# Household Data Model & Restriction Rule Usage

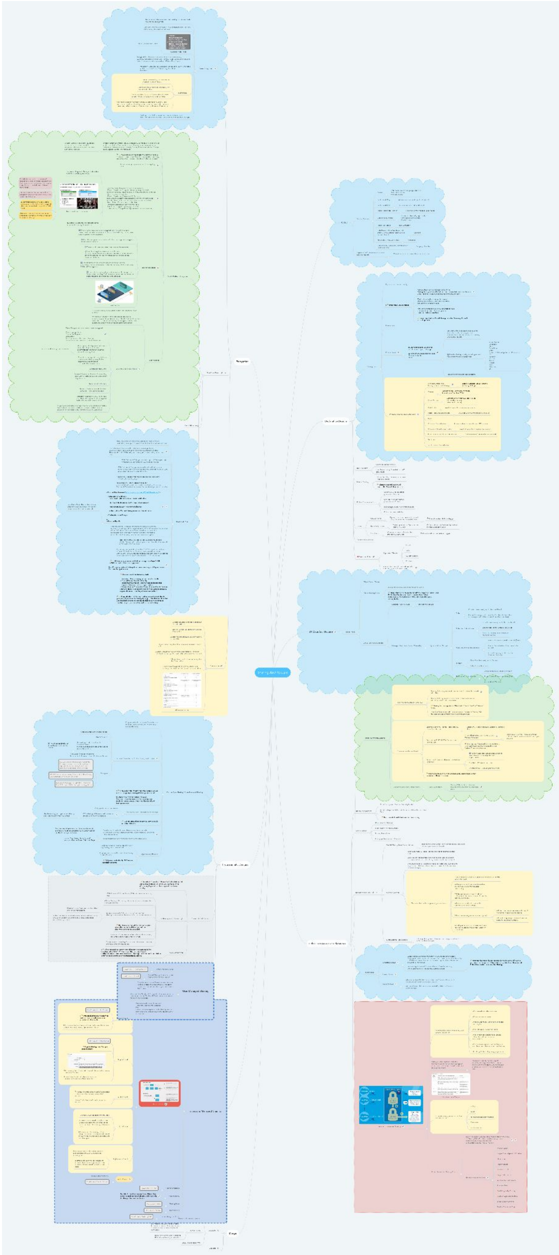
Svet Voloshin

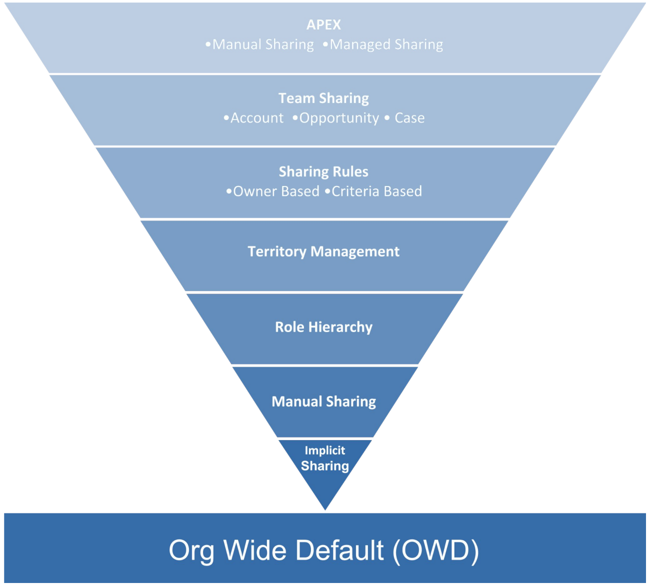
# Problem Statement

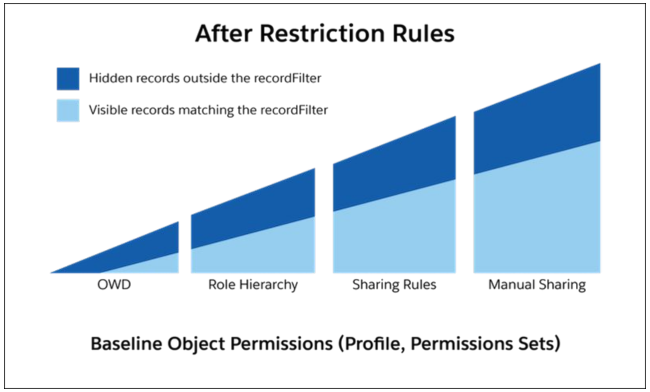
- How can the existing <u>standard</u> Sales Cloud functionality be leveraged to model the relationships between individuals and groups of individuals?
- Scenario:
  - Universal Properties is a global company that manages apartment units in large metropolitan areas. Apartments managed by UP are typically owned by Landlords who own a portfolio of multiple apartments to let.
  - Universal Properties has 300,000 private customers who are often individuals, sharers or small families renting apartments. As part of UP's push to digitize their business, they plan to onboard tenants to a new portal.
  - Throughout the lifetime of a tenancy Tenants should be able to raise cases and maintenance requests via the portal.
  - User must be able to see their own contracts, as well as contracts that are associated with the household that they are a part of.
- Objects:
  - Account (Business) = Household
  - Account (Business) = Corporation (Landlord)
  - Person Account = Tenant
  - Contact = an Individual
  - Opportunity = Deal
  - Contract = Lease
  - Asset = Apartment
  - Case = Problem/Issue/Ticket

# Salesforce Security Model

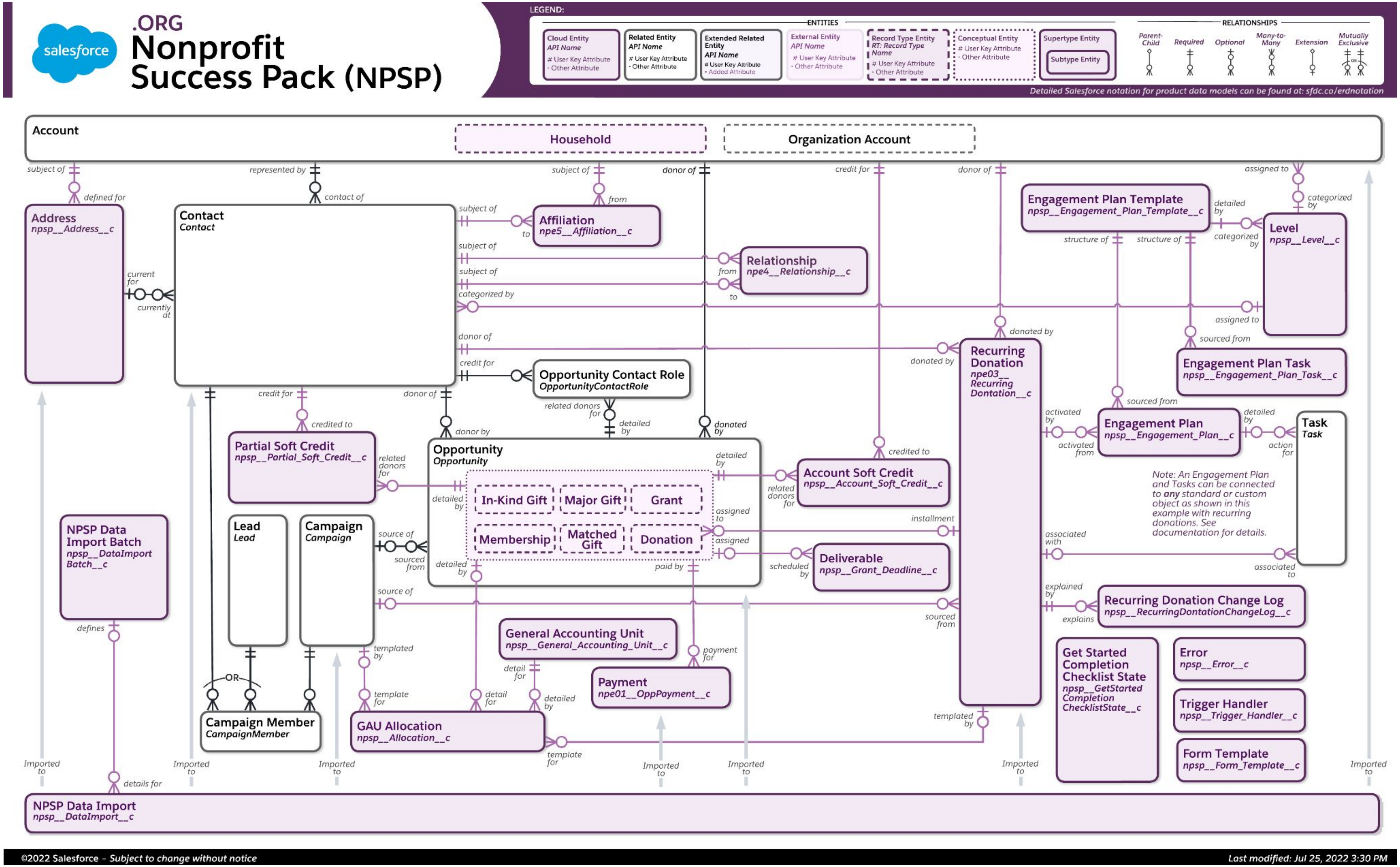
Mindmap →
(click to download)



