

## SnapShot! 4.5 Release Notes

The following changes and additions have been made to SnapShot! for Dynamics CRM

### New Reports

- A report for **Reports** has been added to the Business Management worksheet.
- The **Recurring System Jobs** report contains things like bulk-delete jobs, duplicate detection jobs, etc.
- The **Duplicate Detection Settings** report consolidates information related to the Duplicate Detection feature including settings and rules.
- The **Auto Numbering** report simply consolidates the auto-numbering system settings into its own worksheet.

### New Features

- **JavaScript Web Resources** may now be exported and will be placed into a **JavaScript** folder below the **ForDevelopers** folder.
- **Document Templates** have been added to the **Templates** report.

### Bug Fixes

- The **Processes** report could fail if a Global Action was encountered. This was caused by the Primary Entity name being blank.
- Removed any characters Excel considers “illegal” when naming workbooks.

## Changes

- General

- SnapShot! was updated to use the Dynamics 365 assemblies (dlls). This corrected issues connecting to Dynamics 365 as well as some of the later versions of Dynamics 2016.
- The entire codebase for SnapShot! was refactored. As we all know, everything within Dynamics CRM is related and when creating documentation, it is not any different.

I examined the entire codebase and made sure that I was only retrieving the data that I needed, when I need it. This resulted in several major speed improvements. Instead of pulling back an entire dataset I only retrieve the required subset.

SnapShot! v4.3 documented my main xRM Coaches CRM Online 2016 environment in: **6m:03s**.

SnapShot! v4.5 produced the same reports, plus the new reports in: **3m:43s**.

- Where practical, the documentation file is created soon after the data is collected. Prior versions collected all the data, then created the reports. This change is to help alleviate some resource and memory constraints caused by extremely large Dynamics CRM deployments.
- The Dynamics CRM Online data center list updated with these new additions:
  - Canada (**CRM3**)
  - United Kingdom (**CRM11**)
  - Microsoft Cloud Germany

- Reports

- I've given the Excel reports an overhaul and tried to make them easier to read by adding things like:
  - Frozen top row.
  - Cell word-wrap.
  - Column widths that are sized to the content, where possible.
  - Set column widths for cells that generally contain a lot of text, like **Description** which makes use of the word-wrap feature.
  - Cell content positioning is now at the top-left, instead of the bottom-left. This will help readability when word-wrapping extends the size of the cell.

- Entities
  - I realized that I had neglected to omit a type of entity known as an **Intersect Entity**. This is the table that stores the many-to-many relationship data. I have now excluded it from the **Entity List** because there is nothing that you can configure or change either manually or programmatically. This will reduce the report output for both the **Customization** reports and the **Security Role** reports.
  
- Queues
  - Removed the **Default Queues** from the report. Default Queues are those created automatically by the system and contain < and > in the name.
  
- Security Roles
  - Removed the **Activity Feeds** and **Support User** from the list of security roles.
  - Added new security privileges added to Dynamics CRM 2016 and Dynamics 365.
  - Added a column that would display the count of the **Teams** that have the role assigned.
  
- Security Role Detail
  - The report has been reformatted to make it more visually appealing (I hope).
  - The dots indicating privilege level have been converted into high-resolution images so that they are not so “grainy-looking” when printed. This did increase the size of the documents, but not horribly so.
  - The **User Count** and **Team Count** have been included in the report so you know how many users and teams have been assigned a security role.
  
- System Settings
  - Removed unnecessary settings
  - Modified any setting that contains a reference to a **System User** to include that user’s full name in addition to their ID.
  - The **System Settings** report has been modified and the settings categorized base on how they are displayed within the Dynamics CRM/365 user interface. Each tab on the system settings dialog (plus some hidden settings), are being reported on individual worksheets within the **Administration Report** workbook. This is to help you more easily locate a specific system setting.
  
