MS Dynamics CRM 365

Views and Visualizations

Capgemini

Lesson Objectives

- Types of Views in Dynamics 365

- Creating and Customizing Views

- Customizing Charts

- Customizing Dashboards

- Using Dynamics 365's Theming Feature

System, Public and Personal Views

- **System Views**
  - Specific uses for built-in features of the application
  - Can be customized, cannot be deleted

- **Public Views**
  - Views available to all users for viewing lists of records
  - Several Public Views are created for a new entity
    - These cannot be deleted, but can be renamed, customized or deactivated

- **Personal Views**
  - Created by users, shared with other Users or Teams

System View Types

- **Advanced Find**
  - Used for Advanced Find results if no other view is selected as the starting point for the Advanced Find

- **Associated**
  - Displays related records when accessed through the navigation bar from another record
  - Default filter for most entities is Status = Active

- **List Member View**
  - Marketing List members: Account, Contact, Lead only
  - Filter criteria (query) cannot be modified

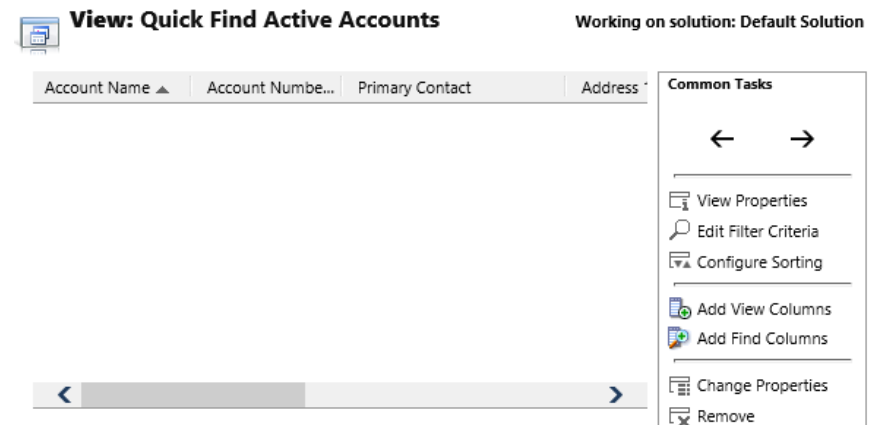| Name ↑	Type	State
Account Advanced Find View	Advanced Find View	Managed
Account Associated View	Associated View	Managed
Account BulkOperation View	Associated View	Managed
Account List Member View	Associated View	Managed
✓ Account Lookup View	Lookup View	Managed
Accounts Being Followed	Public View	Unmanaged
Accounts I Follow	Public View	Unmanaged
Accounts: Influenced Deals That We...	Public View	Managed
Accounts: No Campaign Activities in...	Public View	Managed

New | ✕ | More Actions ▾

System View Types – Quick Find

- Defines display of results of a Quick Find search

- Filter criteria provide pre-filtering of results

- Find Columns define the columns searched
  - Must be from the entity, not related entities

- Adds non-clustered indexes to SQL server
  - Index for every find column is added and maintained

  - Unless you add more than 20 columns, or a text field longer than 900 characters

System View Types - Lookup

- Used by default in lookup controls
  - Lookup controls: on lookup fields and when adding a related record through a sub-grid or associated view
  - Primary field and first two other columns are shown in drop-down list under lookup control

- Look Up Records dialog box uses Lookup view
  - Lookup field on a form can be configured to use a different view to provide different filtering or columns that are more relevant to the context

View: Quick Find Active Accounts

Working on solution: Default Solution

Account Name ▲	Account Numbe...	Primary Contact	Address

Common Tasks

← →

- View Properties
- Edit Filter Criteria
- Configure Sorting
- Add View Columns
- Add Find Columns
- Change Properties
- Remove

Custom Views

- New, or copy an existing view by using Save As

- All public views are shown together under "System Views" section of view selector list
  - Don't confuse this with "special" System Views
  - Always in alphabetical order – consider view names carefully to group similar view together, and most frequently used near the top of the list

- Remove columns that are implied by the filters

- Set the default view, users can override this

View Customization

- View define filters to return matching records
- Similar concept to SQL "WHERE" clause
- Query is stored as FetchXML
- Some clauses can be "dynamic" or "relative" such as "Equals Current User" or "Last three months"
- Some views are used directly to display records, others as the basis for lists, charts and other features

