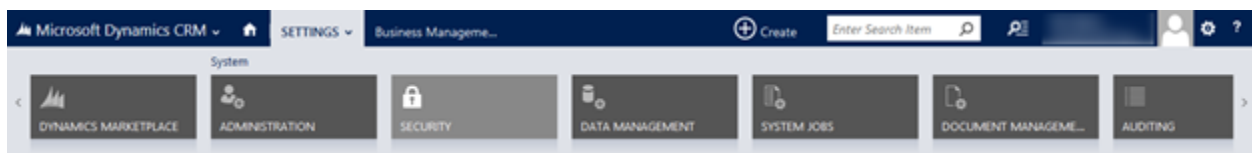
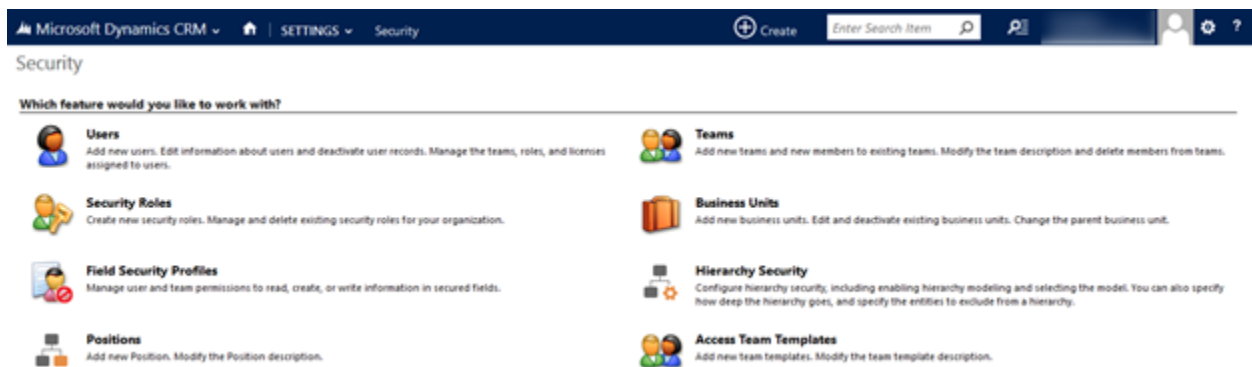


## Hierarchical Security Models in Dynamics CRM 2015

1. With the coming Microsoft Dynamics CRM 2015 a new addition has been made to the security model to provide hierarchical visibility based on the manager field in the user record.
2. This new change will make it possible for managers to see records for the people under them.
3. This will let a direct manager of a person read, update, append and append to owned records, and read permissions to managers above the direct manager allowing for easier visibility of subordinates activities that can be used in dashboard and reporting easily.
4. With the addition of the new security items, the Security has been moved to its own section in the navigation under Settings:



Security related items have been moved to security along with the new Hierarchy settings:



To enable the Hierarchy Security model select the **Hierarchy Security** item.



### **Hierarchy Security**

Configure hierarchy security, including enabling hierarchy modeling and selecting the model. You can also specify how deep the hierarchy goes, and specify the entities to exclude from a hierarchy.

This will bring up the settings:

Microsoft Dynamics CRM | SETTINGS | Security

Save and Close | Discard

## Hierarchy Security

Configure hierarchy security, including enabling hierarchy modeling and selecting the model. You can also specify how deep the hierarchy goes, and specify the entities to exclude from a hierarchy.

**Turn on Hierarchy Modeling**

☒ Enable Hierarchy Modeling 1

**Select Hierarchy Model**

☒ Manager Hierarchy 2 [Configure](#) ☐ Custom Position Hierarchy [Configure](#)

Hierarchy Depth 3 3

**Exclude following entities from hierarchy**

Available Entities

- Account
- Activity
- Appointment
- Campaign
- Campaign Activity
- Campaign Response
- Case
- Case Creation Rule

Selected Entities

4

Add > < Remove

1. Turns on or off the Hierarchy Modeling
2. Sets the Hierarchy to Manager
3. Sets the depth the hierarchy will be applied to (Note that there may be a performance impact on depths greater than 4)
4. Any entity that should be excluded from the hierarchy model can be set here

A new hierarchy view has been added that is available once the Manager Hierarchy is turned on and it can be viewed from the user record by opening a user and selecting View Hierarchy.

Microsoft Dynamics CRM | Training User 1

CONNECT | APPROVE EMAIL | REJECT EMAIL | REASSIGN RECORDS | MANAGE ROLES | JOIN TEAMS | CHANGE BUSINESS UNIT

USER: Training User 1

The information provided in this form is viewable by the entire organization. This user's information is managed by Office 365. To edit this information visit the User Administration section of the Office 365 Portal.

