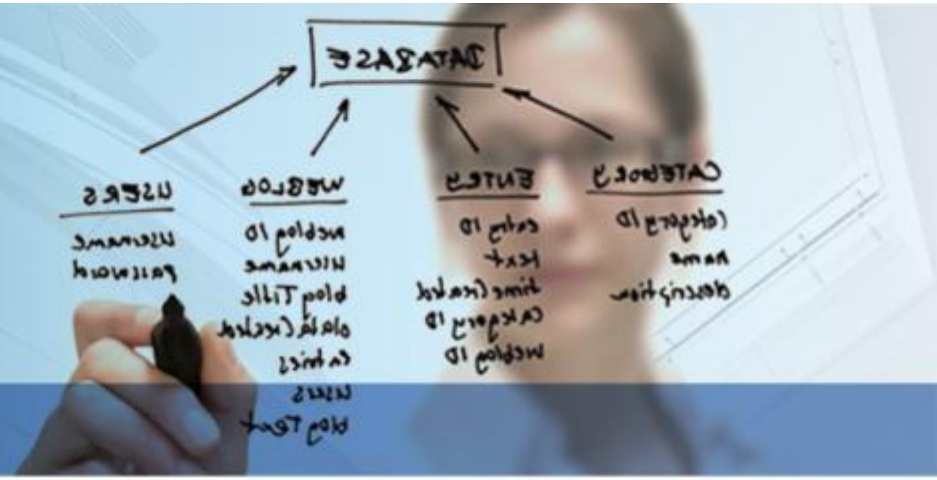
Microsoft | Services

Processes



STRATEGY ■ CONSULTING ■ SUPPORT

Workflow

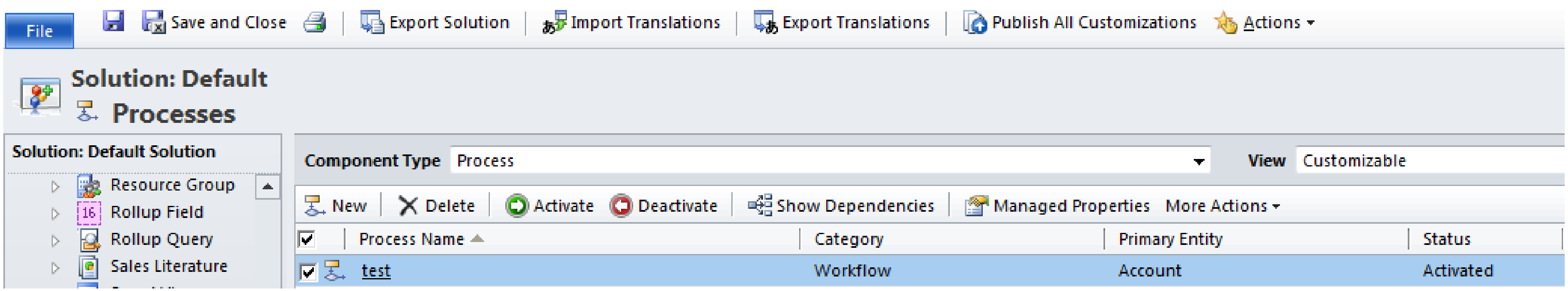
Microsoft Services

Workflow Architecture

- Uses Windows Workflow Foundation
- Utilizes the Asynchronous Service
  - This means
    - Can have multiple Async Servers to help with large WF load
    - If one Async Service goes down WFs will continue to fire as long as there is one functioning Async Service running
    - If no Async Service is running WFs will not fire