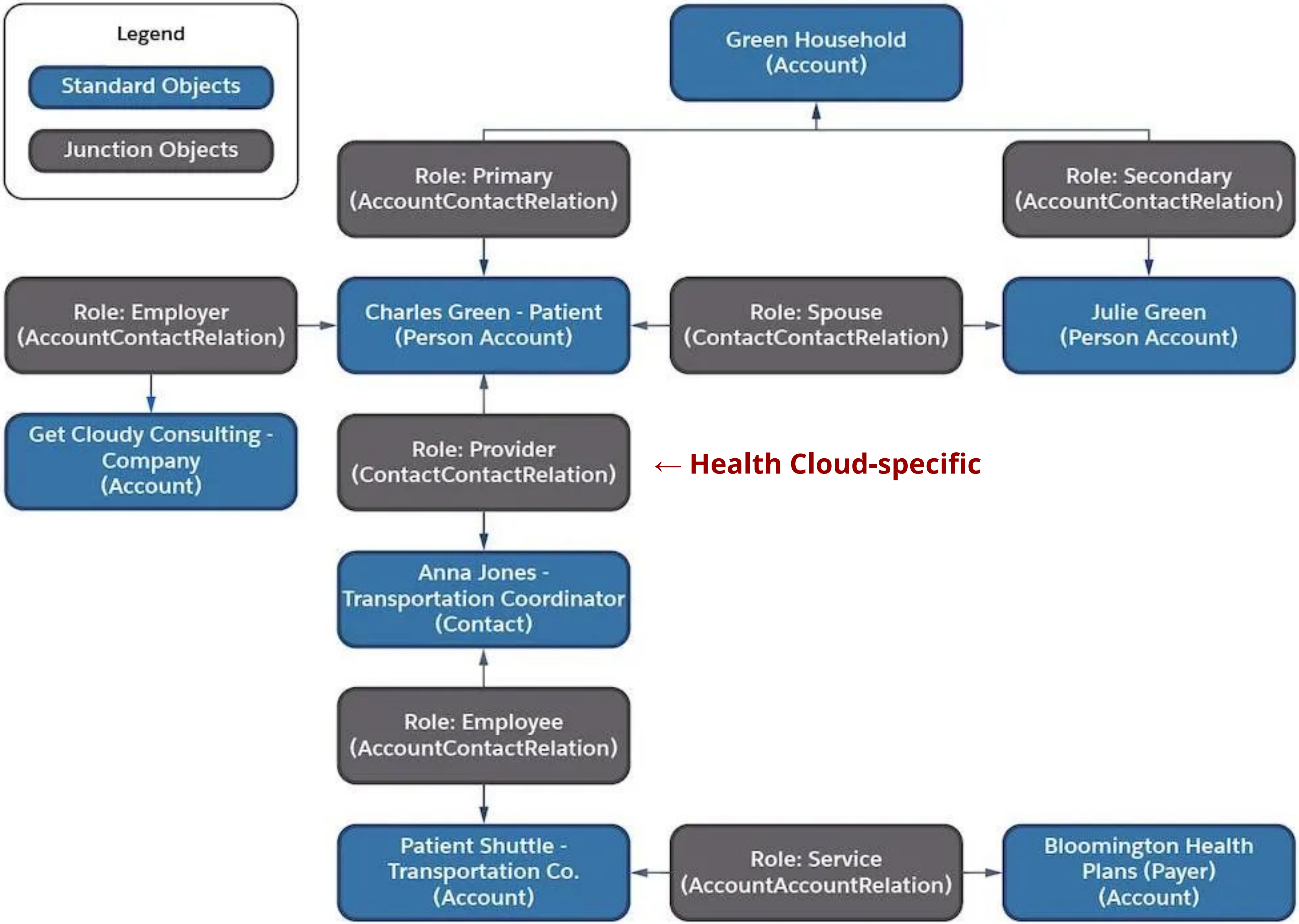


# Nonprofit Success Pack (NPSP)

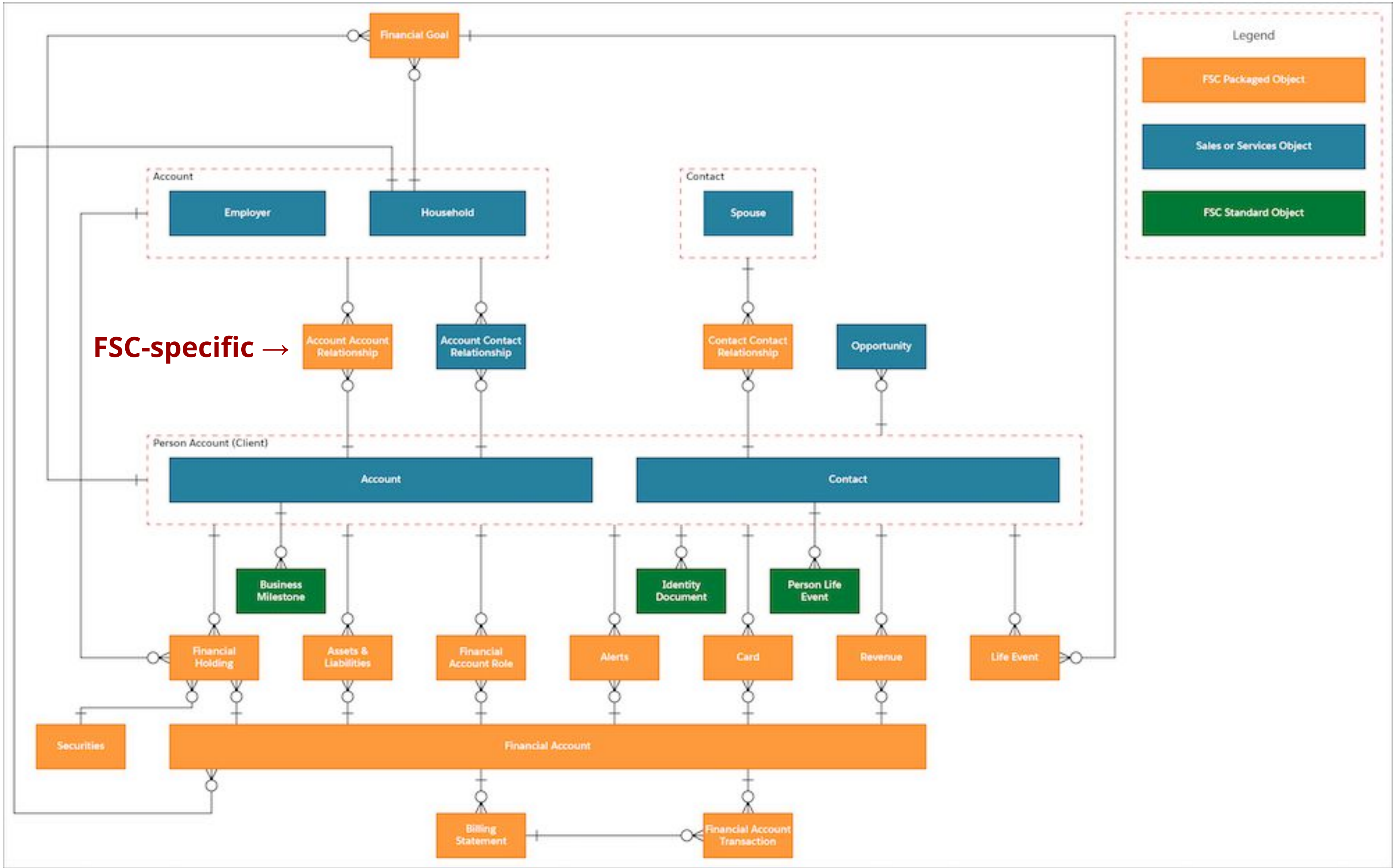


# Health Cloud ERD (Simplified)

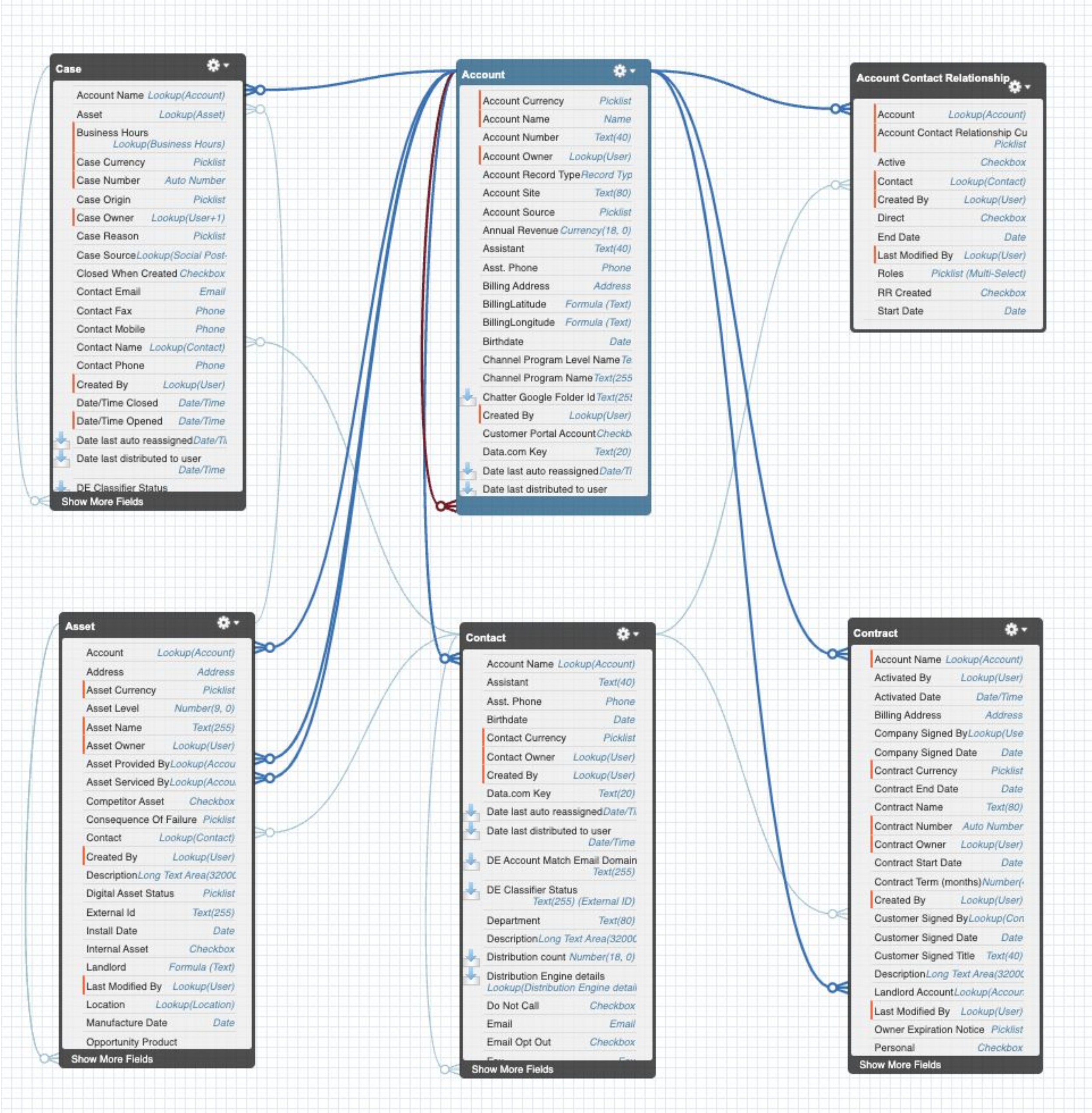


# Financial Services Cloud ERD (Simplified)

FSC-specific →



# Sales Cloud ERD (Abridged)




Key objects for sharing with CC Users:

- Account
- Contact
- Account-Contact Relationship

There is no standard...

- Account-Account relationship or
- Contact-Contact relationship

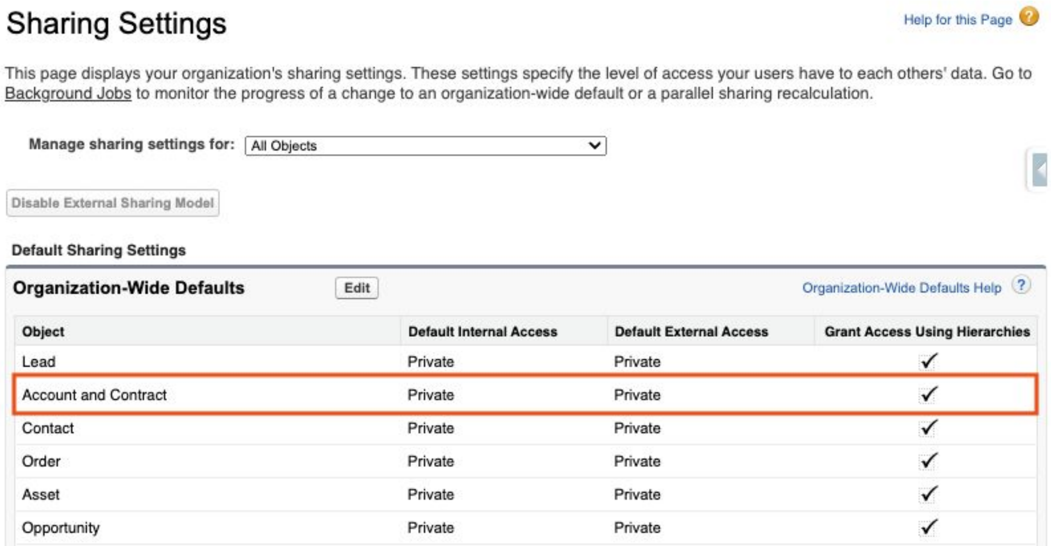
...in Sales Cloud

# Account & Contract OWD

**IMPORTANT:** Separate OWDs cannot be defined for Account and Contract

- In many cases in order to decouple the two objects, a custom Contract object is used, which is not always ideal.

- OWDs for External Users can  be "Private" or "Controlled by Parent", since the Sharing Sets are based on the Account.



Sharing Settings

Help for this Page

This page displays your organization's sharing settings. These settings specify the level of access your users have to each others' data. Go to Background Jobs to monitor the progress of a change to an organization-wide default or a parallel sharing recalculation.