**Summary**

**Account Information**

User Name TrainingUser1@thaddeusmf1ega.onmicr

**User Information**

Full Name Training User 1

**POSTS**

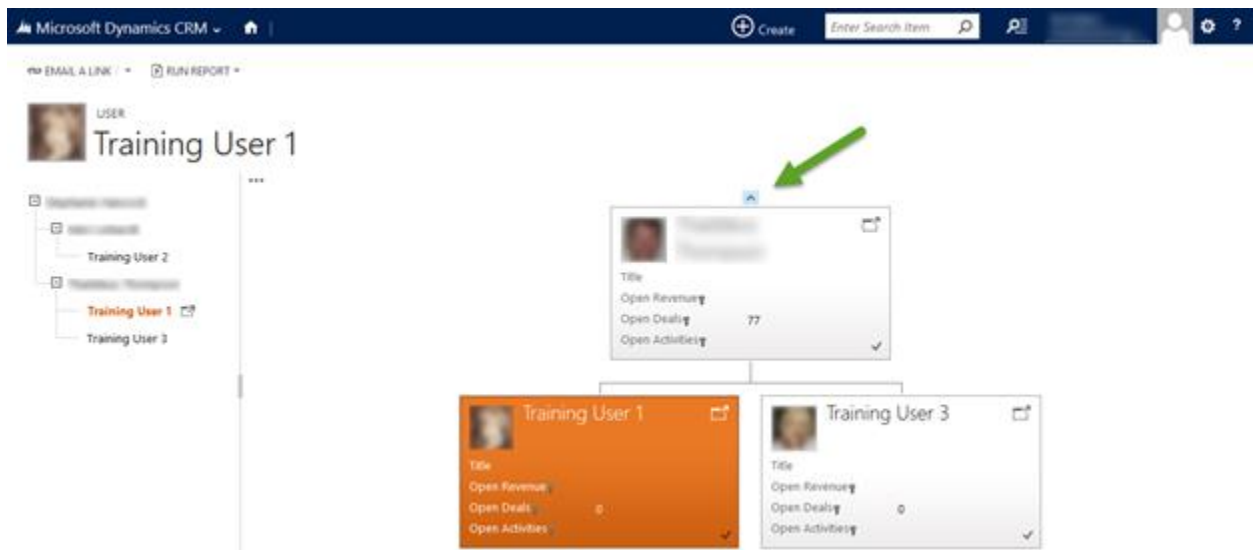
Enter post here

Both Auto posts User posts

We didn't find any posts.

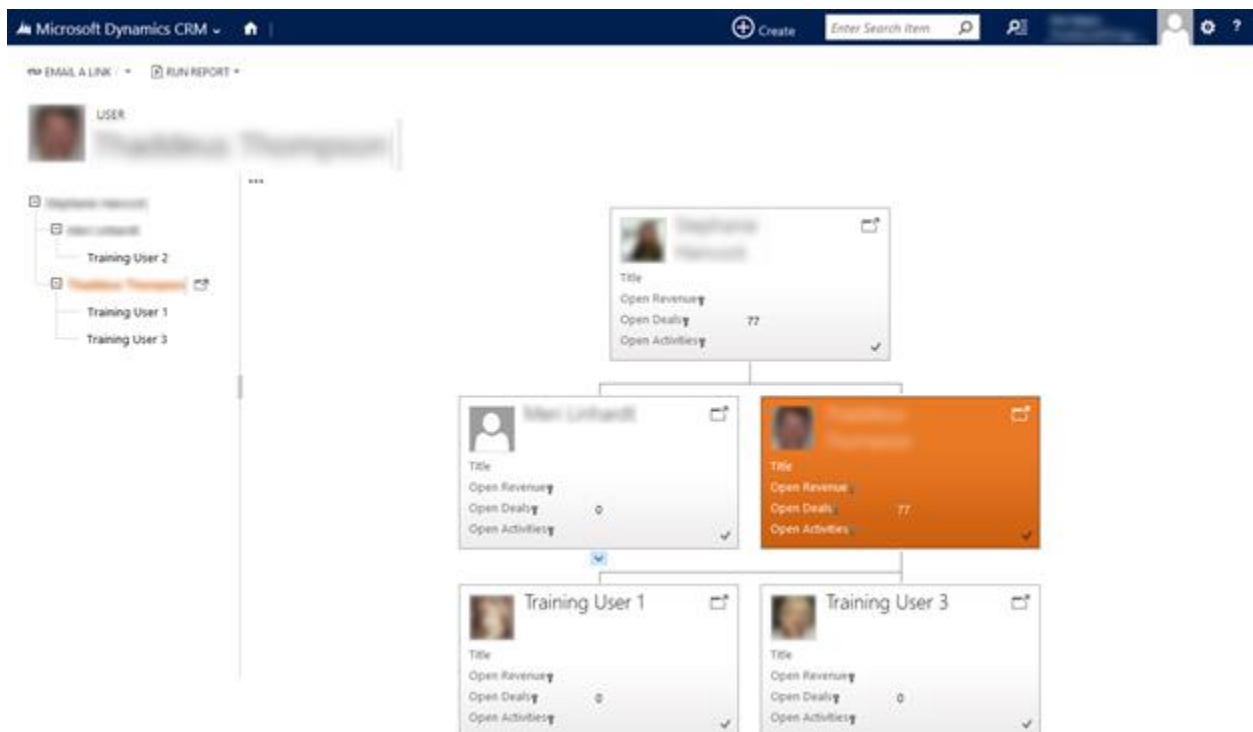
Change Manager  
Change Position  
Open Mailbox  
View Hierarchy  
Send Direct Email  
Share Secured Fields  
Email a Link  
Follow  
Run Workflow  
Start Dialog  
Run Report  
Form Editor