- View columns define the fields to be displayed
- Can include fields from N:1 related primary entities
- Sort by up to two columns from the main entity only

Remove Unwanted Views

- Deactivate unwanted views

  - Cannot deactivate system views

  - Consider all areas of the system that the view is used, including lists and charts on forms and dashboards

- Delete a view permanently

  - Cannot delete system or public views created automatically by the system

  - Check for dependencies before deleting

  - Must delete the view in all systems – delete is not "carried" by a Solution

Charts and Visualizations

- Customizing Charts
- Chart customizations typically include:
  - Series field and aggregate method
  - Category field and date groupings

- Dashboard
  - Groups lists, charts, etc. into single view
  - Access can be controlled through security roles
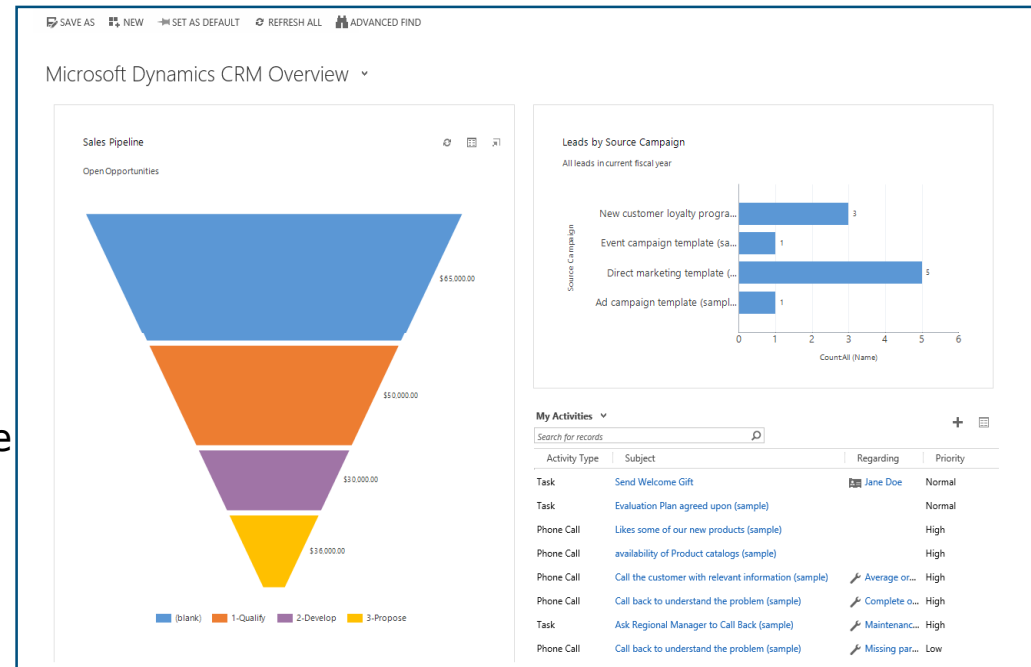
System and Personal Charts Compared

System	Personal
Created by System customizer	Created by user
Can be included in a solution	Not included in a solution
Can be included in system or personal dashboards	Can be included in personal but not in system dashboards
Available to all users	Can be shared with users or teams
Can be exported as a chart XML file, or imported from one	Can be exported as a chart XML file, or imported from one

Chart Design Criteria

- Select the entity that has the data you need

- Select fields you want to summarize as a series
  - How you want to aggregate (summarize) the data in each series, for example as sum or count

- Select fields that group the data into categories

- Select the chart type that will provide the clearest display and understanding of data

- Select a view to help you preview the chart
  - This is not saved as part of the chart definition

Combining Chart Types

Chart Type	Available Combinations
Column	All column, area and line charts
Area	All Column, area and line charts
Line	All Column, area and line charts
Bar	Only other bar charts (of any type)
Pie	None – pie charts only support one series
Funnel	None – funnel charts only support one series

Series Aggregate Functions

Method	Description	Data Types
Count: All	Number of records	All data types
Count: Non-empty	Number of records which have a value in this field	All data types
Avg	Average of the data values	Numeric only
Max	Highest value of this field	Numeric only
Min	Lowest value of this field	Numeric only
Sum	Sum of values of the field	Numeric only

Chart Sort Order

- Text fields – alphabetically

- Numeric fields – in ascending order by value

- Date fields – by date (and always grouped)