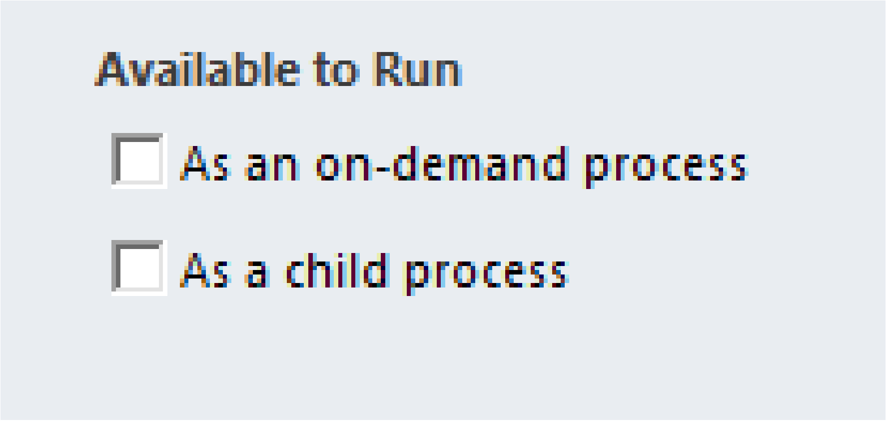
Workflow

- Workflows can be activated/deactivated
- Most entities supported (including custom)
- Workflow templates



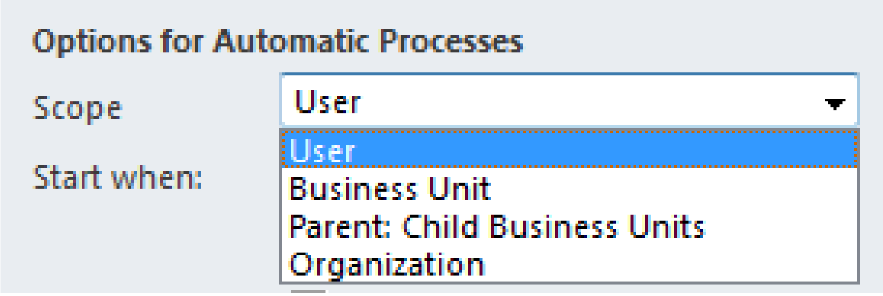
Workflow – Available to Run

- Workflows are available to run:
  - Automatic
    - Runs under the context of the workflow owner
  - As an on-demand process
    - Runs under the context of the user that initiated the workflow
  - As a child process



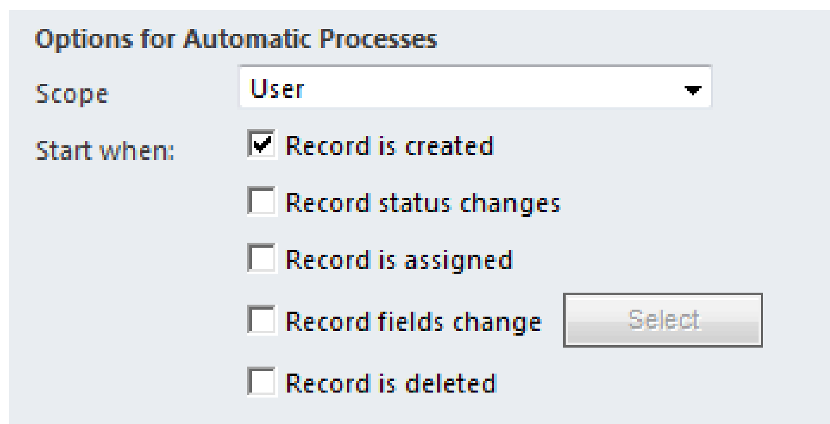
Workflow Scope

- Scope
  - User = Only WF owner will trigger these workflows
  - Business Unit = Anyone in the same BU can trigger the WF
  - Parent/Child = Anyone in the same BU or a child BU will trigger the WF
  - Organization = Applies to all users



Workflow Events

- Event Types
  - Record is created
  - Record status changes
  - Record is assigned
  - Record fields change
  - Record is deleted