This will show the user in relation to the manager and other users within the scope of the current level.



This will show the user, the manager, and other people at the same level as the selected user.

By selecting the up arrow the Hierarchy View can be changed to show more of the structure and shift the focus from the originally selected user to the manager and show a larger portion of the tree.



The managers will then have rights to all the records owned by their direct reports without the need of a sharing model.

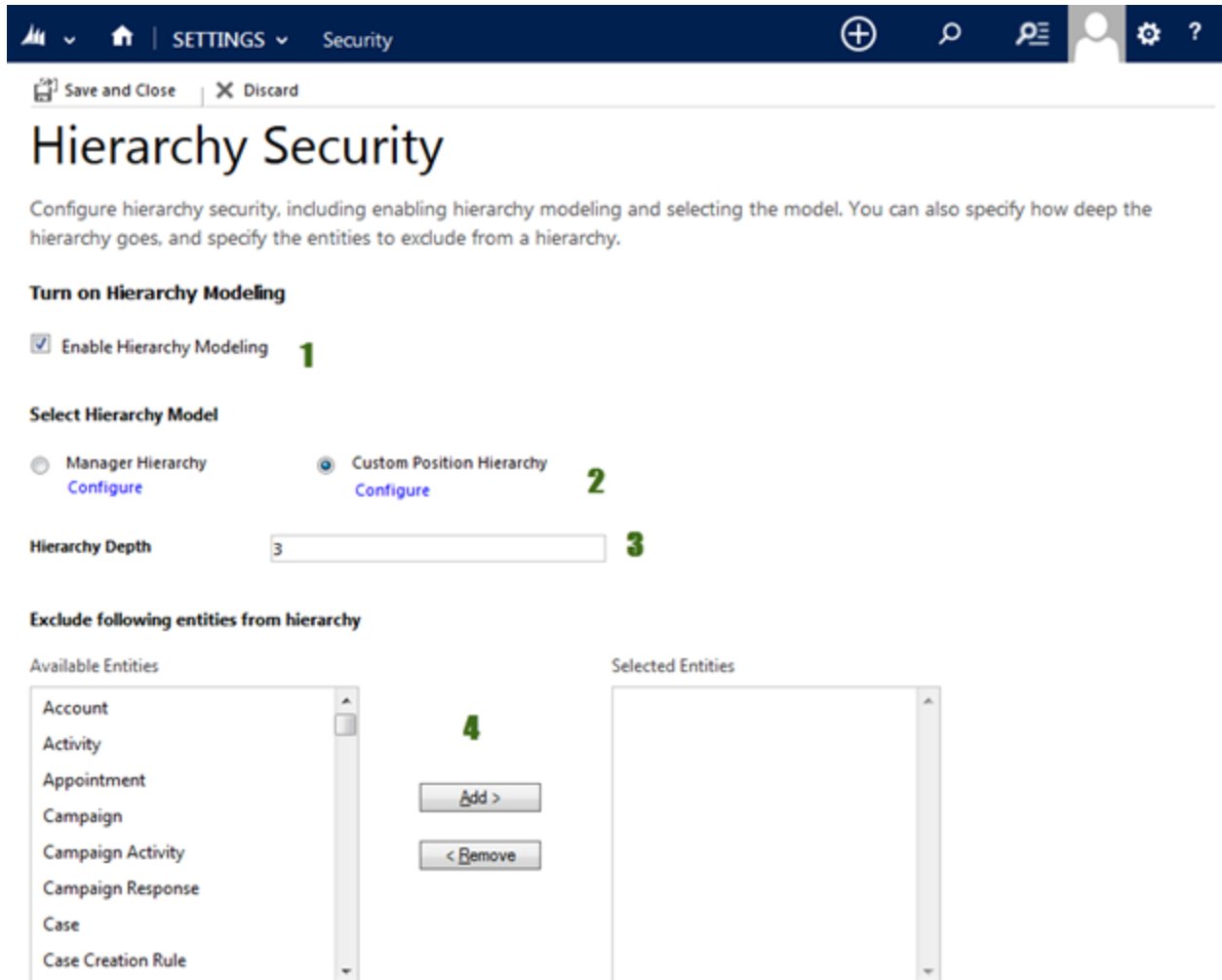
To enable the Positional Security model select the **Hierarchy Security** item.