Manage sharing settings for: All Objects

Disable External Sharing Model

Default Sharing Settings

Organization-Wide Defaults Edit Organization-Wide Defaults Help

| Object | Default Internal Access | Default External Access | Grant Access Using Hierarchies |
|---|---|---|---|
| Lead | Private | Private | ✓ |
| Account and Contract | Private | Private | ✓ |
| Contact | Private | Private | ✓ |
| Order | Private | Private | ✓ |
| Asset | Private | Private | ✓ |
| Opportunity | Private | Private | ✓ |

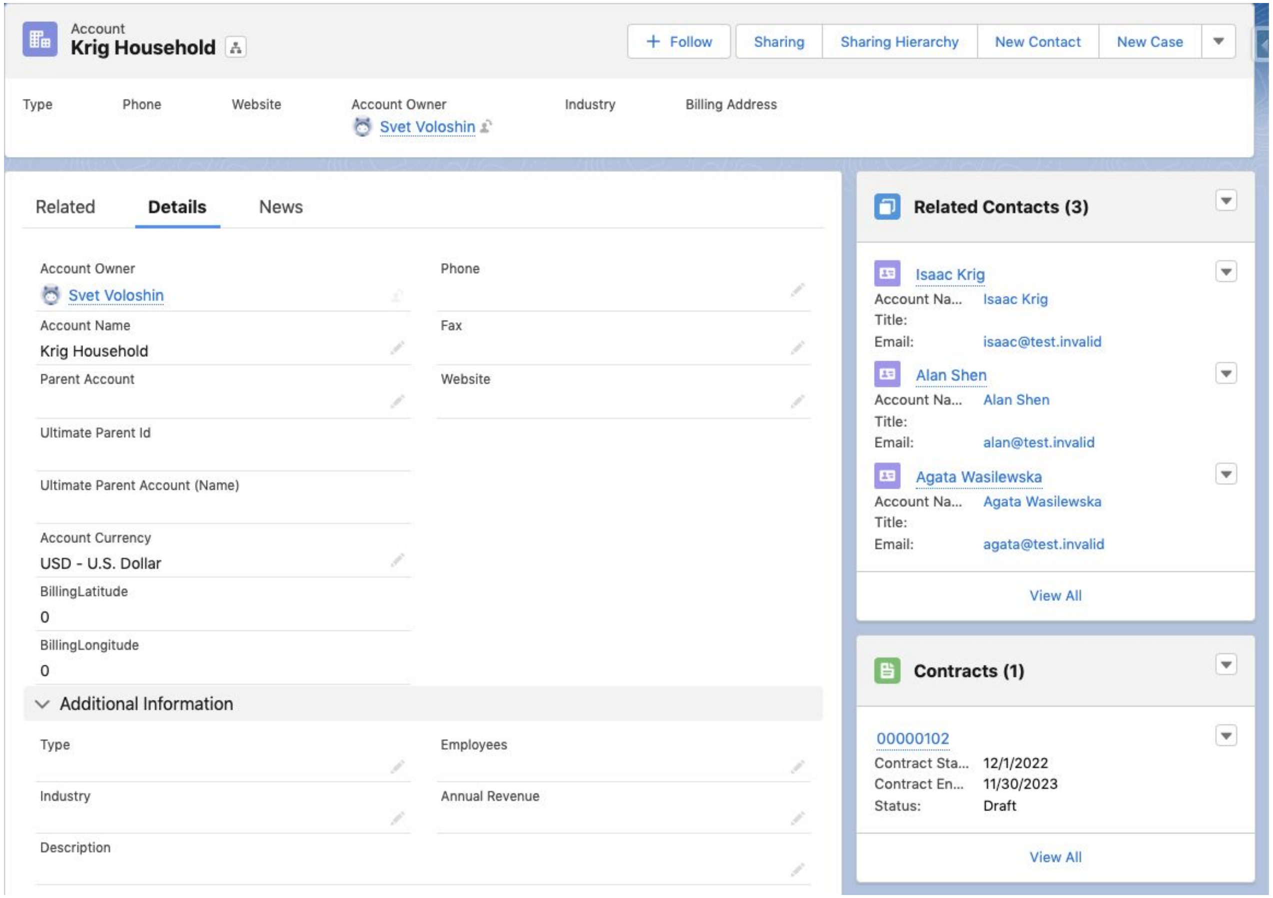
Organization-Wide Defaults Edit Organization-Wide Defaults Help

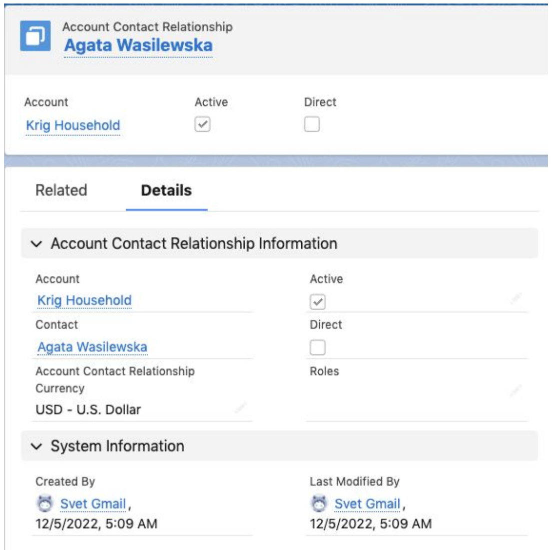
| Object | Default Internal Access | Default External Access | Grant Access Using Hierarchies |
|---|---|---|---|
| Lead | Private | Private | ✓ |
| Account and Contract | Private | Private | ✓ |
| Contact | Controlled by Parent | Controlled by Parent | ✓ |

Irrelevant, since we are sharing records with Customer Community Users.