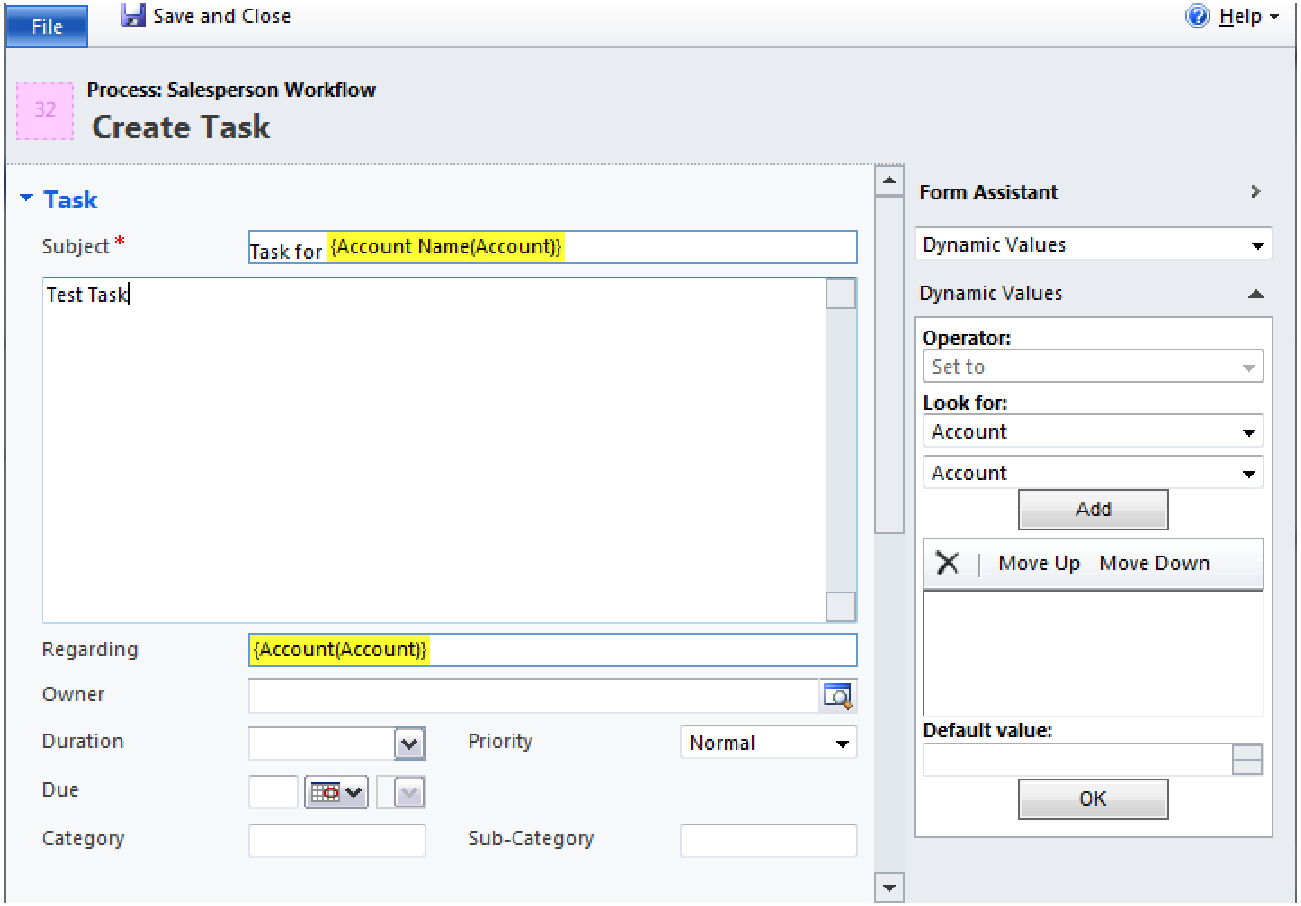
Workflow Actions

- Stage functionality
- Steps
  - Check Condition
  - Conditional Branch
  - Default Action
  - Wait Condition
  - Parallel Wait Branch

- Actions
  - Create a record
  - Update a record
  - Assign a record
  - Send an e-mail notification
  - Start a child workflow
  - Change the status of a record
  - Stop the current workflow