### Hierarchy Security

Configure hierarchy security, including enabling hierarchy modeling and selecting the model. You can also specify how deep the hierarchy goes, and specify the entities to exclude from a hierarchy.

This will bring up the settings:



The screenshot shows the 'Hierarchy Security' configuration page. At the top is a dark blue navigation bar with 'SETTINGS' and 'Security' tabs. Below the bar is a sub-header 'Hierarchy Security' with a descriptive paragraph. The main content area includes a 'Turn on Hierarchy Modeling' section with a checked checkbox labeled '1'. Below that is a 'Select Hierarchy Model' section with two radio buttons: 'Manager Hierarchy' and 'Custom Position Hierarchy', with the latter selected and labeled '2'. A 'Hierarchy Depth' input field is set to '3' and labeled '3'. At the bottom is an 'Exclude following entities from hierarchy' section with two list boxes: 'Available Entities' and 'Selected Entities', with 'Add >' and '< Remove' buttons between them, labeled '4'.

1. Turns on or off the Hierarchy Modeling
2. Sets the Hierarchy to Custom Position
3. Sets the depth the hierarchy will be applied to (Note that there may be a performance impact on depths greater than 4)
4. Any entity that should be excluded from the hierarchy model can be set here

Go back to the security main page and click Select.



## Positions

Add new Position. Modify the Position description.

Which will bring up the position definition list:

The screenshot shows the 'Active Positions' list in Microsoft Dynamics CRM. The table has two columns: 'Name' and 'Parent Position'. The data rows are as follows:

✓	Name	Parent Position
	Sales VP	
	Area Manager	Sales VP
	Sales Manager	Area Manager
	Sales Person	Sales Manager

Where you can define positions and which position reports to another position. This model is best for an organization that is based on one or more manager needs access to records of a group of people in a position below that manager.

Defining a position is simple in that it needs a name, and a parent position if it applies. Once this is saved, users can be added to the position using the sub grid.

The screenshot shows the 'Sales VP' position form in Microsoft Dynamics CRM. The form has a 'General' tab. The 'Name' field is 'Sales VP' and the 'Parent Position' field is empty. The 'Description' field is empty. The 'Users in this position' sub-grid is visible, showing a search bar and a table with columns 'Full Name' and 'Position'. A green arrow points to the 'VIEW HIERARCHY' button in the top navigation bar.

Microsoft Dynamics CRM | SETTINGS | Security | Sales VP | Create | Search | Filter

+ NEW | DEACTIVATE | CONNECT | DELETE | CHANGE PARENT POSITL... | VIEW HIERARCHY

POSITION : INFORMATION

### Sales VP

**General**

Name Sales VP

Parent Position --

Description --

Users in this position

Search for records

Full Name	Position
	Sales VP

You can look at the positional hierarchy by selecting View Hierarchy item.

