IP Phone Services Configuration

Save

Status

i Status: Ready

Service Information

Service Name*

ASCII Service Name*

Service Description

Service URL*

Secure-Service URL

Service Category* XML Service ▾

Service Type* Standard IP Phone Service ▾

Service Vendor

Service Version

☐ Enable

☐ Enterprise Subscription

Save

Enable: This check box allows you to enable or disable the service without removing the configuration from Cisco Unified Communications Manager Administration (and without removing the service from the database). Unchecking the check box removes the service from the phone configuration file and the phone

Enterprise Subscription: This check box automatically provisions the service to all devices in the cluster that can support the service.

Note: *Checking the **Enterprise Subscription** checkbox will provision the service to every phone in the call manager cluster and cannot be reversed, service will have to be deleted to reverse.*

5. Check **Enable** and click **Save**

4.10.2 Deploying UDS for Jabber

1. Before making any changes, backup your existing jabber-config.xml file. You can view config file in your browser by going here: **<http://{ CUCM TFTP }:6970/jabber-config.xml>**
2. Download a copy of the jabber-config.xml file
3. Replace the directory UdsServer value in the config file with your UDS service URL without the protocol e.g. **/acm/directory?clidid=AL001**

```
<?xml version="1.0" encoding="utf-8"?>
<config version="1.0">
  <Options>
    <StartCallWithVideo>>false</StartCallWithVideo>
  </Options>
  <Voicemail>
    <VoicemailPrimaryServer>unity1</VoicemailPrimaryServer>
  </Voicemail>
  <Phone>
    <TftpServer1>ccm1</TftpServer1>
    <TftpServer2>ccm2</TftpServer2>
    <CtiServer1>ccm2</CtiServer1>
    <CtiServer2>ccm3</CtiServer2>
    <CcmcipServer1>ccm1</CcmcipServer1>
    <CcmcipServer2>ccm2</CcmcipServer2>
  </Phone>
  <Policies>
    <TelemetryCustomerID>com.mycompany</TelemetryCustomerID>
    <EnableSIPURIDialing>true</EnableSIPURIDialing>
  </Policies>
  <Presence>
    <PresenceServerAddress>cups1</PresenceServerAddress>
  </Presence>
  <Directory>
    <DirectoryServerType>UDS</DirectoryServerType>
    <PresenceDomain>mycompany.com</PresenceDomain>
    <BDIPresenceDomain>mycompany.com</BDIPresenceDomain>
    <UdsServer>{ HOSTNAME }/agd/index.php/directory?clidid=AL001</UdsServer>
  </Directory>
</config>
```

4. Save jabber-config.xml file
5. Upload the jabber-config.xml file to each one of your TFTP servers
6. Restart the TFTP service on each of the servers
7. Client Jabber application will pick up the config file when they user signs into Jabber. In some situations, you may have to reset Jabber for change to take effect.

4.10.3 Deploying Mobile App Directory

To Enable the Mobile App Directory for Contact Manager

1. From the Mobile App ensure you have connectivity to the Akkadian Contact Manager.
2. Enter the hostname or IP Address of the Akkadian Contact Manager and Service ID (optional).



Server Authentication

Host Name/IP Address

Validate

3. You will be redirected to the login page to authenticate against the Mobile Auth sources specified in **System > Mobile Auth** section of Contact Manager.
4. You will be presented with the mobile directory.



Akkadian

Contact Manager



The Presidents

A



Abraham Lincoln
16th President



Andrew Jackson
7th President



Andrew Johnson
17th President



B



Barack Obama
44th President



Benjamin Harrison
23rd President



4.11 Placing calls using Contact Manager and Jabber

Contact Manager now supports placing calls through Jabber from the web and mobile directories. When viewing a contact's details, click on the phone icon to place a call.