- Option Set fields – by the underlying values of the options, not the labels

- Lookup Fields – by the GUID of the parent record, although the primary field such as Name or Subject is used for labels

Chart Importing and Exporting

- Both System and Personal Charts can be exported and imported into new environments

- You can import a chart exported from any version
  - XML is checked on import for valid syntax

- If the GUID matches an existing system chart, you will be prompted to Replace or Keep Both

  - When you export a personal chart and import as a system chart, no dialog box is shown, both are kept

  - When you export a system chart and import as a personal chart, Replace is unavailable in dialog box

  - If you keep Both, export the chart with the new GUID

Dashboards

- Show several components in a single screen to provide users the information they need

- Include Charts, Lists, Iframes, Web Resources

- Create new or copy existing as a starting point

- Default Dashboard for each area of the system, set in the Sitemap.xml for the navigation bar

- Dynamics 365 for Tablets uses Sales Dashboard
  - Dashboards can be made available in Tablet client
  - Users can switch dashboards from within the client

System and Personal Dashboards Compared

System	Personal
Created by system customizer	Created by a user
Can be included in a solution	Not included in solutions
Can only use public views and system charts	Can include system/personal views and charts
Access can be controlled by using Security Roles	Can be shared with users or teams (All included components must also be shared)
Available in mobile	Available in mobile

Dashboard Layout

- Similar grid-based structure to forms

  - Tabs can be expanded or collapsed

  - Components can span multiple

  - Responsive design moves columns from the right to below other columns as the window width decrease

- More and resize components

  - Components can be moved by dragging or using arrow keys, and can be resized by using on-screen buttons or keyboard shortcuts
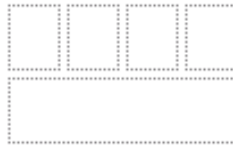
  - Other components move to make space

Choose a Layout for a New Dashboard

3-Column
Regular Dashboard

3-Column
Multi-Focused Dashbo
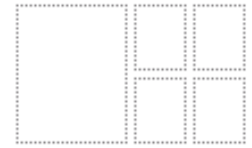
4-Column
Overview Dashboard

2-Column
Regular Dashboard

3-Column
Overview Dashboard

3-Column
Focused Dashboard

Layout name	Construction
3-Column Regular Dashboard	One tab of three columns
3-Column Multi-Focused Dashboard	One tab of four columns
4-Column Overview Dashboard	Two tabs of four columns each
2-Column Regular Dashboard	One tab of four columns
3-Column Overview Dashboard	Two tabs of three columns each
3-Column Focused Dashboard	One tab of four columns

Dashboard Components

- The following items can be added to a dashboard

- Charts

  - Define the entity, view and chart

- Lists

  - Define the entity and view

- IFrames

- Web Resources

- Social Insights

  - Only available if connected with a Microsoft Social Engagement subscription

Controlling Access to Dashboards

- Access to system dashboards is controlled through Security Roles
  - All roles have access by default
  - Access can be limited to single or multiple roles
  - Click Enable Security Roles

- Available on Mobile
  - Click Properties, and select Available on Mobile to make a dashboard on mobile clients
  - Can be done for both system and personal dashboards

Lab

Themes

- Used to enhance the Dynamics 365 user interface

- Allows adjustment of certain visual elements
  - Does not allow drastic alterations of the application

- Theming Examples
  - Add your company logo
  - Adjust navigation colors to your company colors
  - Provide entity-specific coloring
  - Adjust accent colors

Theming

- Access through Settings > Customizations > themes

- Logos must be uploaded as Web Resources

- Easiest to copy and alter an existing theme

  - Only one theme can be active at a time

- Cannot be included in solutions

Module Review

- Dynamics 365 ships with several system views that support application functionality, such as Quick Find and Lookups.

- Additional views can be added as needed

- Charts provide several visualizations to view data in Dynamics 365

- Dashboards allow grouping multiple components into a single view

- Creating new or modifying an existing theme allows you to do some simple branding in Dynamics 365

About Capgemini

With more than 190,000 people, Capgemini is present in over 40 countries and celebrates its 50th Anniversary year in 2017. A global leader in consulting, technology and outsourcing services, the Group reported 2016 global revenues of EUR 12.5 billion. Together with its clients, Capgemini creates and delivers business, technology and digital solutions that fit their needs, enabling them to achieve innovation and competitiveness. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

Learn more about us at

www.capgemini.com

People matter, results count.