SETTINGS

Security

NEW

EMAIL A LINK

RUN REPORT

POSITION

Sales VP

Sales VP

Area Manager

Sales Manager

Sales Person

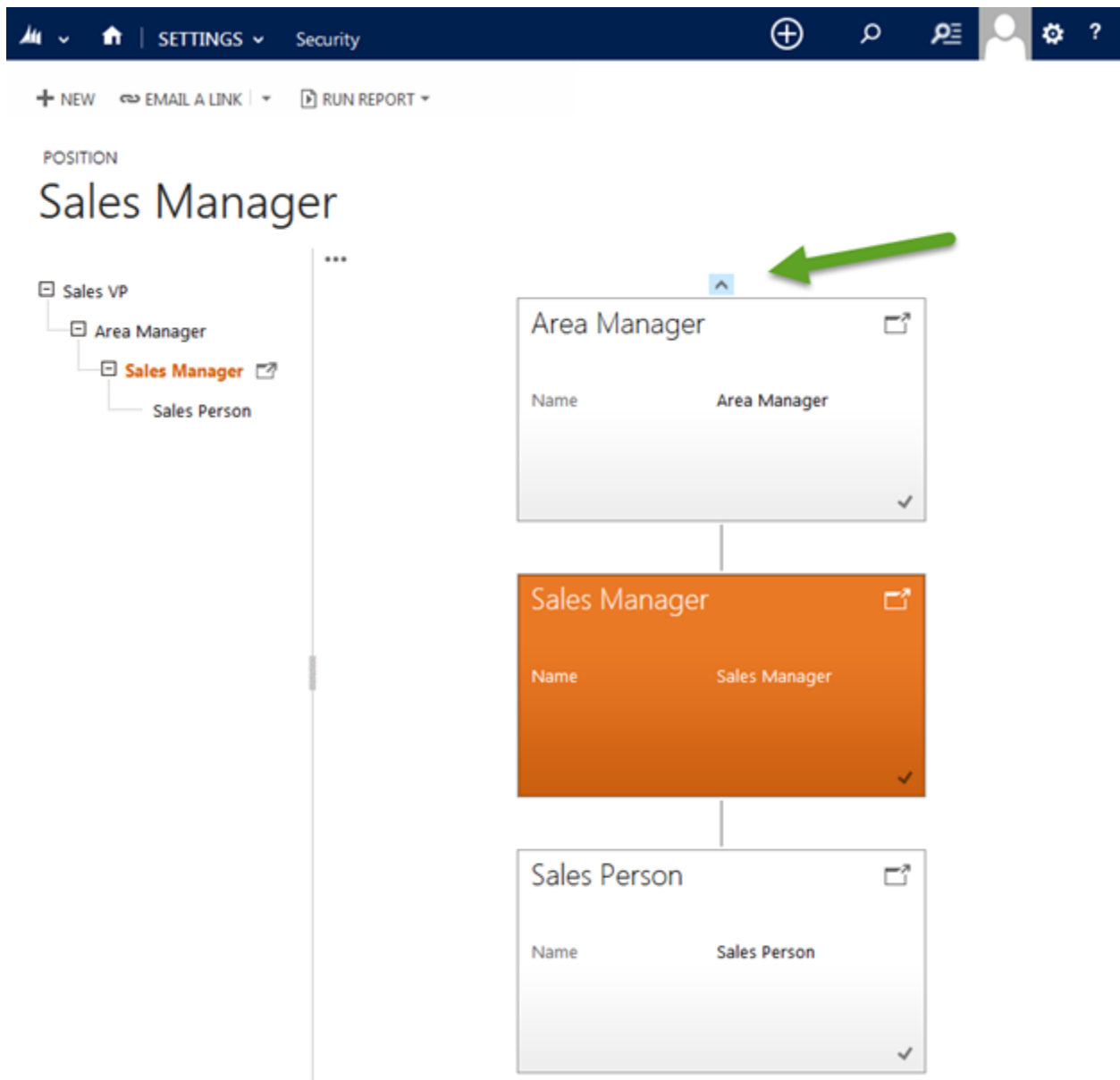
Sales VP

NameSales VP

Area Manager

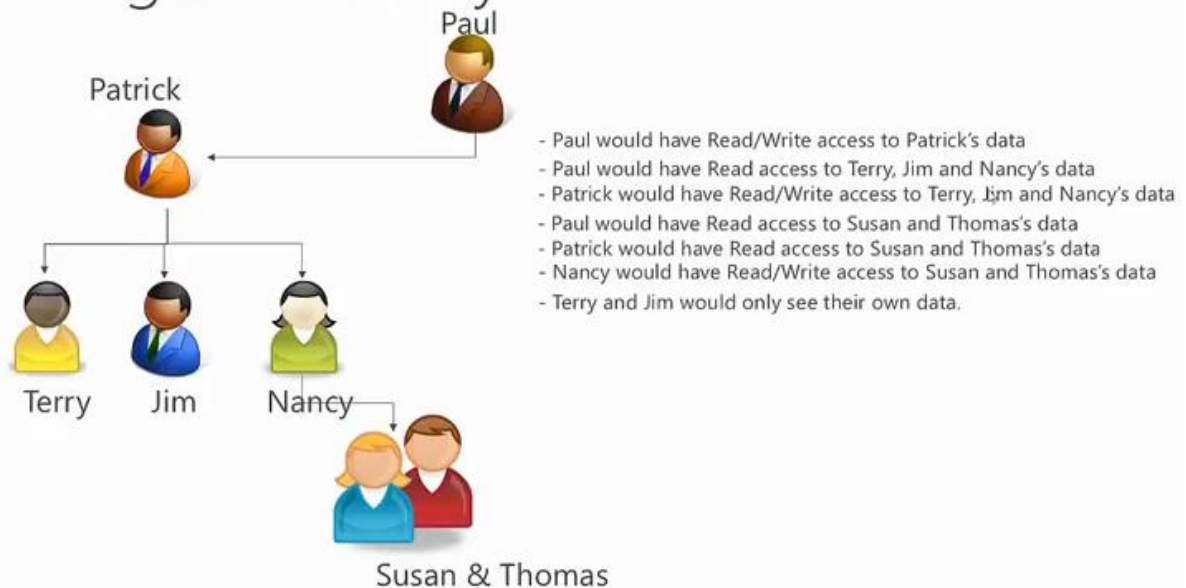
NameArea Manager

This will bring up a view of the relationship of the positions and can be navigated with the blue arrows, similar to the manager hierarchy.