4.11.1 Requirements

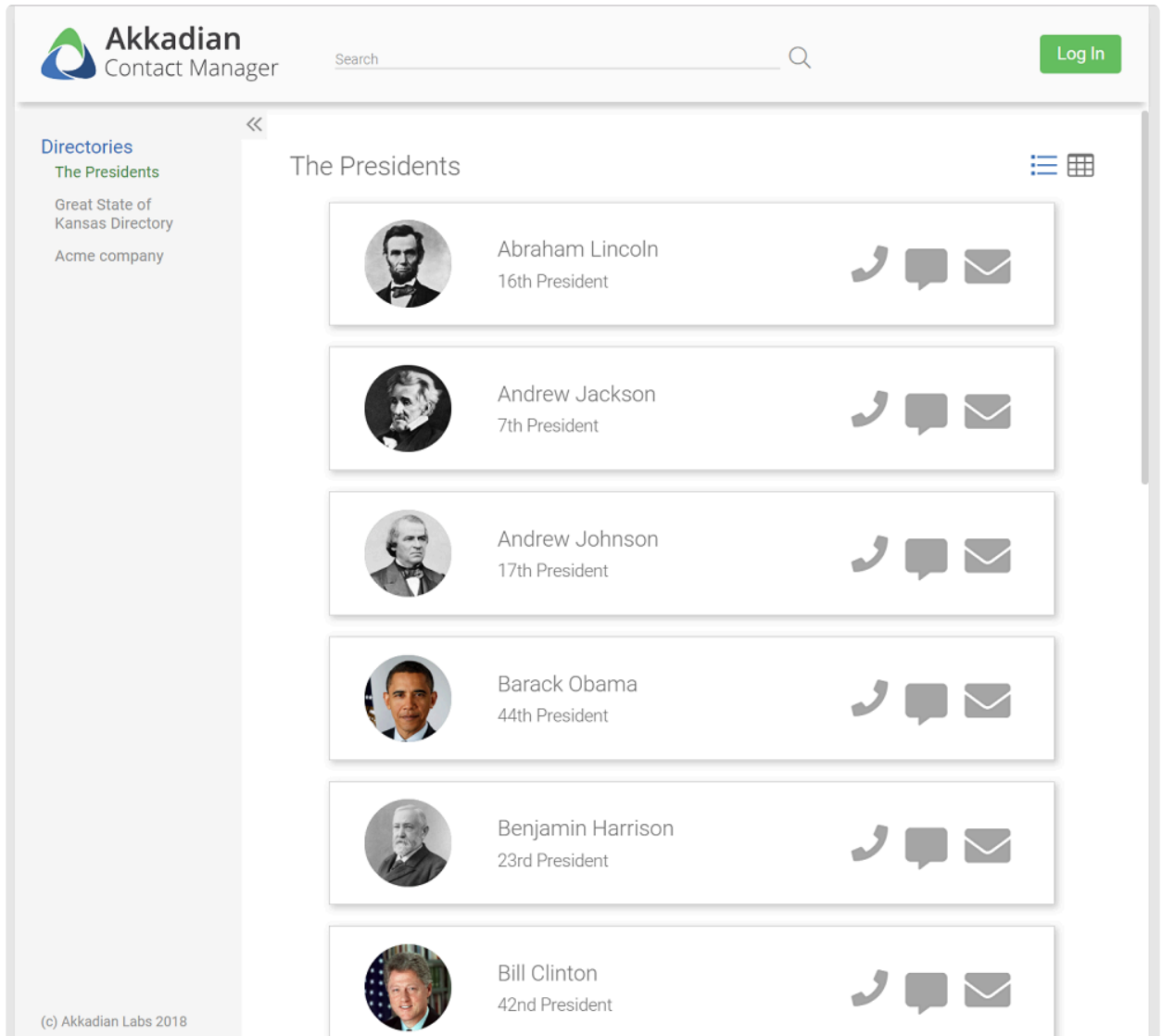
To place a call using Contact Manager and Jabber:

- Ensure that Contact Manager has been configured with a [Service URL](#)
- The **Enable Web/Mobile Directory** checkbox in **System > Settings** have been configured.