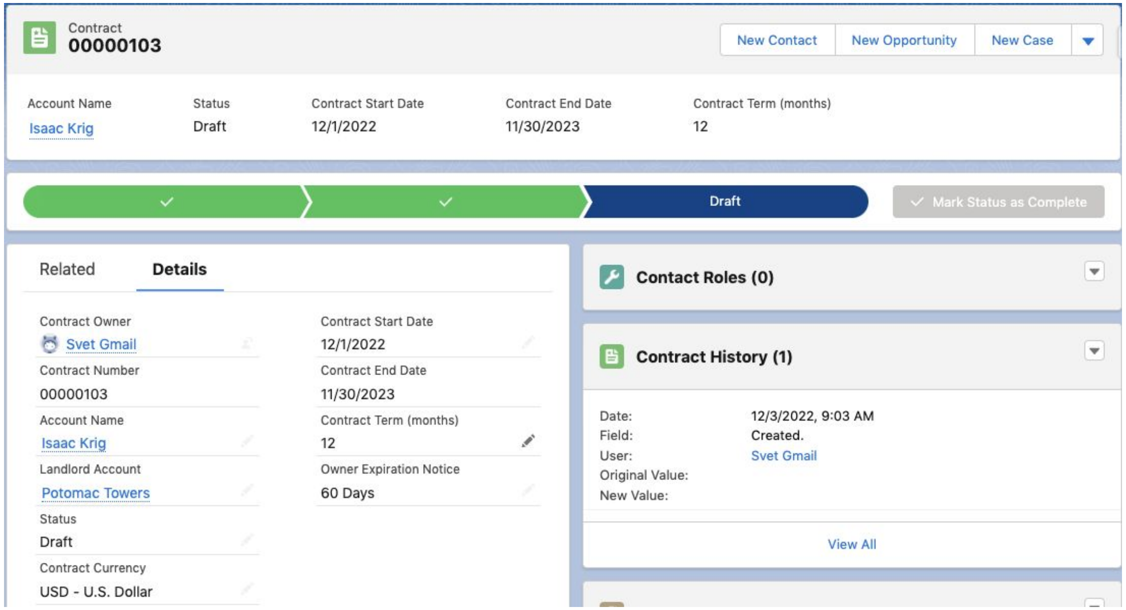
# Household Account

- Not a special secret Salesforce Account Record type
- Standard Business Account
- Person Accounts are associated with it using Account-Contact Relationship



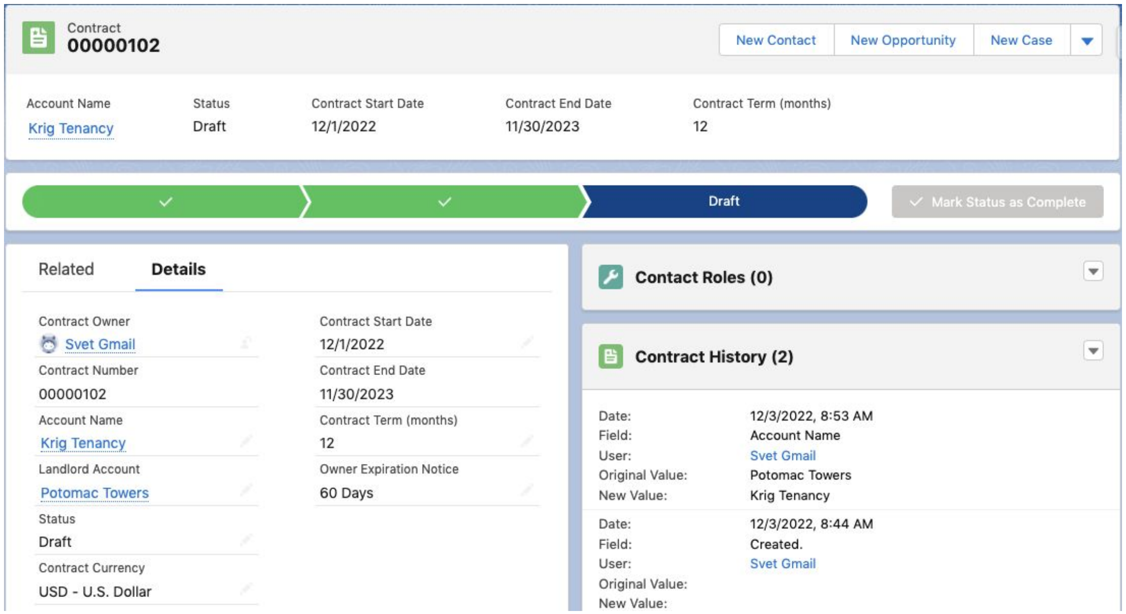



# Person Contract vs. Household Contract?




<u>Person Contract</u>: signed with a single person

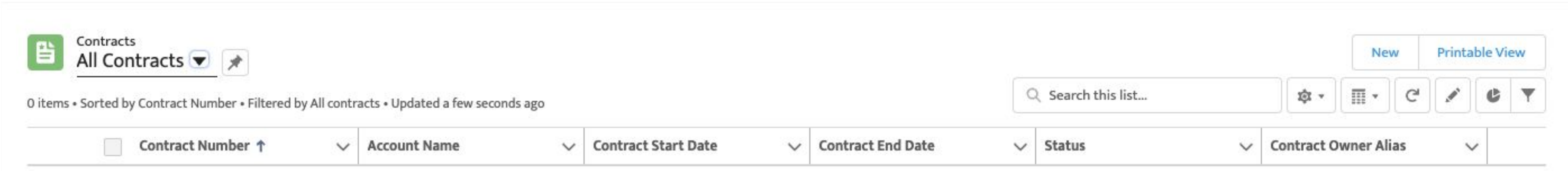
Reason: single tenant, lives by themselves and pays the rent on their own.



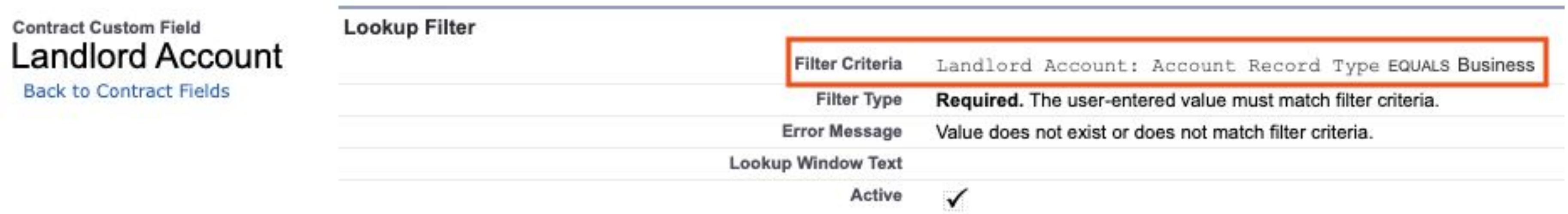

<u>Household Contract</u>: signed with an entire household

Reason: multiple tenants, live together and share the rent payments.

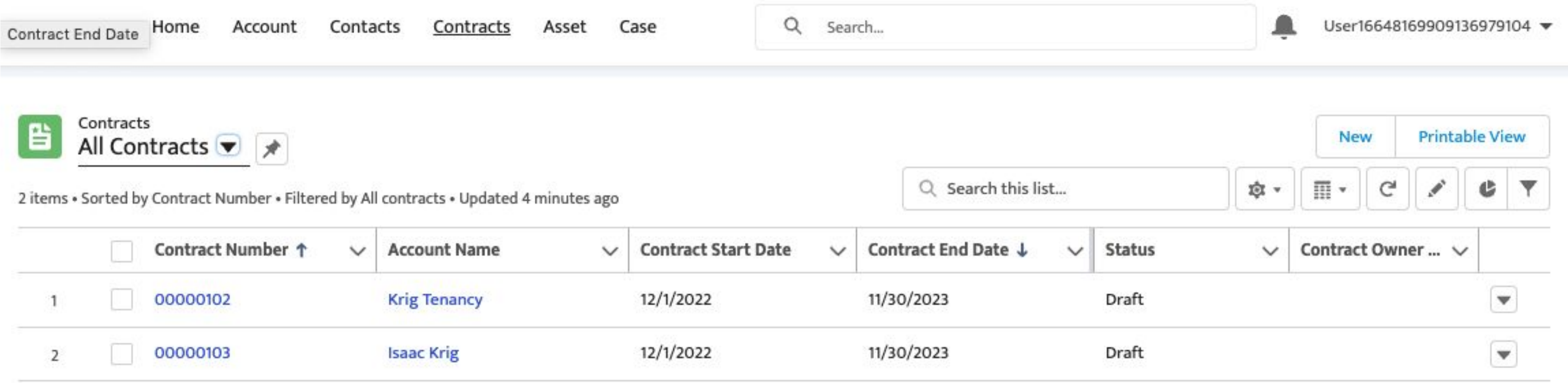
# Account Fields on Contract Object




- If one decides to use a custom Account Lookup field on Contract, the Customer Community User will not be able to see their Contracts by default.
- The recommended approach is to use the default Account field.
- Custom Account Lookup field can then be used to show Landlords.
- Additionally one can set the lookup filter to allow only the <u>Business Account Record Type</u> to be selected.