Dynamic Values

- Dynamic Values allow pulling from primary & associated entities



Custom Workflow Activities

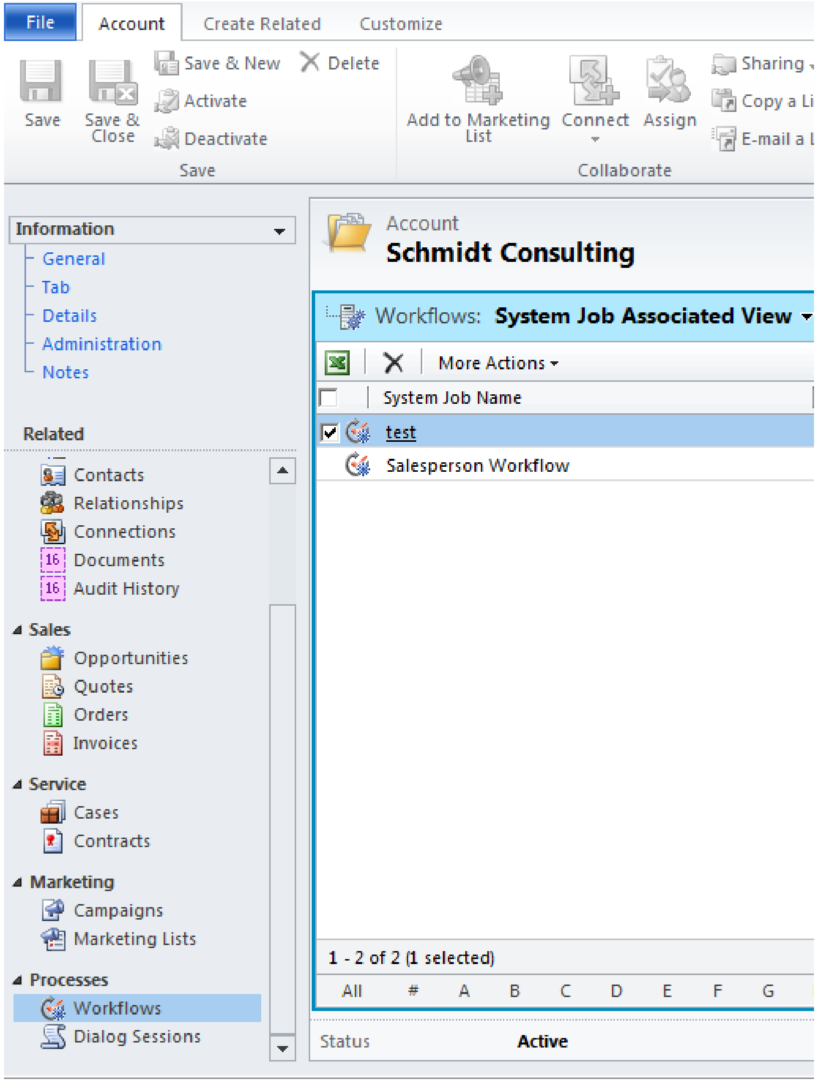
- Extends the process capabilities of CRM Workflow
  - Example: Send email that contains URL of a specific record
- .NET assembly
  - Can be created in Visual C# or VB.NET
- Available at runtime to link your code to the CRM Workflow Engine
- Can be used with workflows or dialogs
- Covered more in the CRM SDK section

Workflow

- Sharing
  - Allows users to run on demand workflows
- Assigning
  - Gives ownership to the user and the automatic workflows will now run under that users account
  - After the WF has been assigned the new user needs to re-publish the WF
- Organization Level permissions
  - Can unpublish all workflows and modify all workflows
  - Cannot Publish workflows unless they are owned by the user