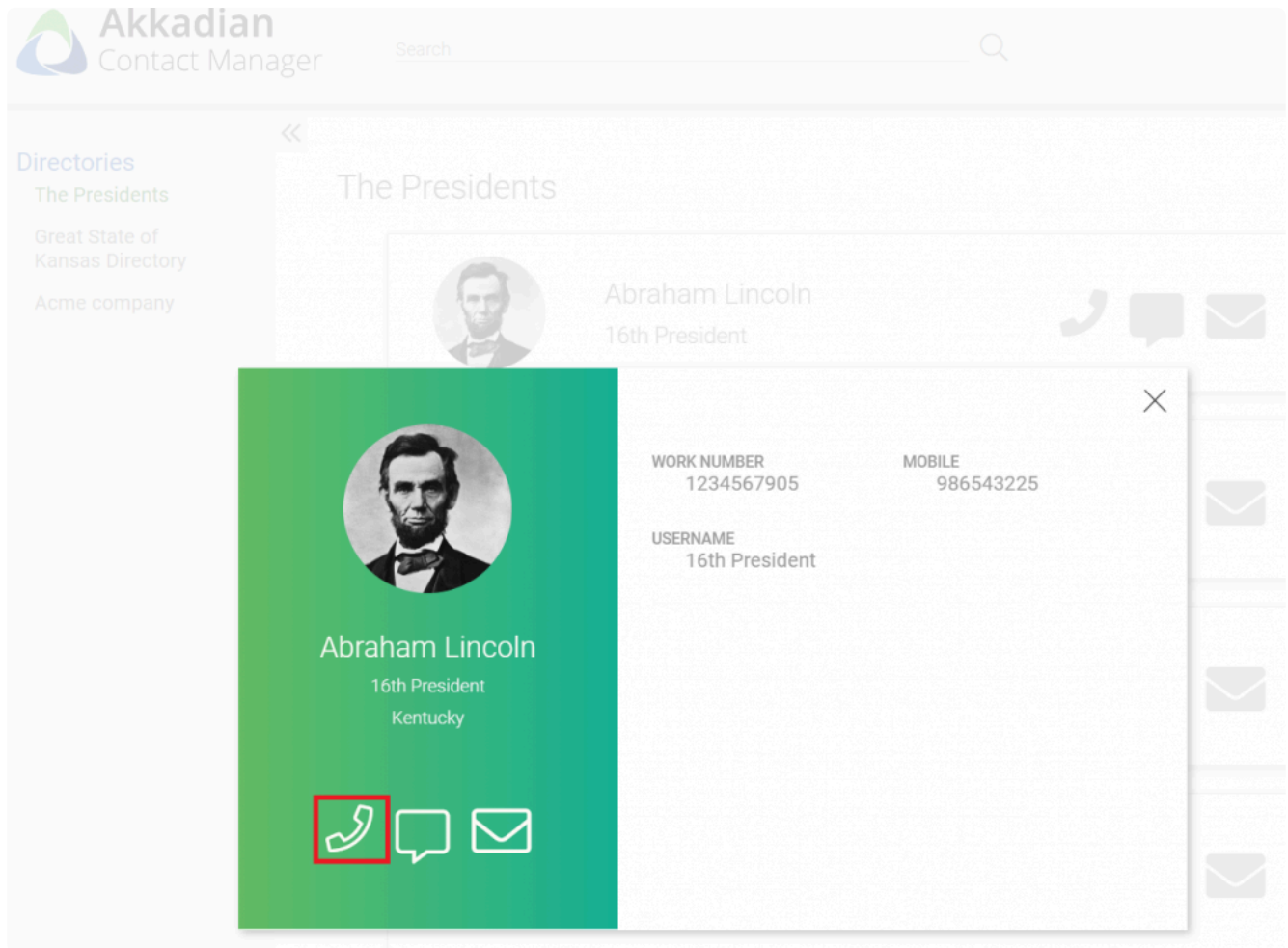
4.11.2 Placing a Call

To place a call using Contact Manager and Jabber:

1. Log in to **`https://{ HOSTNAME }/acm/web/`**
 - a. Alternatively **`https://{Server IP or NAME}/acm/web/directories/{service number}`** can be used



2. Select the contact that you wish to call.



3. Click on the phone icon

Note: Different clients approach this differently. See below for details.

- When using the web directory via a computer's browser, you may be prompted to select a default application or launch Cisco Jabber.
- When using Android and the mobile directory, you may be prompted to select the default calling app.
- When using iOS and the mobile directory, Jabber will automatically launch and place a call if the Jabber app is already installed.

5. Cover Me

Cover Me allows users to request another user to cover their phone calls for an allotment of time. This request is made through the web directory.

The screenshot displays the 'Cover Me' interface in the Akkadian Contact Manager. At the top, the user 'Joanna Niles' (JN) is logged in. The sidebar on the left contains a 'Home' link and a 'Directories' section with the following items: XML Service URL, Sales Directory, Testing Sales, Testing Sales, Testing Sales, The Presidents, UDS FOR KAMAL, Kenrick UDS, 140 call Manager, ACME Co., CUCM 11.0, and Demo Directory. The main content area is titled 'Cover Me' and contains the following fields:

- Start on:** A date and time selector set to 2019-08-21 at 6:00 PM.
- End on:** A date and time selector set to 2019-08-26 at 6:30 PM.
- Presidents:** A dropdown menu currently showing 'Presidents'.
- William Henry Harrison:** A dropdown menu currently showing 'William Henry Harrison'.
- + Add Note:** A button with the text 'optional' next to it.
- Buttons:** Two buttons at the bottom, 'Send Request' (blue) and 'Cancel' (red).