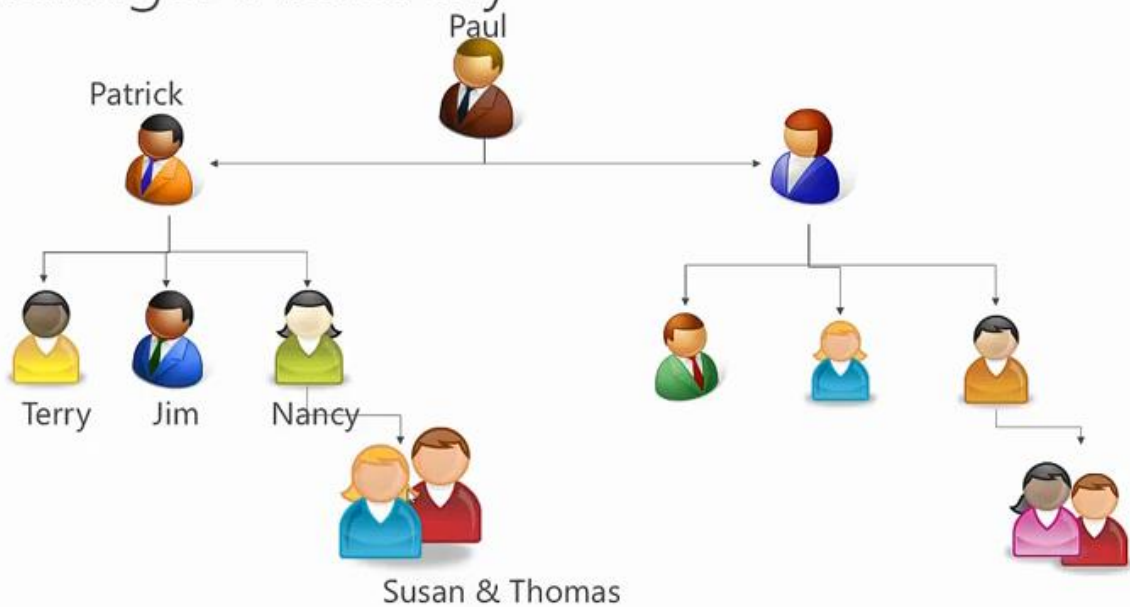


These two models are in addition to the current security models and will adhere to business unit restrictions or if using a team model, the teams the person is on. This adds visibility based on the hierarchical structure to allow for an easier way for managers to see the records for their people and those below them.