# Requirements: Contract Visibility in Community Portal




- User must be able to see <u>their own</u> contracts, as well as contracts that are associated with the household that they are a part of.
- The user can see their own contract, because they get access to their own Account record implicitly.
- The user can see contract that is associated with the household that they are a part of, because their own Person Account is associated with the Household (Business) Account via Account-Contact Relationship.

# Sharing Sets - Granting access to CC Users

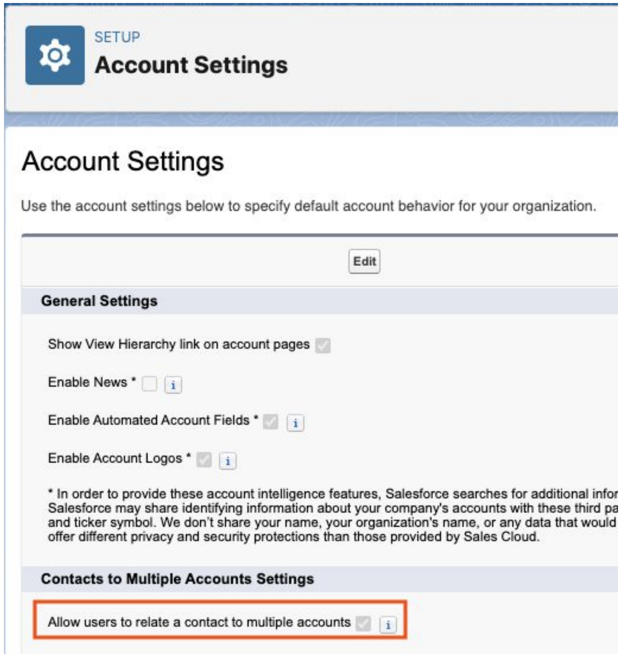
**Access Granted**

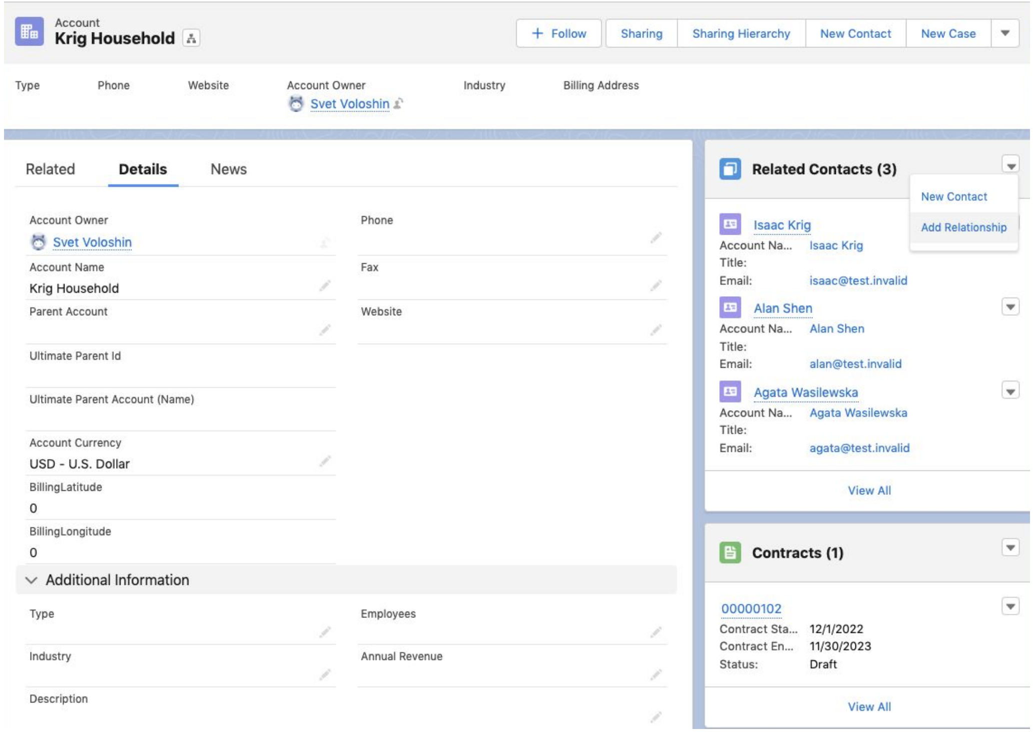
| Action | Object | Access Determined By | Access Level |
|---|---|---|---|
| Edit \| Del | Account | User:Contact.RelatedAccount = Account:Id | Read Only |
| Edit \| Del | Asset | User:Contact.RelatedAccount = Asset:Account | Read Only |
| Edit \| Del | Case | User:Contact.RelatedAccount = Case:Account.Parent | Read Only |
| Edit \| Del | Contact | User:Contact.RelatedAccount = Contact:Account | Read Only |
| Edit \| Del | Lease | User:Contact.RelatedAccount = Lease:Household__c | Read Only |

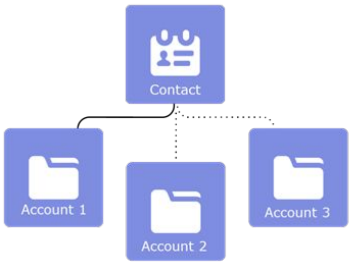
- The <u>only</u> way to grant access to records to Customer Community users is by using [Sharing Sets].

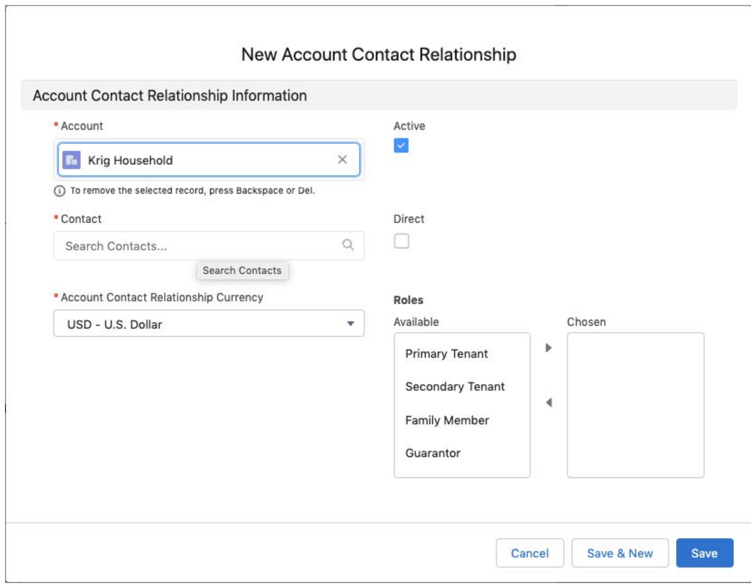
- In the screenshot above, we have created Sharing sets on the Account-Contact Relationship object: *Contact.**Related**Account* (keyword is "Related")

# Account-Contact Relationship (ACR)




Step 1: Go to Account Settings and check “Allow users to relate a contact to multiple accounts”

Step 2: Go to an Account and click on “Add Relationship”

Step 3: Choose a Contact and select other relevant fields.

Step 4: Make sure ACR is **Active**.