Cover Me Requirements

- Communications Manager must be configured in the [Communications Managers](#) section
- The same Communication Manager must be configured as a directory source and service URL
- Cover Me must be enabled in the [Settings](#)

5.1 Integrating CUCM for Cover Me

Integrating CUCM for Cover Me

1. Configure CUCM in **System** > Communications Managers
2. Enable Cover Me in **System** > **Settings**
 - a. Select the CUCM you want to use for Cover Me
3. Add CUCM as a [Data Source](#)
4. Add CUCM as a [Service URL](#)

5.2 Configuring Cover Me

Configuring Cover Me

1. Log into the **Web Directory**
2. Go to **My Account > Cover Me**
3. Select **Create New Request**
4. Select the Start and End Date and Time Range for the Cover Me Request
5. Select the CUCM
6. Type in 3 letters to find and select the contact you want to send the request to
7. Add a note to the request.
8. Click **Send Request**
 - a. User B will get an email stating User A submitted a Cover Me Request
 - i. Upon approval or denial of the request, User A and B will get an email stating the request was approved or denied
 - ii. If approved, User A's Calls will be forwarded to User B's device for the duration of the request. Upon expiration of the request, call forwarding will stop.



Admin Users can also view, approve, or deny Cover Me Requests in **System > Cover Me Request**

6. Web Directory

To access a Web Directory in Contact Manager

- It must be enabled in the [Settings](#)
- Use the following URL:

https://{Server IP or HOSTNAME}/acm/web

or

https://{Server IP or NAME}/acm/web/directories/{service number}

To access the Web Directory for a specific Directory Service from the browser, use the URL under the Web Directory Information section.

Phone Services URLs
Manage phone services urls
Contact Manager / Service URLs / Edit

Directory Service Options

* Phone Service Name:

Phone Service Prompt:

Cluster:

Default

Directory Groups:

* Agency List

Client:

Please Select Item

Service Type:

Standard IP Phone Service

* Interface Name:

Default

* Data Source:

* Acme Company LDAP

Edit Dial:

☐

Display all numbers:

☐ Require list of available numbers to display in order for the end user to select a number to dial.

Save

CUCM Service Provisioning Information

Service Name:

XML Service URL

ASCII Service Name:

XML Service URL

Service Description:

Akkadian Labs, LLC Global Directory

Service URL:

http://{redacted}/acm/directory?service=10

Secure-Service URL:

https://{redacted}/acm/directory?service=10

Service Category:

XML Service

Service Type:

Standard IP Phone Service

Service Vendor:

Akkadian Labs, LLC

Service Version:

4.0.0

Web Directory Information

Browser Directory URL:

https://{redacted}/acm/web/directories/10

Authentication Required:

☐

If the **Authentication is Required** box is checked on the service URL, log in using the mobile username and password



Username

Password

Login

(c) Akkadian Labs 2018

Glossary

Authentication URL

Corresponds to the URL authentication in CUCM located under the Enterprise Parameters Configuration. This URL is used to authenticate devices accessing the Contact Manager.

Cisco UDS

User Data Services (UDS) API is a REST-based set of operations that provide authenticated access to user resources and entities such as user's devices, subscribed services, speed dials, and much more from the Unified Communications configuration database.

CSV

Comma-separated values. Contact Manager can be configured to use a CSV for importing directory information. A template of the file can be obtained when the CSV option is selected when adding csv data source.

CUCM

Cisco Unified Communications Manager. The link to CUCM and Contact Manager is via the Services URL which should be populated in Call Manager. In addition, phone and CUCM authentication between the Contact Manager Server is required in order to publish directory settings on individual phones.

Dial Rules

Dial rules can be enabled to enforce call routing rules. Creating dial rules in Contact Manager will enable more efficient enforcement of call routing using a customer's WAN. This may, in many cases prevent calls from being routed out through the PSTN.

LDAP

Lightweight Directory Access Protocol. Contact Manager can be configured to use LDAP for its directory source. A directory can be created on the entire directory, an individual, or set of "ou"s, or on a subset using filtering.

Login/Admin Roles

Login: Allows access only to the Directory Tab. Admin: Allows access to both the Directory and System Tab to enable changes for GD.

MSSQL

Microsoft SQL server. Contact Manager can be configured to import directories directly from MSSQL.

Publisher

This is the central Global Director server. When enabled in a multi-server configuration, this server is used to centrally administer directories, users, and URL's.

Service URL

This is the URL that constitutes the service representing a directory. Each directory will have its own unique Service URL. This will translate to an individual directory on the end user's phone.

Subscriber

The subscriber is a secondary Contact Manager server. It will pull its data either transnationally, or on a defined schedule from the Publisher. This is the URL that constitutes the service representing a directory. Each directory will have its own unique Service URL. This will translate to an individual directory on the end user's phone.