# Manager Hierarchy



# Manager Hierarchy





# Position Hierarchy

## Cross business unit

No constraints on business unit hierarchy

Structure based on Position and Parent Position records

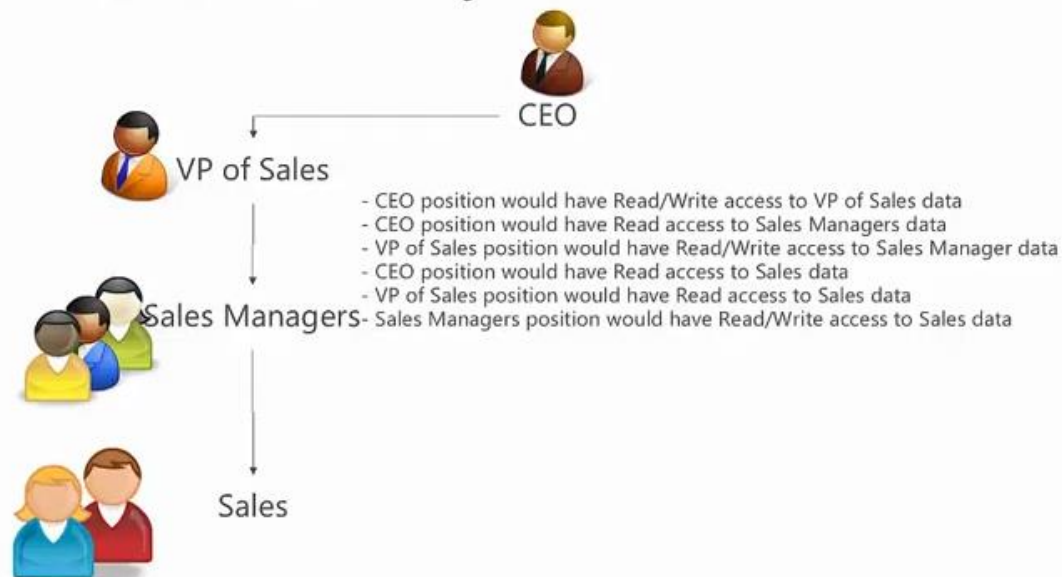
## Users tagged to a position

Positions can be used for multiple users

## Reporting structure

User doesn't have to be a manager of a user to access data

# Position Hierarchy



# Position Hierarchy



## Enable HSM

### Settings-Security-Hierarchy Security

Disabled by default on new and upgraded organizations

Hierarchy Depth will default to 3

**Hierarchy Security**  
Configure hierarchy security, including enabling hierarchy modeling and selecting entities to exclude from the hierarchy.

**Turn on Hierarchy Modeling**

☒ Enable Hierarchy Modeling

**Select Hierarchy Model**

☒ Manager Hierarchy [Configure](#) ☐ Custom Position Hierarchy [Configure](#)

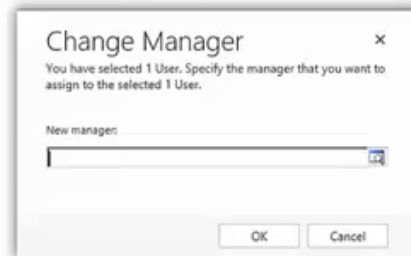
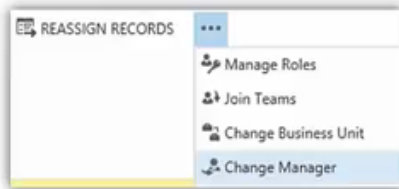
Hierarchy Depth:

**Exclude following entities from hierarchy**

Available Entities		Selected Entities
Account	<input type="button" value="Add &gt;"/>	<input type="text"/>
Activity		
Appointment	<input type="button" value="&lt; Remove"/>	
Campaign		
Campaign Activity		
Campaign Response		
Case		
Case Creation Rule		
Case Resolution		

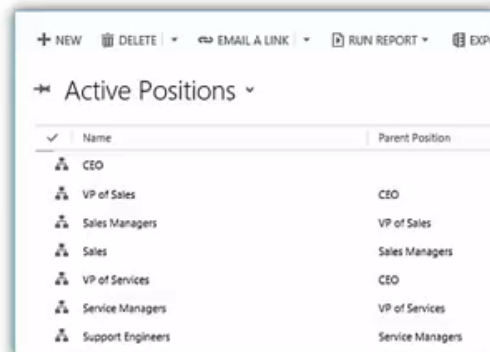
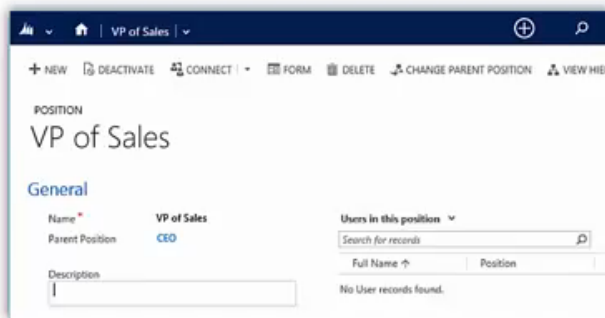
# Manager Hierarchy