**IMPORTANT**: **If ACR is not Active, sharing sets will not work.**

# Person Account-to-Person Account via ACR

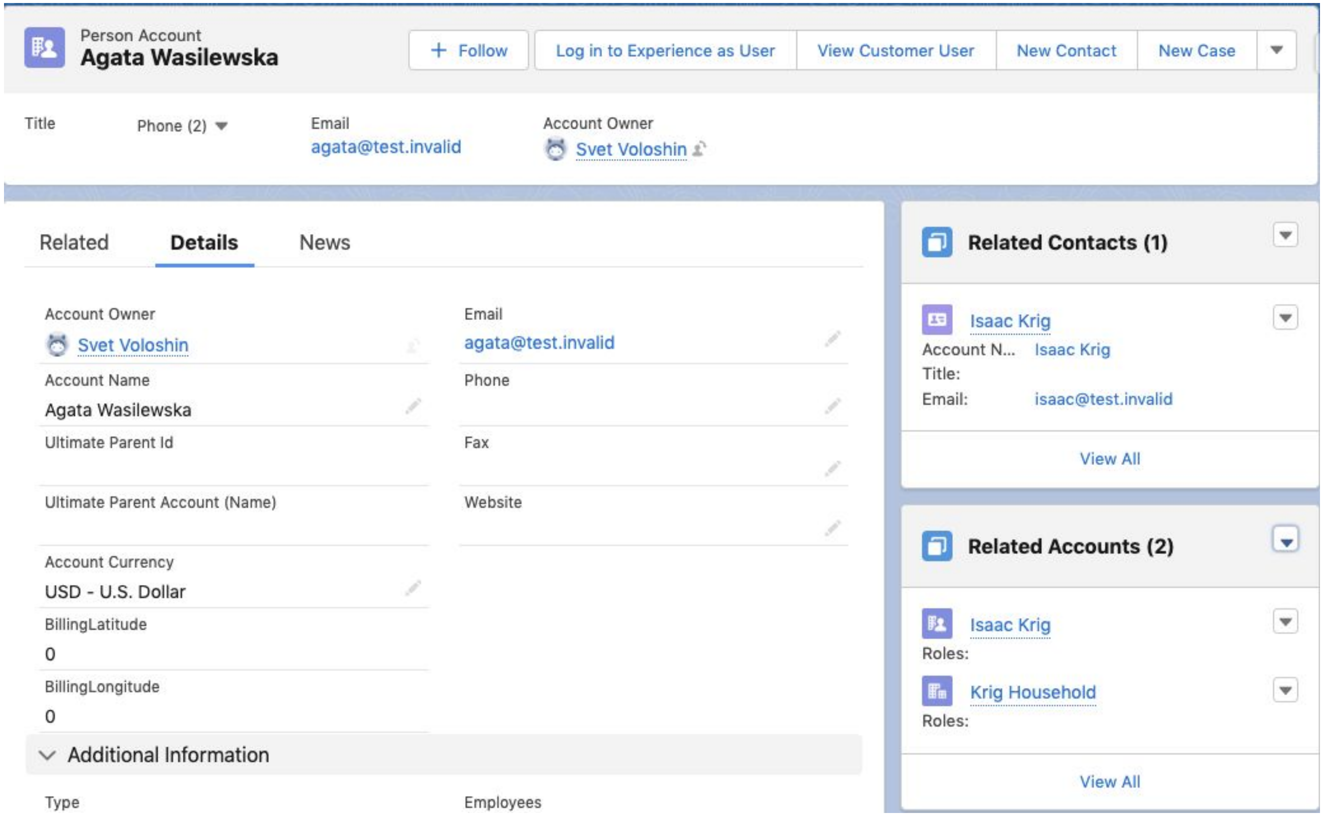
**Contacts**

- Person accounts can't have **direct relationships** with contacts.
- You can use Contacts to Multiple Accounts to create **indirect relationships** between a person account and a contact.

**Contacts to Multiple Accounts**

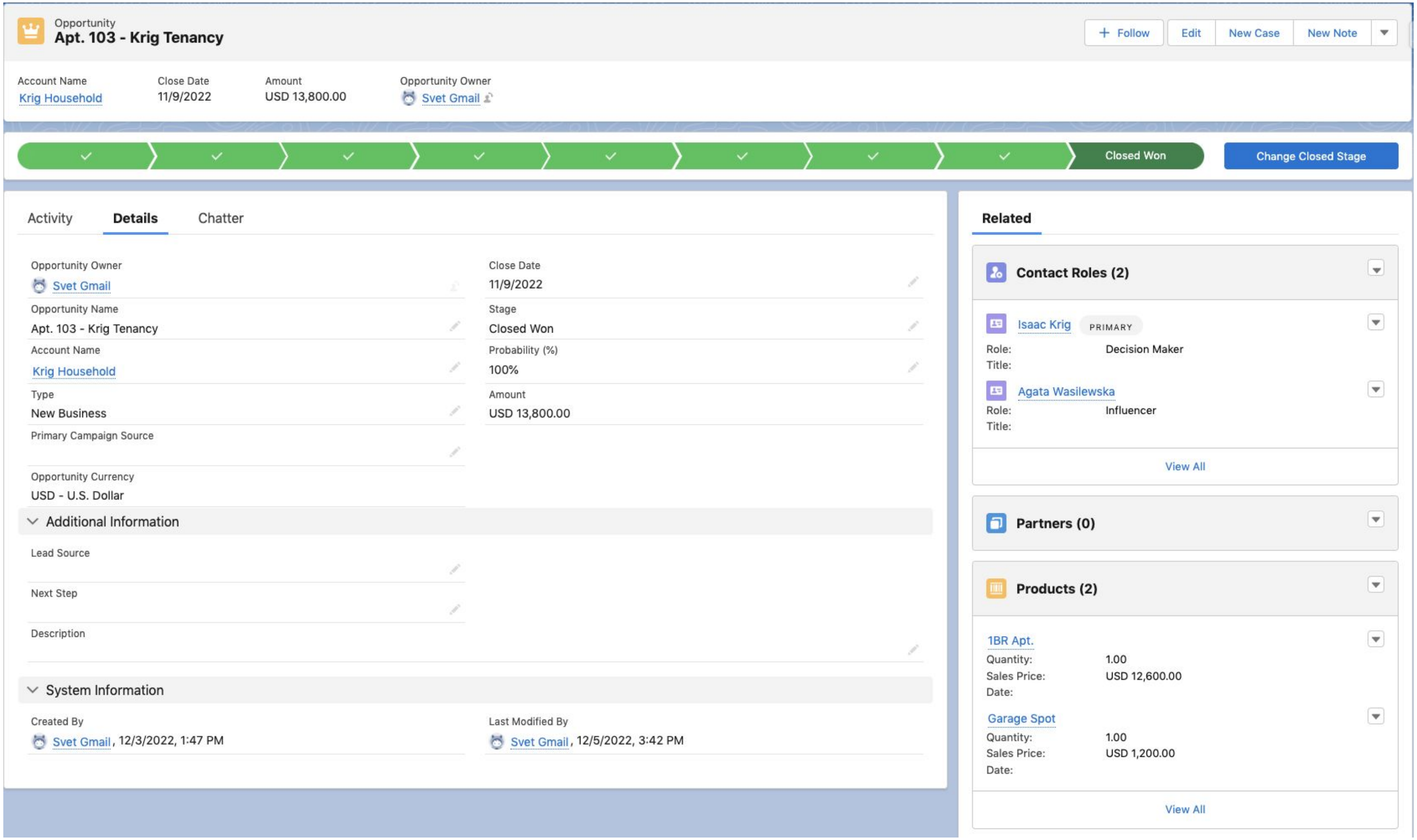
- With Contacts to Multiple Accounts, a person account can be either a:
  - **related contact on a business account**
    - Or
  - **a related account on a contact**.
- A **person account** can also be related to **another person account** as either **a related contact or related account**.
- <u>Person accounts are always indirectly related to other accounts or contacts.</u>

# Person Account-to-Person Account via ACR




- Person Accounts and their related Contact records both show up in related lists, if those lists have been added to the page layout and to the Lightning Record Page.
- Business Accounts only show up in the “Related Accounts” related list.

# Opportunities & ACR




## Opportunity Contact Roles

You can relate person accounts to opportunities using the Contact Roles related list.

# Reporting for ACR

## Create Custom Report Types for Account Contact Relationships

1. Make sure you're familiar with custom report types and the general steps for creating and maintaining them.
2. Create custom report types with the appropriate object relationships, and configure them as necessary.
   Check out these examples of custom report types to get you started.

| REPORT TYPE | LETS TEAMMATES RUN REPORTS THAT SHOW | A (PRIMARY OBJECT) | B | C | MAKE SURE YOU ALSO |
|---|---|---|---|---|---|
| Related Contacts | All the contacts, both direct and indirect, that are related to accounts. | Accounts | Contact Relationships | | Add the `Direct` and `Full Name` fields to the Contact Relationships page layout. |
| Related Accounts | All the accounts, both direct and indirect, that are related to contacts. | Contacts | Account Relationships | | |
| Related Contacts with or without Activities | All the contacts, both direct and indirect, that are related to accounts, and whether there's recent activity. | Accounts | Contact Relationships | Activities | |

3. Deploy the report types you want to make available.
4. Let your sales teams know that they can create reports using these custom report types.

# Report Samples

Report: Related Accounts
**Related Accounts Report**

Total Records
13

| Full Name ↑ | Account Name | Account Record Type |
|---|---|---|
| Agata Wasilewska (2) | Krig Household | Household |
| | Isaac Krig | Person Account |
| **Subtotal** | | |
| Alan Shen (1) | Krig Household | Household |
| **Subtotal** | | |
| Carole White (1) | Global Media | - |
| **Subtotal** | | |
| Edward Stamos (1) | Acme | - |
| **Subtotal** | | |
| Geoff Minor (1) | Global Media | - |
| **Subtotal** | | |
| Howard Jones (1) | Acme | - |
| **Subtotal** | | |
| Isaac Krig (2) | Krig Household | Household |
| | Agata Wasilewska | Person Account |
| **Subtotal** | | |
| Jon Amos (1) | Global Media | - |
| **Subtotal** | | |
| Leanne Tomlin (1) | Acme | - |
| **Subtotal** | | |
| Marc Benioff (1) | salesforce.com | - |
| **Subtotal** | | |
| Svet Voloshin (1) | Svet's Company | Business |
| **Subtotal** | | |
| **Total** (13) | | |

Report: Related Contacts
**Related Contacts Report**

Total Records
13

| Account Name ↑ | Full Name | Account Record Type |
|---|---|---|
| Acme (3) | Edward Stamos | - |
| | Howard Jones | - |
| | Leanne Tomlin | - |
| **Subtotal** | | |
| Agata Wasilewska (1) | Isaac Krig | Person Account |
| **Subtotal** | | |
| Global Media (3) | Geoff Minor | - |
| | Carole White | - |
| | Jon Amos | - |
| **Subtotal** | | |
| Isaac Krig (1) | Agata Wasilewska | Person Account |
| **Subtotal** | | |
| Krig Household (3) | Alan Shen | Household |
| | Agata Wasilewska | Household |
| | Isaac Krig | Household |
| **Subtotal** | | |
| salesforce.com (1) | Marc Benioff | - |
| **Subtotal** | | |
| Svet's Company (1) | Svet Voloshin | Business |
| **Subtotal** | | |
| **Total** (13) | | |