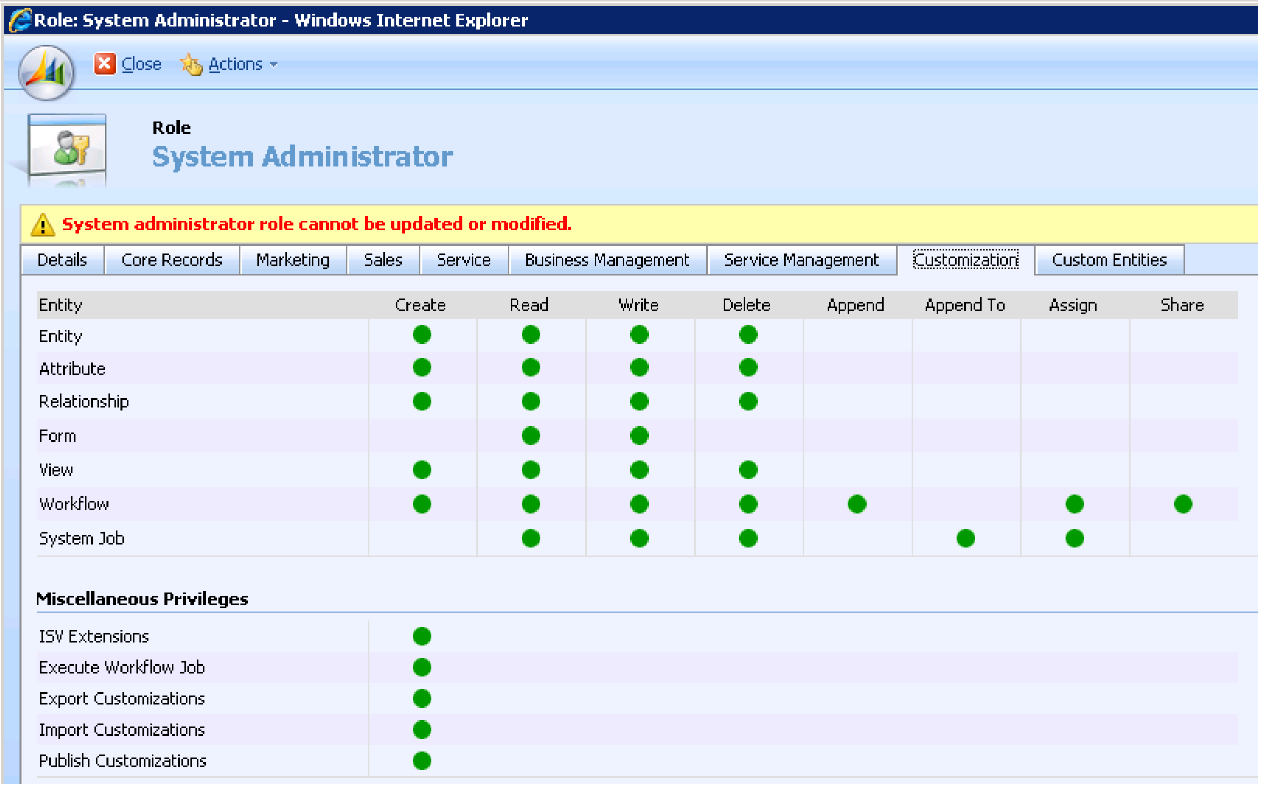
Workflow Monitoring

- System Jobs
- Record - Workflows



Workflow Privileges

- Execute Workflow Job
- Workflow
- System Job


Role: System Administrator - Windows Internet Explorer

Close Actions

Role
System Administrator

System administrator role cannot be updated or modified.

Details | Core Records | Marketing | Sales | Service | Business Management | Service Management | Customization | Custom Entities

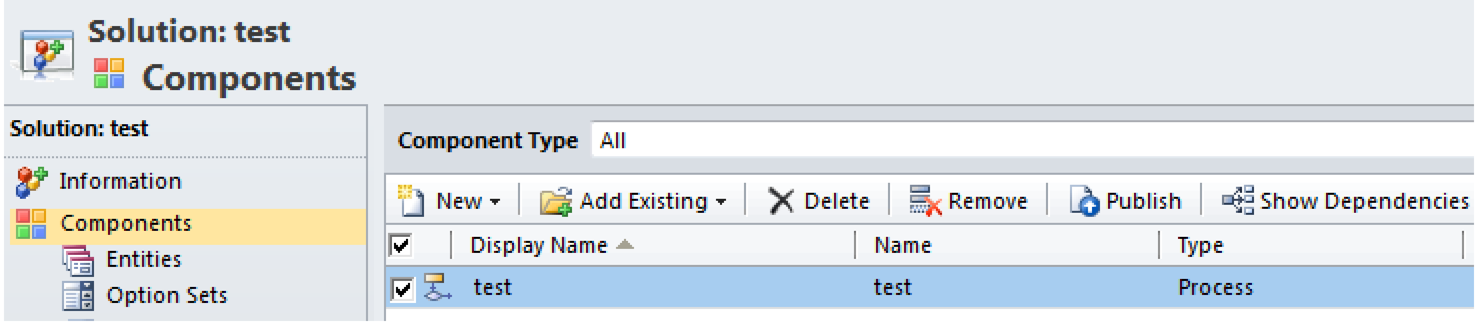
Entity	Create	Read	Write	Delete	Append	Append To	Assign	Share
Entity	●	●	●	●				
Attribute	●	●	●	●				
Relationship	●	●	●	●				
Form		●	●					
View	●	●	●	●				
Workflow	●	●	●	●	●		●	●
System Job		●	●	●		●	●	