## Set Manager on User Record

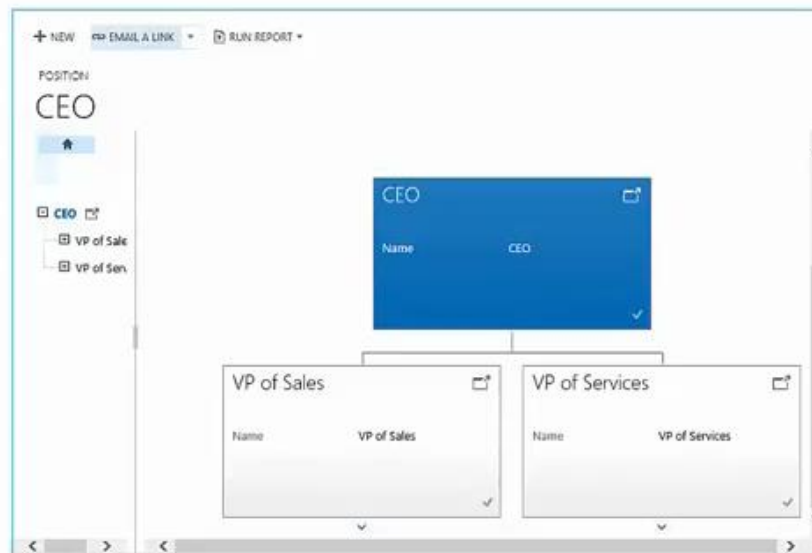


# Position Hierarchy

## Create Position Records



# Viewing the Hierarchy



## Security Filtering

### Hierarchy Security Disabled

Disabled by default

Current BU, Roles, Teams, Sharing are still used

### Hierarchy Security Enabled

No changes for non manager users

No changes if managers role is BU depth or global access

Qualifying Records

- Owned by child users or teams the child user is a member of

- Shared to child users or teams the child user is a member of

Non-qualify records

- Records that child users can see due to global security privileges

- Records that child users can see due to Business Unit depth security privileges

# Tables

## SystemUserManagerMap

Row for every user

Every Manager also has a row for every child user they can see

HierarchyLevel column identifies how many levels of hierarchy exists between the manager and user

Depth setting will affect how much data is in this table

HierarchyLevel	SystemUserManagerMapId	ParentSystemUserId	ManagerName	SystemUserId	UserName
0	AE64D774-BEA9-4323-A80E-0A0AD80F8EC7	890BB450-133D-E411-80C4-00155D00790A	CRM Admin	890BB450-133D-E411-80C4-00155D00790A	CRM Admin
0	37C955EE-FFB1-4030-8F4F-50652F2FCA34	47B3921A-6743-E411-80C6-00155D00790A	Terry Adams	47B3921A-6743-E411-80C6-00155D00790A	Terry Adams
1	6E649FC2-1F7A-48F3-A992-A5421405394D	54B3921A-6743-E411-80C6-00155D00790A	Susan Burk	47B3921A-6743-E411-80C6-00155D00790A	Terry Adams
3	72D01715-40F6-4203-9BCC-A6F0B1227060	F433B832-4748-E411-80C6-00155D00790A	Nancy Anderson	47B3921A-6743-E411-80C6-00155D00790A	Terry Adams
2	08E8AA9D-3806-468E-BC9C-FDC2AEFDC716	6EB3921A-6743-E411-80C6-00155D00790A	Patrick Sands	47B3921A-6743-E411-80C6-00155D00790A	Terry Adams
1	1D09FC07-7287-4AB7-BC2F-126F68E4E4E0	6EB3921A-6743-E411-80C6-00155D00790A	Patrick Sands	54B3921A-6743-E411-80C6-00155D00790A	Susan Burk
2	600840A7-712E-4ABF-9682-502962C1F5C4	F433B832-4748-E411-80C6-00155D00790A	Nancy Anderson	54B3921A-6743-E411-80C6-00155D00790A	Susan Burk
0	44AB700D-6333-4F88-A0FE-EAE2E984517F	54B3921A-6743-E411-80C6-00155D00790A	Susan Burk	54B3921A-6743-E411-80C6-00155D00790A	Susan Burk
0	C416D163-A2BA-4D4B-A2D7-DEE9F31AE545	61B3921A-6743-E411-80C6-00155D00790A	Paul Cannon	61B3921A-6743-E411-80C6-00155D00790A	Paul Cannon
1	56B5DC81-073D-48BF-B2CF-08FA8496396E	F433B832-4748-E411-80C6-00155D00790A	Nancy Anderson	61B3921A-6743-E411-80C6-00155D00790A	Paul Cannon
1	F6176214-D39F-48E5-9A48-31F55E3A64B9	F433B832-4748-E411-80C6-00155D00790A	Nancy Anderson	6EB3921A-6743-E411-80C6-00155D00790A	Patrick Sands
0	6ABD9308-CB4E-41FF-A4D0-25EE850CB898	6EB3921A-6743-E411-80C6-00155D00790A	Patrick Sands	6EB3921A-6743-E411-80C6-00155D00790A	Patrick Sands
0	85729864-F9C2-4E1C-BF08-B3C568A8B83	F433B832-4748-E411-80C6-00155D00790A	Nancy Anderson	F433B832-4748-E411-80C6-00155D00790A	Nancy Anderson