# Other Objects' Visibility

**Access Granted**

| Action | Object | Access Determined By | Access Level |
|---|---|---|---|
| Edit \| Del | Account | User:Contact.RelatedAccount = Account:Id | Read Only |
| Edit \| Del | Asset | User:Contact.RelatedAccount = Asset:Account | Read Only |
| Edit \| Del | Case | User:Contact.RelatedAccount = Case:Account.Parent | Read Only |
| Edit \| Del | Contact | User:Contact.RelatedAccount = Contact:Account | Read Only |
| Edit \| Del | Lease | User:Contact.RelatedAccount = Lease:Household__c | Read Only |

Accounts
All Accounts
New | Printable View
3 items • Sorted by Account Name • Filtered by All accounts • Updated a few seconds ago
Search this list...

| | Account Name | Account Record... | Billing S... | Email | Phone | Type | Account... |
|---|---|---|---|---|---|---|---|
| 1 | Agata Wasilewska | Person Account | | agata@test.invalid | | | |
| 2 | Isaac Krig | Person Account | | isaac@test.invalid | | | |
| 3 | Krig Household | Household | | | | | |

- Logged-in User is Agata
- Main Household User is Isaac
- Both Agata & Isaac have Person Accounts
- Both Agata & Isaac's Person Accounts are related to the **Krig Household Account** (Business)
- They are also related to one-another

Contacts
All Contacts
New | Printable View
2 items • Sorted by Name • Filtered by All contacts • Updated a minute ago
Search this list...

| | Name | Account Name | Account: Acco... | Title | Phone | Email | Contac... |
|---|---|---|---|---|---|---|---|
| 1 | Agata Wasilewska | Agata Wasilewska | Person Account | | | agata@test.invalid | |
| 2 | Isaac Krig | Isaac Krig | Person Account | | | isaac@test.invalid | |

**Is this a good idea?**

Contracts
All Contracts
New | Printable View
2 items • Sorted by Contract Number • Filtered by All contracts • Updated a few seconds ago
Search this list...

| | Contract Nu... | Account Name | Contract Start ... | Contract End Da... | Status | Contract ... |
|---|---|---|---|---|---|---|
| 1 | 00000102 | Krig Household | 12/1/2022 | 11/30/2023 | Draft | |
| 2 | 00000103 | Isaac Krig | 12/1/2022 | 11/30/2023 | Draft | |

- Notice that Agata can see Isaac's personal records
- This is a security risk

Assets
All Assets
New
2 items • Sorted by Asset Name • Filtered by All assets • Updated a few seconds ago
Search this list...

| | Asset Name | Serial Num... | Install Date | Account Name | Contact Na... | Product Name |
|---|---|---|---|---|---|---|
| 1 | Apt. 103 | | | Krig Household | | |
| 2 | Apt. 940 | | | Isaac Krig | | 1BR Apt. |

**How can this be prevented?**

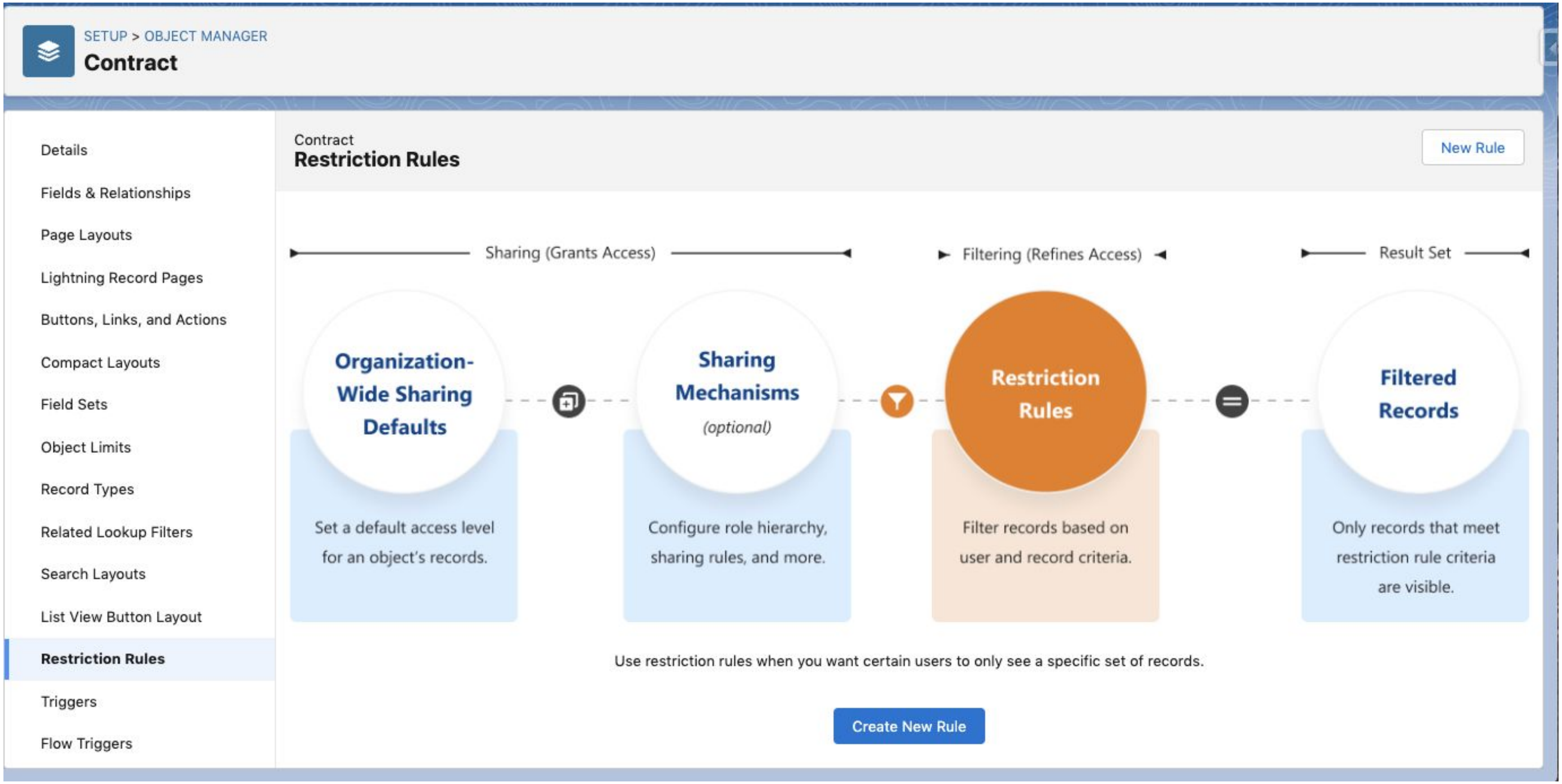
Leases
All
2 items • Sorted by Contract Name • Filtered by All leases • Updated a few seconds ago
Search this list...

| | Contract Name |
|---|---|
| 1 | Potomac Towers - Apt. 103 - Krig Tenancy |
| 2 | Potomac Towers - Apt. 940 - Isaac Krig |

- In this case, it's best not to related Person Accounts to one-another

←Custom Object

# Restriction Rules



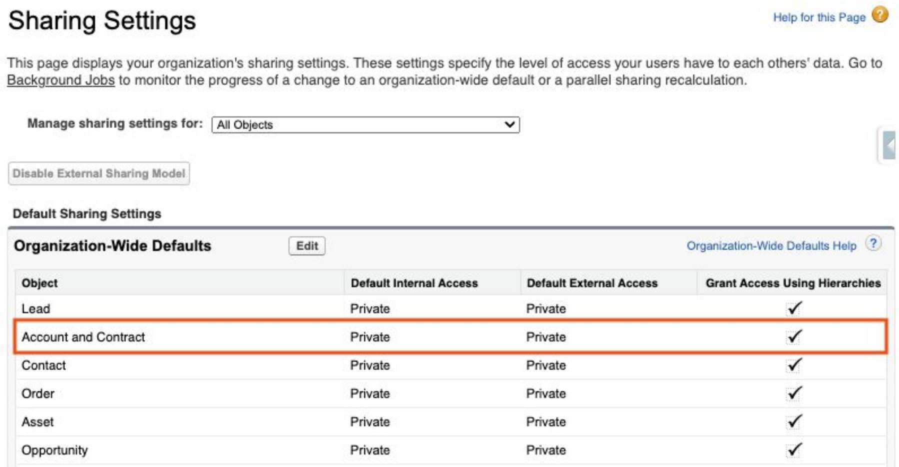

[Step By Step Guide to Using Restriction Rules in Salesforce] (Ashish Agarwal)

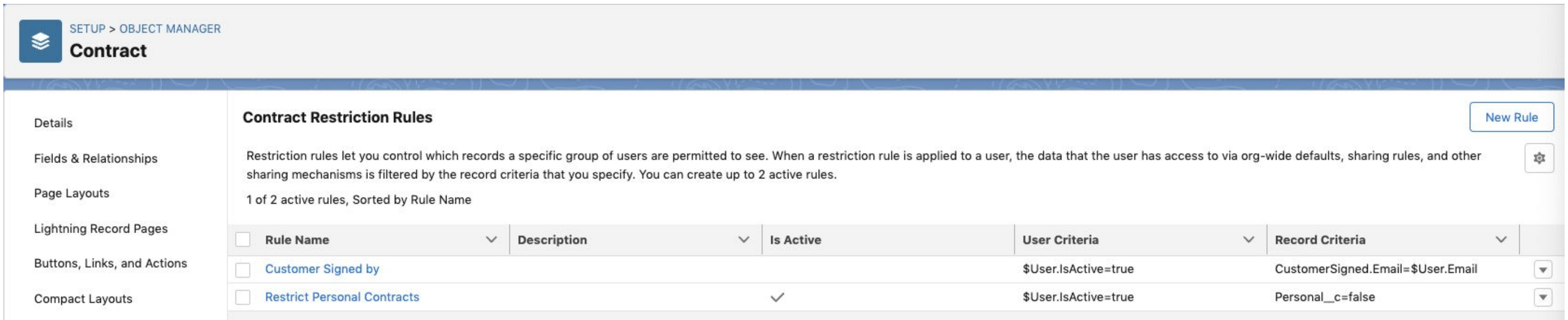
# Restriction Rules on Contract

### Supported Objects

- Custom Objects
- **Contracts**
- Events
- Tasks
- Time Sheets
- Timesheet Entries