Miscellaneous Privileges

ISV Extensions	●
Execute Workflow Job	●
Export Customizations	●
Import Customizations	●
Publish Customizations	●

Workflow Export/Import

- Export and import of workflows is accomplished by using CRM 2011 Solutions
  - Ex. 1: Solution with all customizations and processes
  - Ex. 2: Solution with workflow rule and related entities
  - Ex. 3: Solution with only the workflow rule



Workflow Tables

- Workflowbase
  - Holds each workflow definition

- Type
  - 1 – Definition
  - 2 – Activation
  - 3 – Template
- StateCode
  - 0 – Draft
  - 1 – Published
- StatusCode
  - 1 – Draft
  - 2 – Published

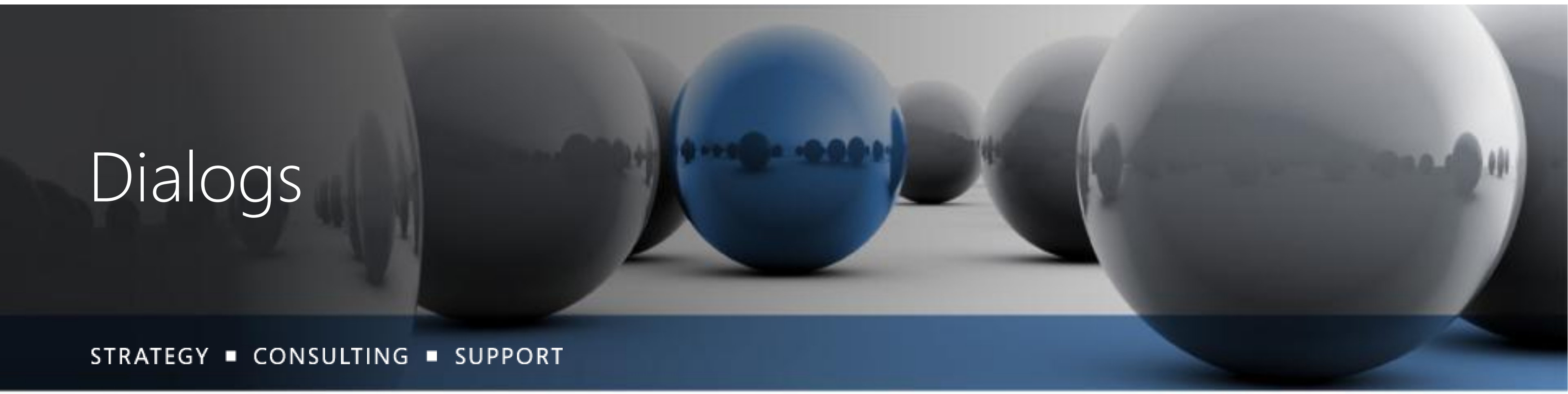
- Scope
  - 1 – User
  - 2 – Business Unit
  - 3 – Parent: Child Business Units
  - 4 – Organization
- OnDemand
  - 0 – No
  - 1 – Yes
- Subprocess
  - 0 – No
  - 1 – Yes

Workflow Tables (cont)

- Workflowdependencybase
  - Contains all the related objects from each workflow rule
- Workflowlogbase
  - Records all completed actions from the async jobs
- Workflowwaitsubscriptionbase
  - Holds any workflows records that are in a waiting state
  - Get removed once the workflow moves past the waiting state
- PluginTypeBase
  - Contains any published workflow rule
- AsyncOperationsBase
  - Contains all executed workflow jobs