- User Settings
  - Added an **Active** column to indicate if the user is **Active** or **Inactive**
  
- OptionSets
  - This data is now only extracted for entities where the **IsCustomizable** flag is set to true. The **Fields** report already used this filter but it was added to the **OptionSets** report as well.

- JavaScript Libraries
  - Any Microsoft-created library (those that begin with “msdyn\_”) is automatically removed from the list. This effects the **Jscript Library Usage** and **Jscript Function Reference** reports.
  
- Solutions
  - The **Publisher Prefix** was added to the report.
  - The **Unique Name** was added to the report.
  
- Views
  - The **ViewDetail** report has the following changes:
    - Now includes a **View Status** field which will either be **Active** or **Inactive**.
    - There was an issue where **nested Linked-Entities** were not being extracted from the FetchXML and displayed in the **Linked Entities** section. This has been corrected.
  - The main **View** report has the following changes:
    - Rows are now sorted by **Entity**, then **View Name**.
    - **Associated Views** are now included.
    - **Layout Column Names** now include the pixel width of the column.
    - Fields from **Linked Entities** found in the **Layout Column Names** now use the **Entity Name** instead of the **Linked Entity Alias**, i.e., *contact.fullname*.
    - **Sort Column Names** are now included
    - **Find Column Names**, which are used by **Quick Find Queries** now show the proper value.
    - **Filter Criteria** shows the FetchXML filters for the primary query (not any nested Linked-Entity queries)
    - The **Custom View** column was using the wrong metadata column and therefore reporting incorrect information (*IsUserDefined* vs. *IsCustom*). This has been corrected.
  
- Users
  - Added Delegated Admin as an option to the **Access Mode** field.
  
- Themes
  - The background color of each cell now represents the color of the theme selection.

## Output File Structure and Contents

Within the main folder are sub-folders:

- **Administration** contains
  - Administration Overview report, which contains
    - Auto-Numbering
    - System Settings-General
    - System Settings-Calendar
    - System Settings-Formats
    - System Settings-Auditing
    - System Settings-Email
    - System Settings-Marketing
    - System Settings-Customization
    - System Settings-Outlook
    - System Settings-Goals
    - System Settings-Sales
    - System Settings-Service
    - System Settings-Synchronization
    - System Settings-Internal (these are internal settings not visible through the UI)
    - System Settings-Features (some of which are previews)
    - System Settings-Mobile
    - Fiscal Year Settings
    - System Settings-Privacy
    - System Settings-SharePoint
    - System Settings-Security
    - System Settings-Other (anything that remains after all the above are documented)
    - User Settings
    - Recurring System Jobs
  - Duplicate Detection Settings
  
- **Analysis** contains
  - Auditing Summary report
  
- **Business Management** Contains
  - Business Management Overview report, which contains
    - Connection Roles
    - Templates
    - Reports
  - Queues

- **Customizations** contains
  - Customizations Overview report, which contains
    - Entities
    - Fields
    - Option Sets
    - Relationships
    - Entity Maps
    - Attribute Maps
    - Views
    - Forms
    - System Charts
    - User Charts
    - Solutions
    - Web Resources
    - Jscript Library Usage
    - Jscript Function Reference
    - Plug-in Assemblies
    - Plug-in Steps
    - Custom Workflow Activities
    - Processes
    - Themes
  - View Detail Folder
  
- **EmailConfiguration** contains
  - Email Configuration report, which contains
    - User Email Settings
    - Email Server Profiles
    - Mailboxes
  
- **ForDevelopers** contains
  - Empty JavaScript Event handlers
  - Jscript events converted to code
  - JavaScript function references
  - Raw dump of plug-in configurations
  - Automation testing matrix report
  - JavaScript files

- **Security** contains
  - Security Roles
  - Security Roles raw data
  - User Privileges
  - User Privileges raw data
  - Security Privileges by entity
  - Business Units' overview
  - Security Roles overview
  - Security Overview
    - Field Security Profiles
    - Field Permissions
  - Team membership
  - Teams
  - Users and Teams security roles
  - Users
  - Positions
  - Access Team Templates