Contracts are supported, probably because they are locked to the same

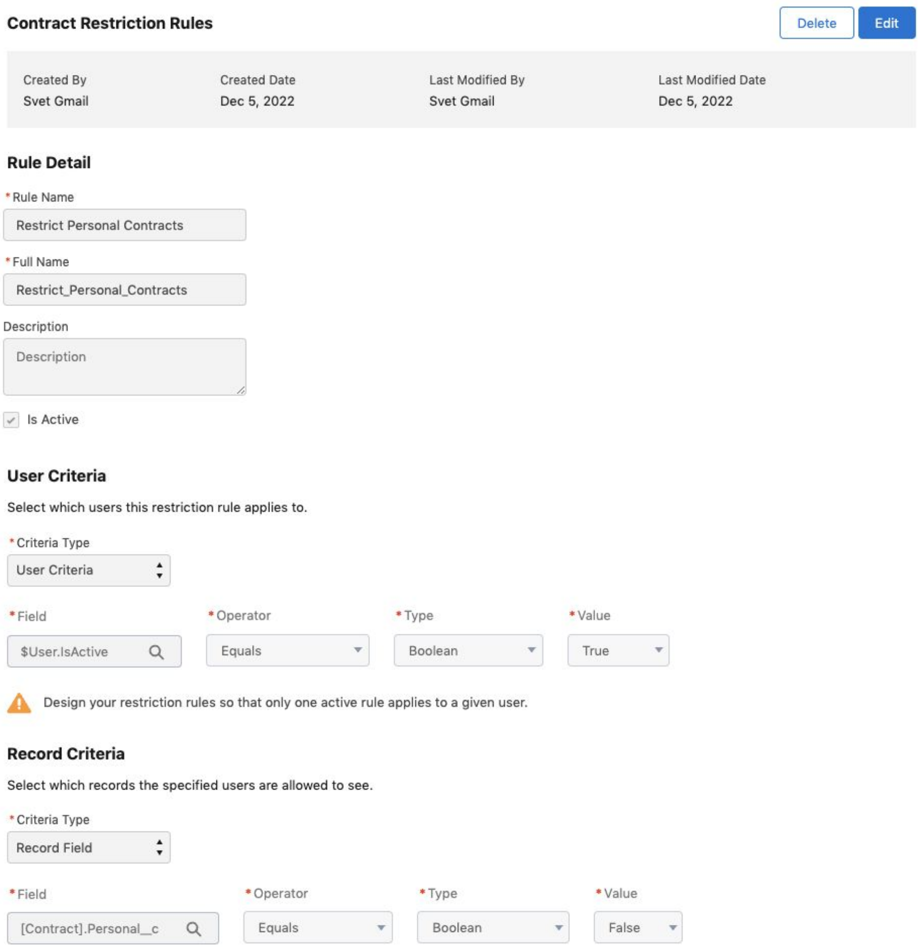



## Key Restriction Rule Considerations

- The use of AND and OR operators isn't supported.
- The use of formulas isn’t supported.
- 2 restriction rules per object in Enterprise and Developer editions
- 5 restriction rules per object in Performance and Unlimited editions.
- 1 restriction or scoping rule **per object per user**.
    - *In other words, for a given object, only one restriction or scoping rule at most can have the User Criteria field evaluate to true for a given user.*

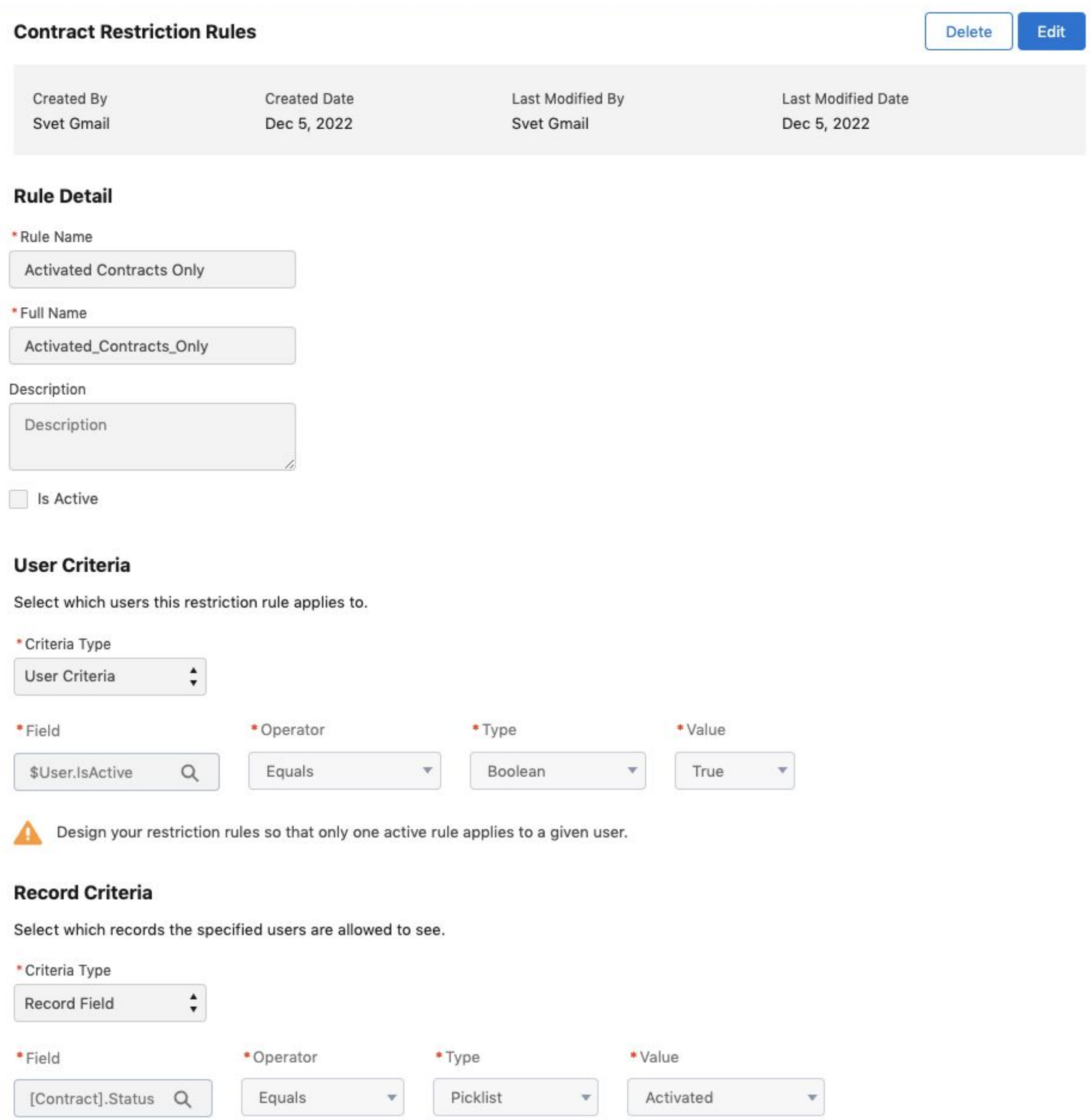
# Do RR rules help in the Household Model?




*Objective: hide users' personal records, while maintaining Person Account-to-Person Account connection via ACR.*

- Both Users have the same Customer Community License
- Both Users are treated equally by the system
- Absence of dynamic evaluation criteria renders Restriction Rules **ineffective** in this case
- One would have to create multiple restriction rules AND enter a condition where both rules apply, just like in declarative automation
- This is <u>not possible</u> currently with Restriction Rules.

# Positive Case for RR rules on Contract



**Contract Restriction Rules**

Delete Edit

| Created By | Created Date | Last Modified By | Last Modified Date |
|---|---|---|---|
| Svet Gmail | Dec 5, 2022 | Svet Gmail | Dec 5, 2022 |

**Rule Detail**

*Rule Name
Activated Contracts Only

*Full Name
Activated_Contracts_Only

Description
Description

Is Active

**User Criteria**

Select which users this restriction rule applies to.

*Criteria Type
User Criteria

| *Field | *Operator | *Type | *Value |
|---|---|---|---|
| $User.IsActive | Equals | Boolean | True |

Design your restriction rules so that only one active rule applies to a given user.

**Record Criteria**

Select which records the specified users are allowed to see.

*Criteria Type
Record Field

| *Field | *Operator | *Type | *Value |
|---|---|---|---|
| [Contract].Status | Equals | Picklist | Activated |

- Show only **Activated** Contracts
- That could be useful, since it would apply to ALL Customer Community Users as a **Business Rule**

# Thank you!

Ways to get in touch…

Connect with me on LinkedIn
BAH Teams/Slack/Email/Phone