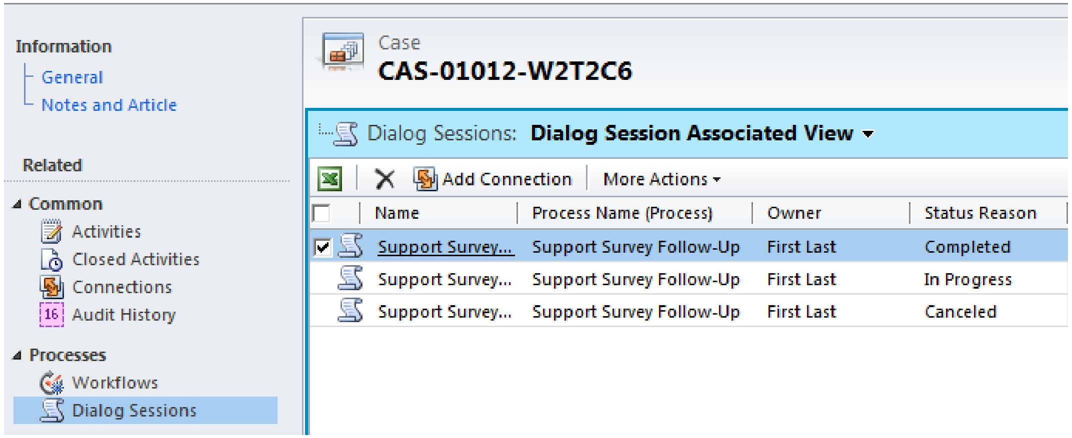
Microsoft | Services

Dialogs



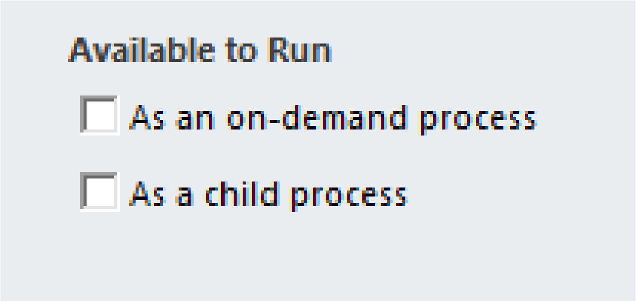
Dialog

- Guide (script) which helps achieve a set of tasks in a standardized and repeatable fashion
- Workflows cannot trigger Dialogs (user interaction required)
- Responses from the dialog can be tracked and recorded
- Dialogs work with the CRM Outlook client
  - Some restrictions with the offline client
- Viewing Dialogs (on record)
- Available for import
- Dialog templates



Creating Dialogs

- Same look and feel as workflow UI
- Available as:
  - On-demand
  - As a child process



Input Arguments

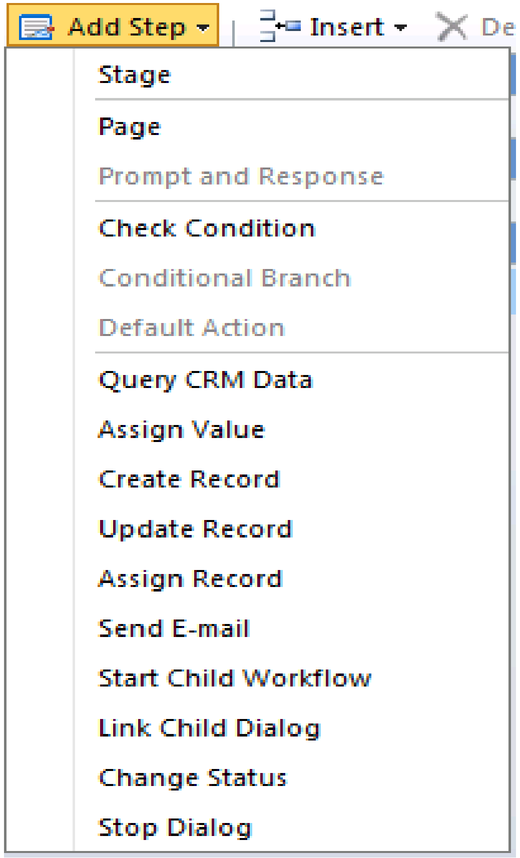
- Can be included only in a child dialog, as child dialogs require input arguments to be invoked.

Variables

- Store data within a dialog for later use
- Uses:
  - Data slugs in the process logic of your dialog
  - Maintain a running counter for determining a score based on responses in prompt and response steps.
  - Computational values that can be used in a dialog by using the assign value step.

Steps

- Items to be completed in the dialog
- No wait step



Questions?

Microsoft Services